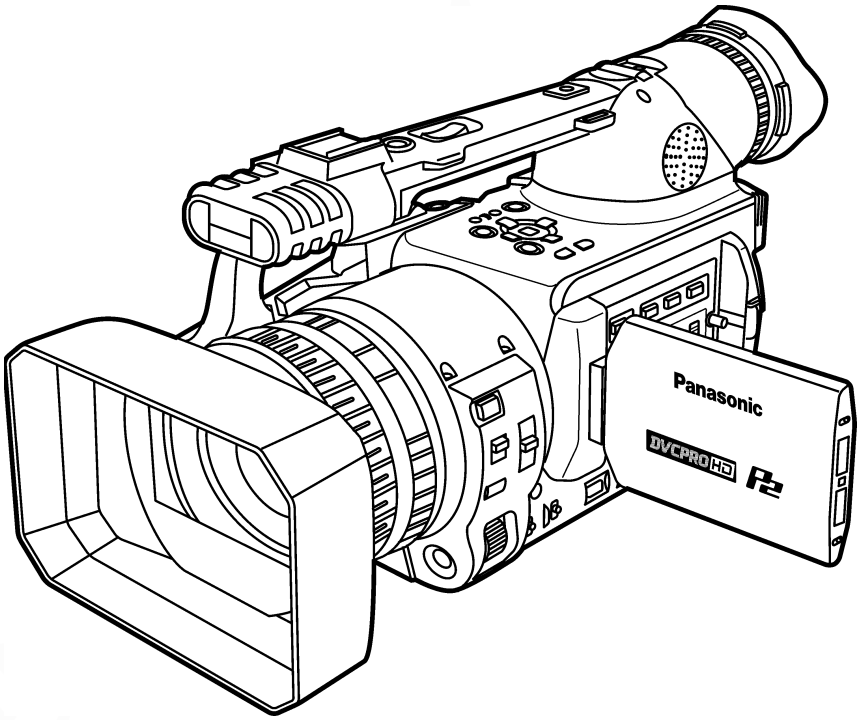
ORDER NO. BSD0512A28CE
D21

Service Manual

Memory Card Camera-Recorder

AG-HVX200P/AN/E/MC
AG-HVX202EN

Sec. 1 *Service Information*
Sec. 2 *Disassembly Procedures*
Sec. 3 *Mechanical Adjustment*
Sec. 4 *Electrical Adjustment*
Sec. 5 *Block Diagrams*
Sec. 6 *Schematic Diagrams*
Sec. 7 *Circuit Board Diagrams*
Sec. 8 *Exploded Views & Replacement Parts List*



Panasonic

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

AG-HVX200P

Specifications

[GENERAL]

Supply voltage: DC7.2 V/7.9 V
Power consumption
11.6 W (when the viewfinder is used)
12.0 W (when the LCD monitor is used)
14.0 W (max.)

indicates safety information.

Ambient operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Ambient operating humidity
10% to 85% (no condensation)
Weight
2.5 kg (5.5 lb)
(excluding battery and accessories)
Dimensions (W x H x D)
168.5 mm x 180.0 mm x 390.0 mm
(6-5/8 inches x 7-1/16 inches x 15-3/8 inches)

[Camera]
Pickup devices
CCD image sensor (x3)
(1/3-inch, interline transfer, progressive-capable)
Lens
LEICA DICOMAR Optical image stabilizer lens,
Motorized/Manual selectable 13x zoom,
F1.6 (f = 4.2 mm to 55 mm)
(35 mm equivalent: 32.5 mm to 423 mm)
Color separation optical system
Prism system
ND filter
1/8, 1/64
Gain settings
0/+3/+6/+9/+12/+18 dB (60i/60P mode)
0/+3/+6/+9/+12 dB (30P/30PN/24P/24PA/24PN)
Shutter speed settings
Regular shutter speed
60i/60P mode:
1/60 (OFF), 1/100, 1/120,
1/250, 1/500, 1/1000, 1/2000 sec.
30P/30PN mode:
1/30, 1/50 (OFF), 1/60, 1/120, 1/250,
1/500,1/1000 sec.
24P/24PA/24PN mode:
1/24, 1/50 (OFF), 1/60, 1/120, 1/250,
1/500, 1/1000 sec.
Synchronous scan settings
60i/60P mode: 1/60.0 sec. to 1/249.8 sec.
30P/30PN mode: 1/30.0 sec. to 1/249.8 sec.
24P/24PA/24PN mode:
1/24.0 sec. to 1/249.8 sec.
Shutter opening angle
Can be set in 0.5° steps from 10° to 350°
(When FILM CAM is set for OPERATION TYPE under SCENE FILE screen)
Slow shutter speed settings
60i/60P mode: 1/15, 1/30
30P/30PN mode: 1/15
Minimum subject luminance
3 lx (F1.6, gain +12 dB with a shutter speed of 1/24)
Lens hood
Large-sized lens hood with wide angle of view
Filter diameter
82 mm
[VIDEO P2] (DVCPRO HD 1080i 720P)
Sampling frequency
Y: 74.25 MHz, P_B/P_R: 37.125 MHz
Quantizing
8 bit
Video compression system
DCT + variable-length code
Video compression rate
1/6.7
Video recording bit rate
100 Mbps

Specifications (continued)

[AUDIO P2] (DVCPRO HD 1080i 720P)

Sampling frequency
48 kHz

Quantizing
16 bit/4 CH

Frequency response
20 Hz to 20 kHz

Wow & flutter
Below measurable limits

[MEMORY CARD]

Video recording formats:
DVCPRO HD
1080i/60i (30P over 60i, 24P over 60i, 24PA over 60i)
720P/60P (30P over 60P, 24P over 60P)
720P/30PN
720P/24PN
DVCPRO50/DVCPRO/DV
480i/60i (30P over 60i, 24P over 60i, 24PA over 60i)

Audio recording formats:
PCM digital recording
48 kHz 16-bit 4CH (DVCPRO HD/DVCPRO50)
48 kHz 16-bit 2CH/4CH selectable (DVCPRO/DV)

Recording/playback time:
Approx. 4 minutes
When recorded in DVCPRO HD format using one AJ-P2C004HG card with audio signals recorded on 4 channels.
Approx. 8 minutes
When recorded in DVCPRO HD format using one AJ-P2C008HG card with audio signals recorded on 4 channels.

<Note>

- This recording time represents one shot continuously recorded on a P2 card. The recording time may be shorter, depending on the number of shots recorded.
- The 720P/30PN and 720P/24PN formats are not included in the DVCPRO HD recording format.

[TAPE]

Recording format
DV (Digital video SD format)

Tape format
Mini DV system

Video signals recorded
480i/60i (NTSC)
In progressive mode (30P/ 24P/ 24PA), convert to 480i/60i and record.

Frame rate
60i (480i), 24P, 24PA, 30P

Audio signals recorded
PCM digital recording
16bit: 48kHz/2CH
12bit: 32kHz/4CH

Recording tracks
Digital video/audio:
Helical tracks
Time code:
Helical tracks (sub code area)

Tape speeds
SP mode: 18.812 mm/sec.
LP mode: 12.555 mm/sec.

Recording time (when AY-DVM63 is used)
SP mode: 60 minutes
LP mode: 90 minutes

Tapes used
6.35 mm wide metal tapes

FF/REW time
Approx. 140 sec. (when AY-DVM63 is used)

[VIDEO IN/OUT]

Analog component output
720P, 1080i, 480i format monitors supported
Y: 1.0 V [p-p], 75 Ω
P_B/P_R: 0.7 V [p-p], 75 Ω

Analog composite input/output (automatic input/output switching)
Pin jack x 1, 1.0 V [p-p], 75 Ω

S-VIDEO IN/OUT (automatic input/output switching)
4 pins x 1, Y/C separate signal
Y: 1.0 V [p-p] 75 Ω, C: 0.286 V [p-p], 75 Ω

[AUDIO IN/OUT]

XLR input

XLR (3 pins) x 2 (INPUT 1, INPUT 2),
LINE/MIC selectable, high impedance
LINE: 0 dBu
MIC: -50 dBu/-60 dBu (selectable in menu)

LINE IN/OUT (automatic input/output switching)

Pin jack x 2 (CH1, CH2)
Input: 316 mV, high impedance
Output: 316 mV, 600 Ω

Internal microphone

Stereo microphone

PHONES

3.5-mm stereo mini jack

Internal speaker

28 mm diameter x 1

[OTHER INPUTS/OUTPUTS]

Digital interface

4 pins, digital input/output, compliant with IEEE 1394 standard

USB

Type mini B connector (compliant with USB ver. 2.0)

CAM REMOTE

Mini jack (3.5 mm diameter)
(FOCUS, IRIS)
Super mini jack (2.5 mm diameter)
(ZOOM S/S)

DC INPUT

2P x 1, DC 7.9 V

[Monitor]

LCD monitor

3.5-inch LCD color monitor, 210,000 pixels

Viewfinder

0.44-inch LCD color viewfinder, 235,000 pixels

[AC ADAPTER]

Power Source:
100-240 V AC, 50/60 Hz 24 W
Power Output:
7.9 V DC, 1.9 A (Video Camera)
8.4 V DC, 1.2 A (Charge)

indicates safety information.

Weight

160 g (0.35 lb)

Dimensions (W x H x D)

70 mm x 44.5 mm x 116 mm
(2-3/4 inches x 1-3/4 inches x 4-9/16 inches)

[OPTIONAL UNITS]

XLR microphone

AG-MC100G

Battery

CGP-D28 (2800 mAh)
CGA-D54 (5400 mAh: equivalent to accessory battery)

Cleaning tape

AY-DVMCL

Weight and dimensions when shown are approximately.
Specifications are subject to change without notice.

Circuit Diagram

AG-HVX200E

Specifications

[GENERAL]

Supply voltage: DC7.2 V/7.9 V
Power consumption
11.6 W (when the viewfinder is used)
12.0 W (when the LCD monitor is used)
14.0 W (max.)

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Ambient operating temperature
0 °C to 40 °C
Ambient operating humidity
10% to 85% (no condensation)
Weight
2.5 kg
(excluding battery and accessories)
Dimensions (W x H x D)
168.5 mm x 180.0 mm x 390.0 mm

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Pickup devices
CCD image sensor (x3)
(1/3-inch, interline transfer, progressive-capable)
Lens
LEICA DICOMAR Optical image stabilizer lens,
Motorized/Manual selectable 13x zoom,
F1.6 (f = 4.2 mm to 55 mm)
(35 mm equivalent: 32.5 mm to 423 mm)
Color separation optical system
Prism system
ND filter
1/8, 1/64
Gain settings
0/+3/+6/+9/+12/+18 dB (50i/50P mode)
0/+3/+6/+9/+12 dB (25P/25PN mode)
Shutter speed settings
Regular shutter speed
50i/50P mode:
1/50 (OFF), 1/60, 1/120,
1/250, 1/500, 1/1000, 1/2000 sec.
25P/25PN mode:
1/25, 1/50 (OFF), 1/60, 1/120, 1/250,
1/500,1/1000 sec.
Synchronous scan settings
50i/50P mode: 1/50.0 sec. to 1/248.9 sec.
25P/25PN mode: 1/25.0 sec. to 1/248.9 sec.
Shutter opening angle
Can be set in 0.5° steps from 10° to 350°
(When FILM CAM is set for OPERATION TYPE under SCENE FILE screen)
Slow shutter speed settings
50i/50P mode: 1/12, 1/25
25P/25PN mode: 1/12
Minimum subject luminance
3 lx (F1.6, gain +12 dB with a shutter speed of 1/25)
Lens hood
Large-sized lens hood with wide angle of view
Filter diameter
82 mm

[VIDEO P2] (DVCPRO HD 1080i 720P)
Sampling frequency
Y: 74.25 MHz, P_B/P_R: 37.125 MHz
Quantizing
8 bit
Video compression system
DCT + variable-length code
Video compression rate
1/6.7
Video recording bit rate
100 Mbps

Specifications (continued)

[AUDIO P2] (DVCPRO HD 1080i 720P)

Sampling frequency
48 kHz

Quantizing
16 bit/4 CH

Frequency response
20 Hz to 20 kHz

Wow & flutter
Below measurable limits

[MEMORY CARD]

Video recording formats:
DVCPRO HD
1080i/50i (25P over 50i)
720P/50P (25P over 50P)
720P/25PN (Native recording)
DVCPRO50/DVCPRO/DV
576i/50i (25P over 50i)

Audio recording formats:
PCM digital recording
48 kHz 16-bit 4CH (DVCPRO HD/DVCPRO50)
48 kHz 16-bit 2CH/4CH selectable (DVCPRO/DV)

Recording/playback time:
Approx. 4 minutes
When recorded in DVCPRO HD format using one AJ-P2C004HG card with audio signals recorded on 4 channels.
Approx. 8 minutes
When recorded in DVCPRO HD format using one AJ-P2C008HG card with audio signals recorded on 4 channels.

<Note>

- This recording time represents one shot continuously recorded on a P2 card. The recording time may be shorter, depending on the number of shots recorded.
- The 720P/25PN format is not included in the DVCPRO HD recording format.

[TAPE]

Recording format
DV (Digital video SD format)

Tape format
Mini DV system

Video signals recorded
576i/50i (PAL)
In progressive mode (25P), convert to 576i/50i and record.

Frame rate
50i (576i), 25P

Audio signals recorded
PCM digital recording
16bit: 48kHz/2CH
12bit: 32kHz/4CH

Recording tracks
Digital video/audio:
Helical tracks
Time code:
Helical tracks (sub code area)

Tape speeds
SP mode: 18.831 mm/sec.
LP mode: 12.568 mm/sec.

Recording time (when AY-DVM63 is used)
SP mode: 60 minutes
LP mode: 90 minutes

Tapes used
6.35 mm wide metal tapes

FF/REW time
Approx. 140 sec. (when AY-DVM63 is used)

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[AUDIO IN/OUT]

XLR input

XLR (3 pins) x 2 (INPUT 1, INPUT 2),
LINE/MIC selectable, high impedance
LINE: 0 dBu
MIC: -50 dBu/-60 dBu (selectable in menu)

LINE IN/OUT (automatic input/output switching)

Pin jack x 2 (CH1, CH2)
Input: 316 mV, high impedance
Output: 316 mV, 600 Ω

Internal microphone

Stereo microphone

Headphone jack

3.5-mm stereo mini jack x 1

Internal speaker

28 mm diameter x 1

[OTHER INPUTS/OUTPUTS]

Digital interface

4 pins, digital input/output, compliant with IEEE 1394 standard

USB

Type mini B connector (compliant with USB ver. 2.0)

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Mini jack (3.5 mm diameter)
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Viewfinder

0.44-inch LCD color viewfinder, 235,000 pixels

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Power Source:
100-240 V AC, 50/60 Hz 24 W
Power Output:
7.9 V DC, 1.9 A (Video Camera)
8.4 V DC, 1.2 A (Charge)

indicates safety information.

Weight

160 g

Dimensions (W x H x D)

70.0 mm x 44.5 mm x 116.0 mm

[OPTIONAL UNITS]

XLR microphone

AG-MC100G

Battery

CGP-D28 (2800 mAh)
CGA-D54 (5400 mAh: equivalent to accessory battery)

Cleaning tape

AY-DVMCL

Weight and dimensions are approximate.
Specifications are subject to change without notice.

Circuits

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts, which have been over-heated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. The resistance value must be more than 5MΩ.

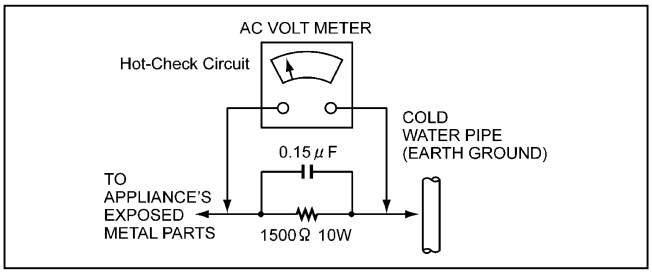


Figure1

LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.
   Do not use an isolation transformer for this check.
2. Connect a 1.5KΩ, 10W resistor, in parallel with a 0.15μF capacitor, between each exposed metallic part on the set an a good earth ground such as a water pipe, as shown in Figure1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.15 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 0.1 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ABOUT LEAD FREE SOLDER (PbF)

Distinction of Pbf PCB:
PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.
Caution:

1. Pb free solder has a higher melting point than standard solder; Typically the melting point is 50–70˚F (30-40˚C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 700±20˚F (370±10˚C).
2. Pb free solder will tend to splash when heated too high (about 1100˚F/600˚C).

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ED) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.
   Alternatively, obtain and wear a commercially available discharging wrist trap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as “anti-static” can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it.
   (most replacement ES devices are package with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

X-RADIATION

WARNING

1. The potential source of X-radiation in EVF sets is the High Voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that jig is capable of handling 10kV without causing X-Radiation.

Note: It is important to use an accurate periodically calibrated high voltage meter.

3. Measure the High Voltage. The meter (electric type) reading should indicate 2.5kV, ±0.15kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure. To prevent an X-Radiation possibility, it is essential to use the specified picture tube.



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER TO SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

- TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.
- TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, KEEP THIS EQUIPMENT AWAY FROM ALL LIQUIDS. USE AND STORE ONLY IN LOCATIONS WHICH ARE NOT EXPOSED TO THE RISK OF DRIPPING OR SPLASHING LIQUIDS, AND DO NOT PLACE ANY LIQUID CONTAINERS ON TOP OF THE EQUIPMENT.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

CAUTION:

THE AC RECEPTACLE (MAINS SOCKET OUTLET) SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.
TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER CORD PLUG FROM THE AC RECEPTACLE.

CAUTION:

Danger of explosion or fire if battery is mistreated.

For Battery Pack

- Replace only with same or specified type.
- Do not disassemble or dispose of in fire.
- Do not store in temperatures over 60°C (140°F).
- Use specified charger.

For Battery of Remote Controller

- Replace battery with part No. CR2025 only.
- Do not recharge the battery.
- Do not disassemble or dispose of in fire.
- Do not store in temperatures over 60°C (140°F).

Camera-Recorder

The rating plate is on the underside of the viewfinder.

AC Adapter

The rating plate is on the underside of the AC Adapter.
Disconnect the AC mains plug from the AC mains socket when not in use.

CAUTION:

In order to maintain adequate ventilation, do not install or place this unit in a bookcase, built-in cabinet or any other confined space. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation.

indicates safety information.

IMPORTANT

"Unauthorized recording of copyrighted television programs, video tapes and other materials may infringe the right of copyright owners and be contrary to copyright laws."

FCC NOTICE (USA)

Declaration of Conformity

Model Number: AG-HVX200P
Trade Name: PANASONIC
Responsible Party: Panasonic Corporation of North America One Panasonic Way, Secaucus, NJ 07094
Support contact: Panasonic Broadcast & Television Systems Company 1-800-524-1448

This device complies with Part 15 of FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
To assure continued compliance, follow the attached installation instructions and do not make any unauthorized modifications.

CAUTION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the booklet “Something About Interference” available from FCC local regional offices helpful.

FCC Warning:

To assure continued FCC emission limit compliance, the user must use only shielded interface cables when connecting to host computer or peripheral devices. Also, any unauthorized changes or modifications to this equipment could void the user’s authority to operate this device.

NOTIFICATION (Canada)

This class B digital apparatus complies with Canadian ICES-003.
Cet appareil numéique de la classe B est conforme à la norme NMB-003 du Canada.

indicates safety information.



A lithium ion/polymer battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

ATTENTION
RISQUE DE CHOC ÉLECTRIQUE NE PAS OUVRIR

ATTENTION:
AFIN DE PRÉVENIR LE RIQUE DE CHOCS ÉLECTRIQUES, NE DÉVISSEZ PAS LE COUVERCLE. AUCUNE PIÉCE N'EST RÉPARABLE PAR L'UTILISATEUR À L'INTÉRIER DU COFFRET. TOUTE RÉPARATION DEVRAIT ÊTRE CONFIÉE À UN PERSONNEL QUALIFIÉ.



Le symbole de l'éclair dans un triangle équilatéral indique la présence d'une tension suffisamment élevée pour engendrer un risque de chocs électriques.



Le point d'exclamation dans un triangle équilatéral indique que le manuel d'utilisation inclus avec l'appareil contient d'importantes recommandations quant au fonctionnement et à l'entretien de ce dernier.

AVERTISSEMENT:

- POUR RÉDUIRE LES RISQUES D'INCENDIE OU DE CHOC ÉLECTRIQUE, ÉVITEZ D'EXPOSER CET APPAREIL À LA PLUIE OU À L'HUMIDITÉ.
- POUR RÉDUIRE TOUT RISQUE DE FEU OU DE CHOC ÉLECTRIQUE, ÉLOIGNER L'APPAREIL DES LIQUIDES - UTILISER ET RANGER UNIQUEMENT DANS UN ENDROIT NE RISQUANT PAS DE RECEVOIR DES GOUTTES OU D'ÊTRE ASPERGÉ DE LIQUIDES, ET NE PAS METTRE DE RÉCIPIENT RENFERMANT DES LIQUIDES SUR LE DESSUS DE L'APPAREIL.

ATTENTION:

POUR ÉVITER TOUT RISQUE D'INCENDIE, DE CHOCS ÉLECTRIQUES OU D'INTERFÉRENCES, N'UTILISER QUE LES ACCESSOIRES RECOMMANDÉS.

ATTENTION:

LA PRISE DE COURANT (PRISE SECTEUR) DOIT ÊTRE INSTALLÉE À PROXIMITÉ DE L'APPAREIL ET FACILEMENT ACCESSIBLE. POUR DÉCONNECTER COMPLÈTEMENT CET APPAREIL DU SECTEUR, DÉBRANCHEZ LA FICHE DU CORDON D'ALIMENTATION DE LA PRISE DE COURANT.

PRÉCAUTION:

Il y a risque d'explosion si la batterie n'est pas manipulée correctement.

Pour le bloc-piles

- Remplacer exclusivement par une batterie du même type ou du type spécifié.
- Ne pas démonter ni jeter au feu.
- Ne pas ranger à des températures supérieures à 60°C (140°F).
- Utilisez le chargeur spécifié.

Pour la pile de la télécommande

- Remplacer la pile exclusivement par une pile No. CR2025.
- Ne pas recharger la pile.
- Ne pas démonter ni jeter au feu.
- Ne pas ranger à des températures supérieures à 60°C (140°F).

Camescope

La plaque signalétique se trouve sur le fond du viseur.

Adaptateur secteur

La plaque signalétique se trouve sur le fond de l'adaptateur secteur.
Débrancher la fiche secteur de la prise lorsqu'on ne se sert pas de l'appareil.

ATTENTION:

Pour maintenir une bonne ventilation, ne pas installer ni placer l'appareil dans une étagère, un meuble encastré ni aucun endroit confiné. Pour éviter tout risque de choc électrique ou de feu dû à une surchauffe, vérifier qu'aucun rideau ni aucun autre matériau ne fait obstacle à la ventilation.

NOTIFICATION (Canada)

This class B digital apparatus complies with Canadian ICES-003.
Cet appareil numéique de la classe B est conforme à la norme NMB-003 du Canada.

Informations concernant la sécurité.

Mise en garde:

“L’enregistrement non autorisé d’émissions de télévision, films, rubans magnétoscopiques ou autres, protégéspar des droits d’auteur, peut enfreindre les droits de propriété et aller à l’encontre des dispositions de la loi sur lesdroits d’auteur”.



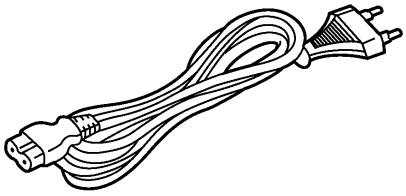
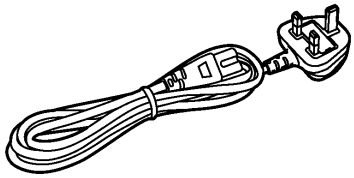
L’appareil que vous vous êtes procuré est alimenté par une batterie au lithium-ion/ lithium-polymère.
Pour des renseignements sur le recyclage de la batterie, veuillez composer le 1-800-8-BATTERY.

Cleanservicemanuals

Caution for AC Mains Lead

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.
This product is equipped with 2 types of AC mains cable. One is for continental Europe, etc. and the other one is only for U.K.

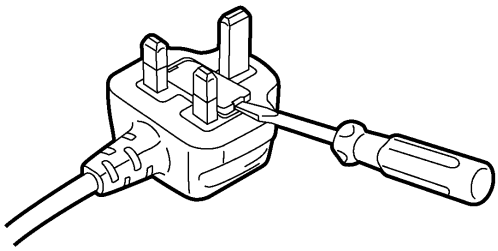
Appropriate mains cable must be used in each local area, since the other type of mains cable is not suitable.

FOR CONTINENTAL EUROPE, ETC. Not to be used in the U.K.	FOR U.K. ONLY
	

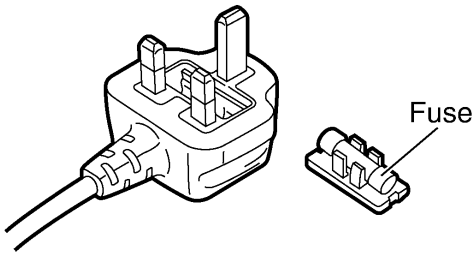
FOR U.K. ONLY
This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5 amp fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ◈ or the BSI mark ♡ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local Panasonic Dealer.

How to replace the fuse
1. Open the fuse compartment with a screwdriver.



2. Replace the fuse



▭ indicates safety information.

■ DO NOT REMOVE PANEL COVERS BY UNSCREWING THEM.

To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING:

- TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.
- TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, KEEP THIS EQUIPMENT AWAY FROM ALL LIQUIDS. USE AND STORE ONLY IN LOCATIONS WHICH ARE NOT EXPOSED TO THE RISK OF DRIPPING OR SPLASHING LIQUIDS, AND DO NOT PLACE ANY LIQUID CONTAINERS ON TOP OF THE EQUIPMENT.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

CAUTION:

In order to maintain adequate ventilation, do not install or place this unit in a bookcase, built-in cabinet or any other confined space. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation.

CAUTION:

Danger of explosion or fire if battery is mistreated.

For Battery Pack

- Replace only with same or specified type.
- Do not disassemble or dispose of in fire.
- Do not store in temperatures over 60°C (140°F).
- Use specified charger.

For Battery of Remote Controller

- Replace battery with part No. CR2025 only.
- Do not recharge the battery.
- Do not disassemble or dispose of in fire.
- Do not store in temperatures over 60°C (140°F).

Camera-Recorder

The rating plate is on the underside of the viewfinder.

AC Adapter

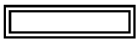
The rating plate is on the underside of the AC Adapter.

Disconnect the AC mains plug from the AC mains socket when not in use.

CAUTION:

THE AC RECEPTACLE (MAINS SOCKET OUTLET) SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER CORD PLUG FROM THE AC RECEPTACLE.

 indicates safety information.

Operating precaution

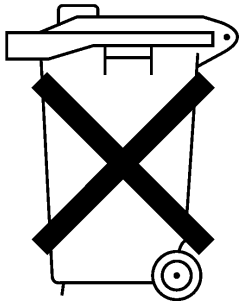
Operation near any appliance which generates strong magnetic fields may give rise to noise in the video and audio signals. If this should be the case, deal with the situation by, for instance, moving the source of the magnetic fields away from the unit before operation.

IMPORTANT

“Unauthorized recording of copyrighted television programs, video tapes and other materials may infringe the right of copyright owners and be contrary to copyright laws.”

Attention/Attentie

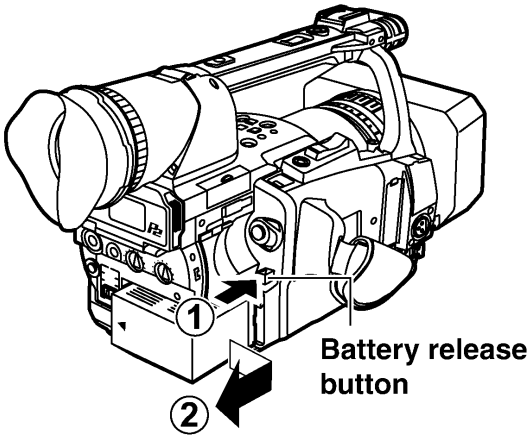
- Batteries are used for the main power source, memory back-up in the product and remote controller.
  At the end of their useful life, you should not throw them away.
  Instead, hand them in as small chemical waste.
- Voor de primaire voeding en het reservegeheugen van het apparaat, alsmede voor de afstandsbediening, wordt gebruik gemaakt van een batterij.
  Wanneer de batterij uitgeput is, mag u deze niet gewoon weggooien, maar dient u ze als klein chemisch afval weg te doen.



To remove the battery/ Verwijderen van de batterij

Main Power Battery
Batterij Voor Primaire Voeding

Remove the battery while pressing the battery release button.



Cleaningservice

Panasonic®

Cleanservicemanuals

MHNK230/013457F6S28P

SECTION 1

SERVICE INFORMATION

MODEL: AG-HVX200P/AN/E/MC/HVX202EN

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1. Servicing fixtures and tools

The following servicing tools are required for mechanical and electrical servicing and alignment.
The items marked **"NEW"** in the following list are necessary for the AG-HVX200/202.
Please refer to **"Y"** in column of table below, these tools were also use for servicing the AG-DVX100B, DVX102B and DVC180B.

1-1. Summary Table of Servicing Fixtures and Tools

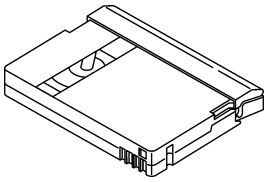
No	Parts No.	NAME	DVX100B	DVX102B/ DVC180B	REMARK
1	VFM3010EDS	DV Alignment Tape (Color bar)	Y	N	For NTSC
2	VFM3110EDS	DV Alignment Tape (Color bar)	Y	Y	For PAL
3	VFM3000LS	DV Alignment Tape (Linearity)	Y	Y	
4	*VVS0030	PC EVR Software	N	N	**NEW** Download from the Global WEB site.
5	*VVS0032	PC EVR Software	N	N	**NEW For VTR adjustment** Download from the Global WEB site.
6	*VFK1481N	LISTA Software	Y	Y	Download from the Global WEB site.
7	VFK1988	Measuring Board	N	N	**NEW** EVR/LISTA
8	VFK1989	Extension Cable	N	N	**NEW**
9	K2GJ2DC00002	DC Cable	Y	Y	It is equal to VJA1128
10	VFK1987	82mm Attachment Ring	N	N	**NEW**
11	VFK1164TAR43	43mm Attachment Ring	Y	Y	
12	VFK1164TCM01	Collimator Set (Infinity Lens)	Y	Y	
13	VFK1345	CC Filter Holder	Y	Y	
14	VFK1346	Step Down Ring (62mm-52mm)	Y	Y	
15	VFK1659	Step-Up Ring (43mm-49mm)	Y	Y	
16	VFK1660	Step-Up Ring (49mm-62mm)	Y	Y	
17	VFK1341	CC Filter (LB40)	Y	N	In AG-DVX100BE, this filter is not used.
18	VFK1347	CC Filter (LB120)	Y	Y	
19	VFK1884	CC Filter (LBA2)	Y	Y	
20	VFK1888	CC Filter (LBB6)	Y	Y	
21	VFK1885	CC Filter (LBB2)	Y	N	In AG-DVX100BE, this filter is not used.
22	VFK1899	Post Driver	Y	Y	**NOTE**
23	VFK1186	LISTA Cable	Y	Y	
24	VFK1300	A/D Converter Board	Y	Y	ISA PC Board.
25	----------	Grayscale Chart	Y	Y	
26	----------	AC Adapter	Y	Y	2 pieces Required
27	----------	RS232C cross cable (9P)	Y	Y	
28	----------	White chart	Y	Y	
29	K1EY06YY0001	Component cable	N	N	The marketed thing can be used.
30	K2RYYYYY0001	PIN-BNC Conversion cable	N	N	(3 pcs) The marketed thing can be used.

NOTE:
This Post Driver use for servicing the "A" mechanism of consumer model.

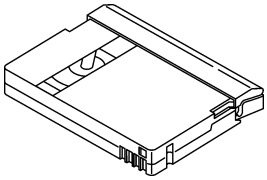
1 **VFM3010EDS** (NTSC)

2 **VFM3110EDS** (PAL)

DV Alignment Tape
(Color bar)



3 **VFM3000LS**
DV Alignment Tape
(Linearity)



4 **VVS0030**

5 **VVS0032**

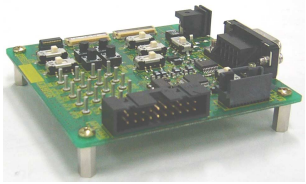
PC EVR Software

DOWN LOAD

6 **VFK1481N**
LISTA Software

DOWN LOAD

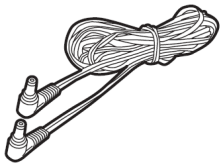
7 **VFK1988**
Measuring Board



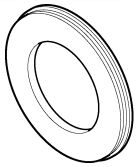
8 **VFK1989**
Extension Cable



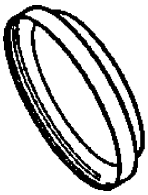
9 **K2GJ2DC00002**
DC Cable



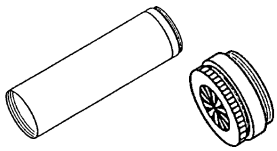
10 **VFK1987**
82 mm Attachment Ring



11 **VFK1164TAR43**
43 mm Attachment Ring



12 **VFK1164TCM01**
Collimator Set
(Infinity Lens)



13 **VFK1345**
CC Filter Holder

14 **VFK1346**
Step Down Ring (62mm - 52mm)



15 **VFK1659**
Step-up Ring (43mm - 49mm)

16 **VFK1660**
Step-up Ring (49mm - 62mm)



17 **VFK1341** (LB40)

18 **VFK1347** (LB120)

CC Filter



19 **VFK1884** (LBA2)

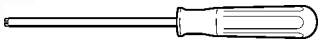
20 **VFK1888** (LBB6)

21 **VFK1885** (LBB2)

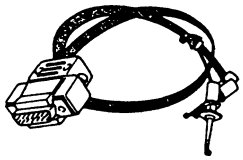
CC Filter



22 **VFK1899**
Post Driver



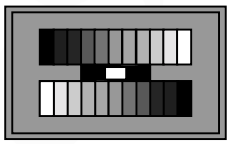
23 **VFK1186**
LISTA Cable



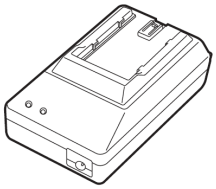
24 **VFK1300**
A/D Converter Board



25 Grayscale Chart



26 AC Adapter



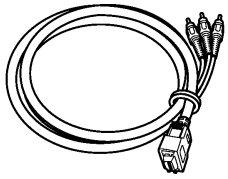
27 RS-232C Cross Cable
(9P)



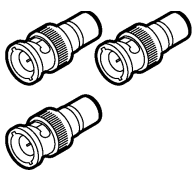
28 White Chart



29 **K1EY06YY0001**
Component Cable



30 **K2RYYYYY0001**
PIN-BNC Conversion
Cable



2. Maintenance

Maintenance is done by periodically performing suitable maintenance servicing in order to maintain the best condition, so that the user can use the equipment safely. Video equipment with mounted mechanisms have parts which will wear, and their wear and deterioration cause troubles. Dust and dirt also can impair stable operation. For this reason it is important not to just perform repair at the time of trouble, but also to perform suitable maintenance at regular intervals.

The maintenance schedule requires replacement of mechanism unit, which contains a cylinder unit and so on.

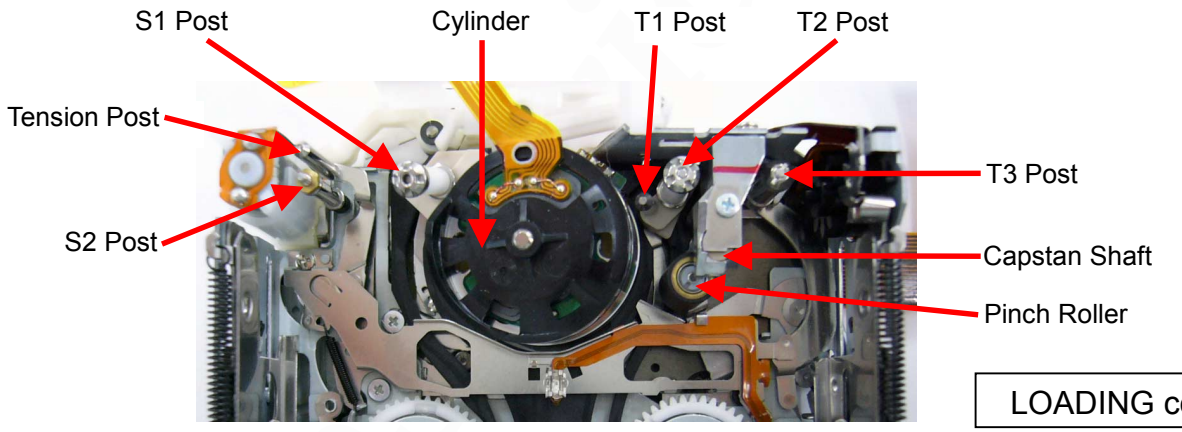
2-1. Maintenance Schedule

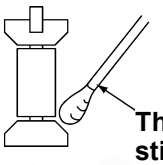
No.	Part Name	Part No.	Cleaning	Replacement	Remark
---	Tape Transport Part	------	100 hours	------	*1
1	Mechanism Chassis Unit	VXY1903Z1	------	Every 2000 hours	*2
2	Zoom Motor Unit	L6DABBKD0001	------	Every 4000 hours	*2

Note:
Hours of use are based on the head rotation hours. (Head rotation hours can be confirm on item HOUR METER in OTHER FUNCTION menu.)
Hours of use are recommendation. It may depend on temperature, humidity, quality of tape or dust condition.
Hours of use are listed as the reference of maintenance. They do not mean guarantee hours.
*1. Tape Transport part is cleaned by cleaning liquid.
*2. Please refer to the most recent execution outline, as the maintenance specifications and the part numbers may change.

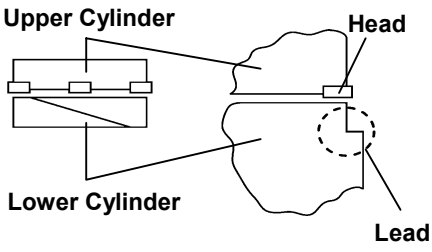
2-2. Cleaning of Tape Transport Part

Please clean the below indicated tape transport parts with cleaning liquid when needed.
(Tension Post, S1 Post, Cylinder & Heads, T1 Post, T2 Post, T3 Post, Capstan Shaft and Pinch Roller)





When cleaning the post, wrap a cloth on a pick. Wipe each post with a cloth dipped in cleaning liquid. And wipe it again with dry cloth.



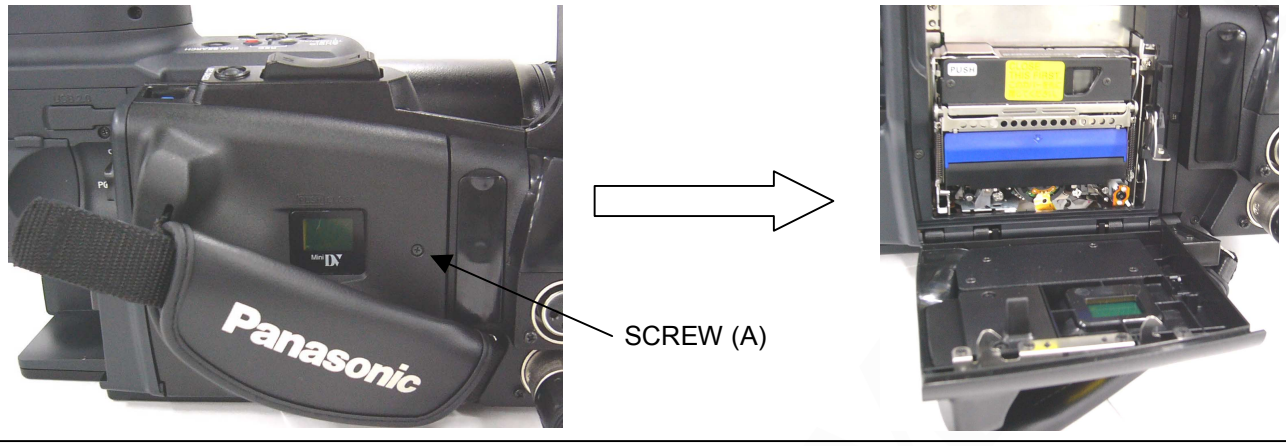
Do not forget cleaning the upper Cylinder, Head, tape transport part of Lower Cylinder and Lead, when cleaning the Cylinder.

3. Manual tape eject (Emergency eject)

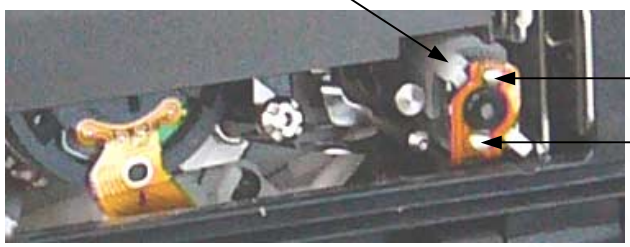
When the tape cannot be ejected by normal operation because of trouble in the electrical system or mechanical system, the tape can be removed from the unit manually by using the following method.

NOTE: By below indicated method, the unit will not take up tape slack. Be careful when removing the tape from Cassette Holder.

1. Unscrew the screw (A) and open the cassette cover as shown in figure.



2. Supply 4.5 Volts using 3 AA batteries in series to unload the posts using the motor.



UNLOADING ..... A: +4.5V B: GND
LOADING..... A: GND B: +4.5V

3. Stop supplying the power when the tape is ejected and remove the tape from Cassette Holder.

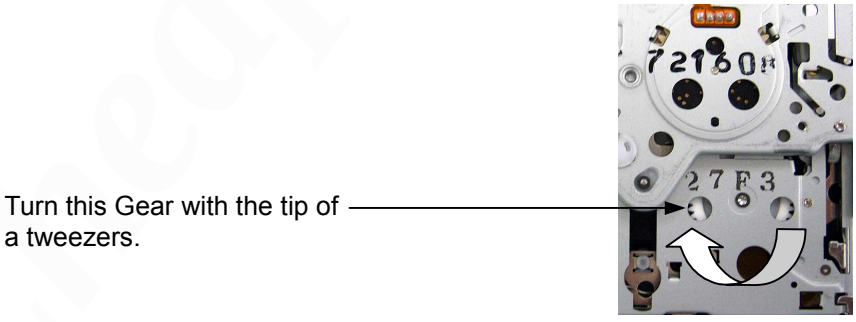
<How to rolls up tape>

Be sure to take up the tape slack so that tape does not become damaged.

1. Remove the Mechanism Unit.
2. Supply 4.5 Volts to unload the posts using the motor.
3. Stop supplying the power at unloading complete position.

NOTE: If power is supplied too long, then the Cassette tape will be ejected prematurely.

4. Turn the Gear of Supply Reel as shown in figure, and this will take up the slack in the tape.
5. Supply 4.5 Volts again to eject the tape using the motor and remove the tape from Cassette Holder.

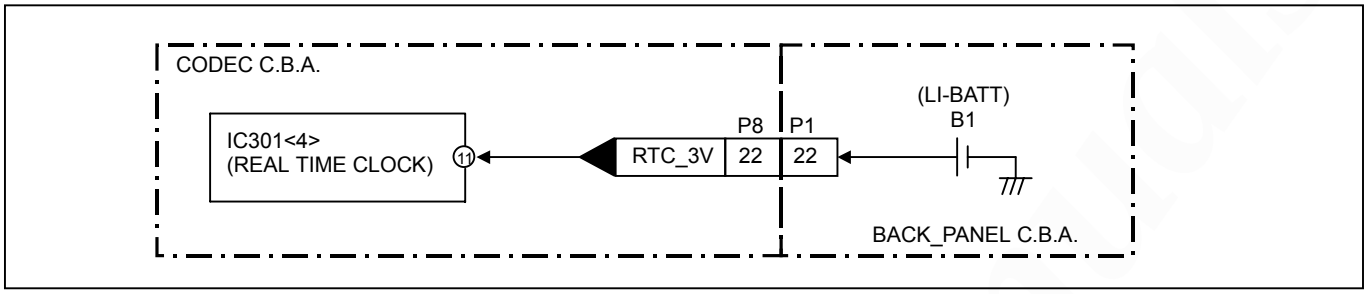


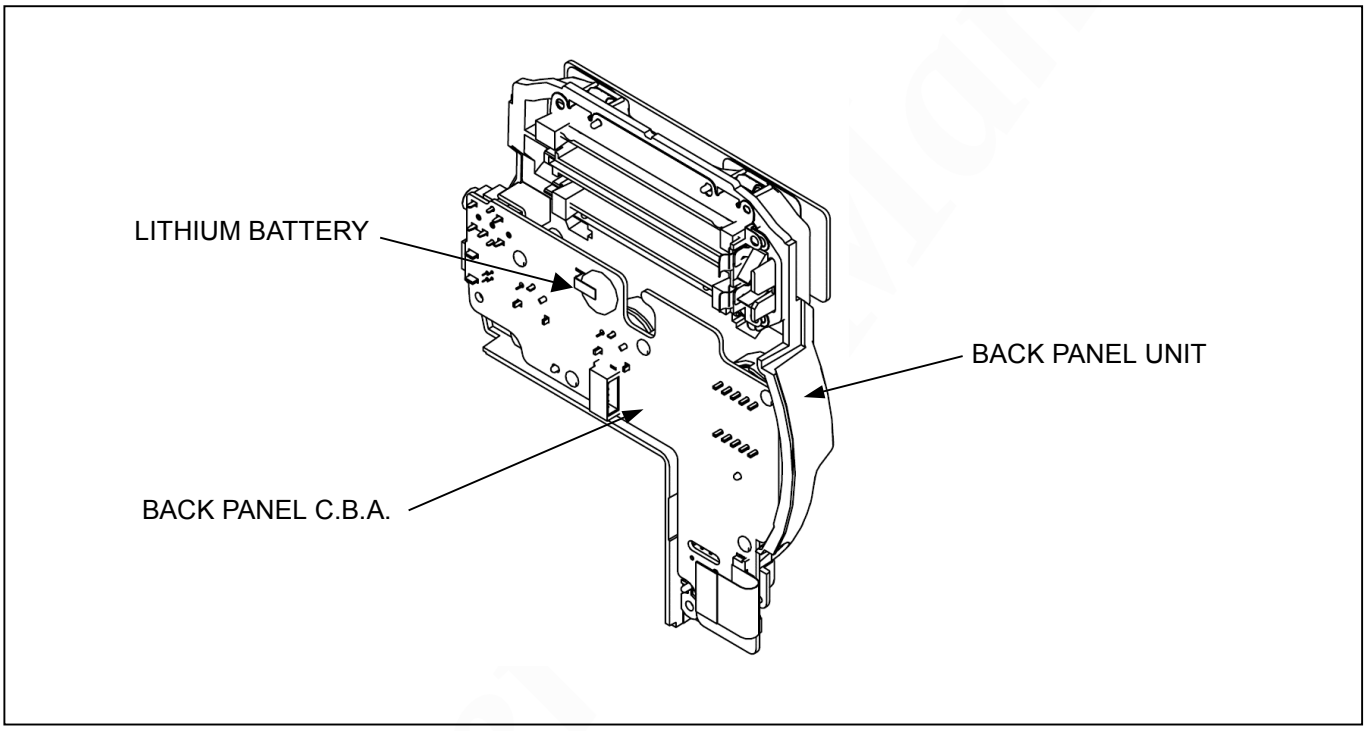
(Bottom side of Mechanism)

4. Lithium battery

4-1. Replacement Procedure

1. Remove the BACK PANEL unit.
2. There is a Lithium battery on the BACK PANEL C.B.A.
3. Unsolder the Lithium battery and then replace with the new one.





NOTE:
The lithium battery is a critical component.
It must never be subjected to excessive heat of discharge.
It must therefore only be fitted in equipment designed specifically for its use.
Replacement batteries must be of the same type and manufacture.
They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.
Do not attempt to re-charge the old battery or re-use it for any other purpose.
It should be disposed of in waste products destined for burial rather than incineration.

CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED.
REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.

5. Camera remote

The operation of zoom operation and record start/stop can be remotely controlled by connecting a remote controller with **ZOOM S/S** remote jack.
The operation of focus and iris operation can be remotely controlled by connecting a remote controller with **FOCUS/IRIS** remote jack.

NOTE: CAMERA remote control is only effective in the CAMERA mode.

5-1. ZOOM S/S REMOTE

Please refer to below indicated specification, When external remote is checked.

Terminal (refer to figure A)	Contents
A	Record start/stop input
B	Zooming control input
C	GND

Equivalent circuit of ZOOM S/S REMOTE jack

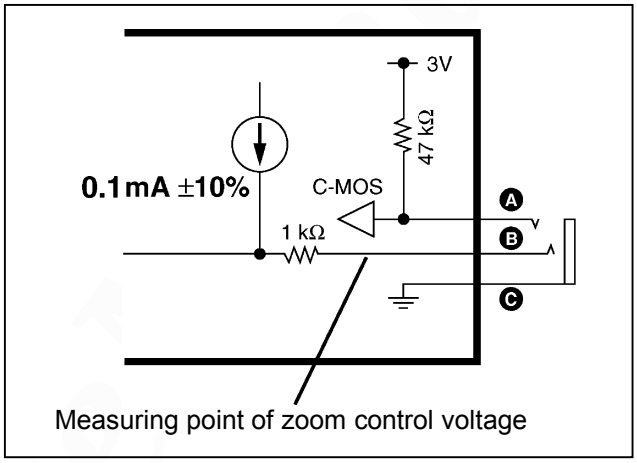


Figure A

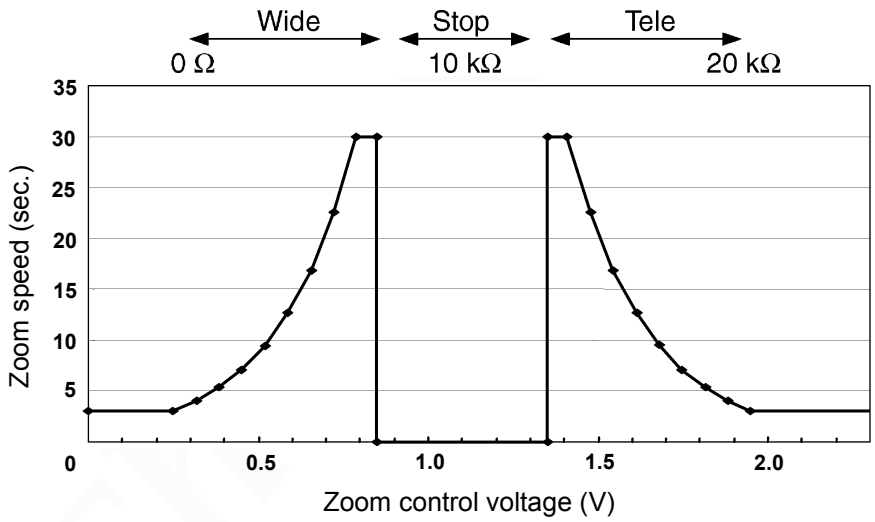
5-1-1. Record start / stop input

Every time A terminal connects with the GND, it repeats recording and a recording stop.

5-1-2. Zooming control input

With the voltage to input to the B terminal, the zoom speed changes. As for the relation between the zoom control voltage and the zoom speed, it is as shown in the following.

Relation between the zoom control voltage and zoom speed



NOTE:
The control voltage and the zoom speed, which are shown below are a reference value. Because there is a little difference, see as the reference data.

Figure B

5-2. FOCUS/IRIS REMOTE

Please refer to below indicated specification, When external remote is checked.

Terminal (refer to figure A)	Contents
A	GND
B	FOCUS control input
C	IRIS control input
D	IRIS(AUTO/MANU) switch input

Equivalent circuit of FOCUS/IRIS REMOTE jack

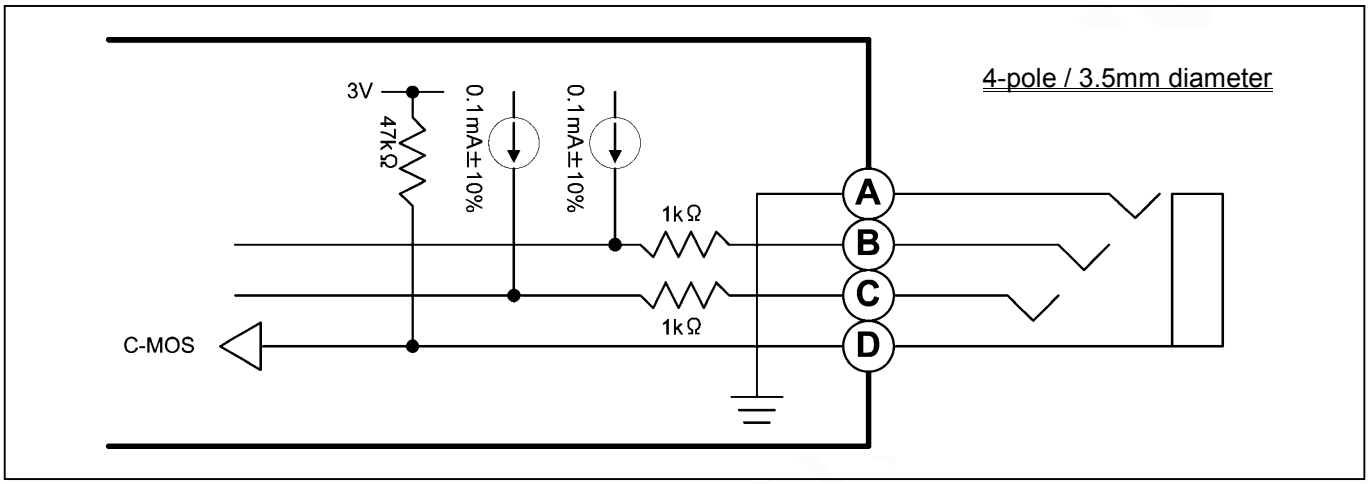
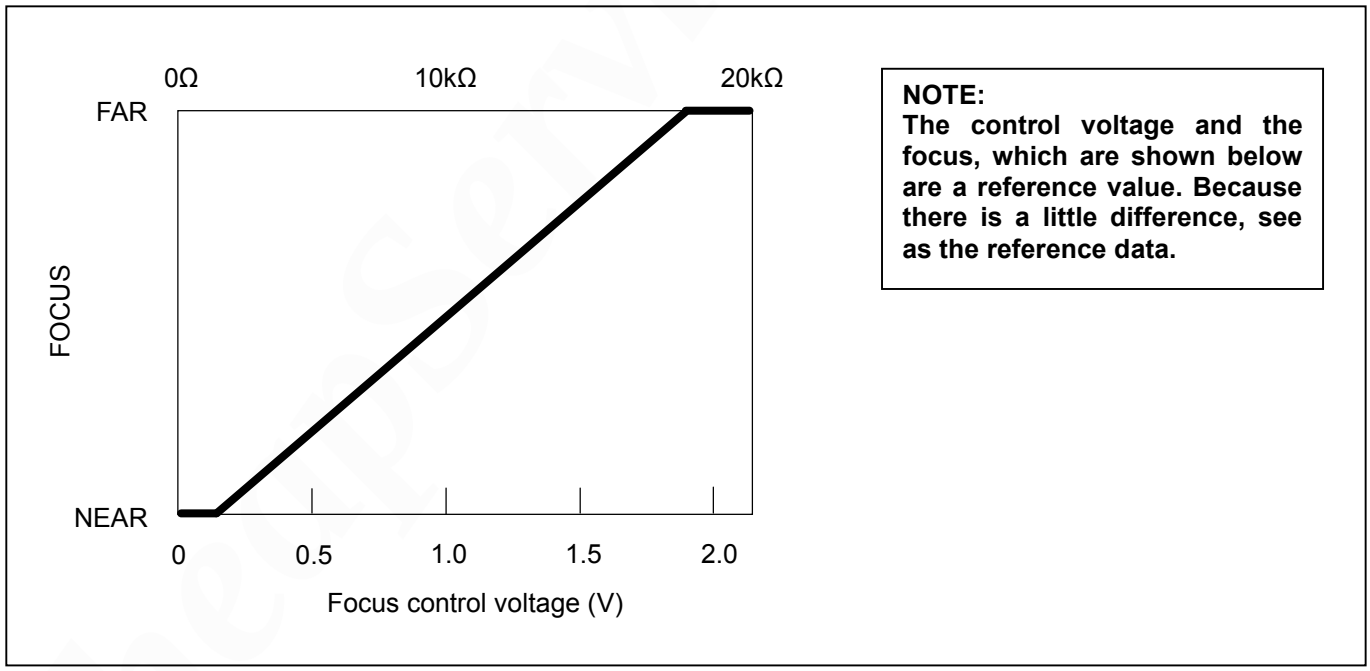


Figure C

5-2-1. Focus control input

With the voltage to input to the B terminal, the focus is changes. As for the relation between the focus control voltage and the focus, it is as shown in the following.

Relation between the focus control voltage and focus



NOTE:
The control voltage and the focus, which are shown below are a reference value. Because there is a little difference, see as the reference data.

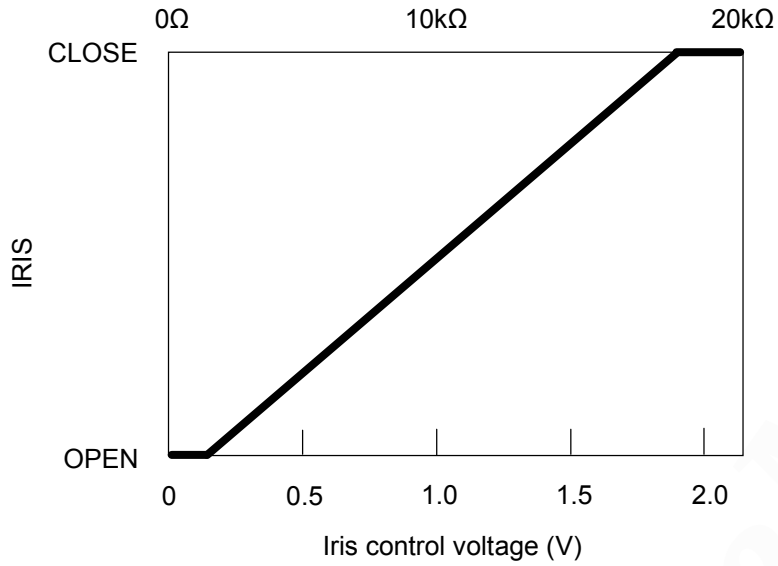
Figure D

When terminal B is open, the focus remote control becomes invalid.

5-2-2. IRIS control input

When terminal D is open, the VCR becomes AUTO-IRIS mode. When terminal D connects with the GND, the VCR becomes MANUAL-IRIS mode.
With the voltage to input to the C terminal, the iris is changes. As for the relation between the iris control voltage and the iris, it is as shown in the following.
Even if AUTO-IRIS is used, the iris can be corrected according to the input voltage.

Relation between the iris control voltage and iris



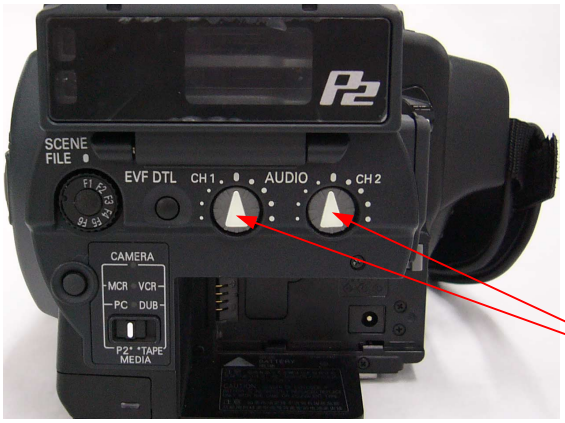
NOTE:
The control voltage and the iris, which are shown below are a reference value. Because there is a little difference, see as the reference data.

Figure E

Circuitservicemanuals

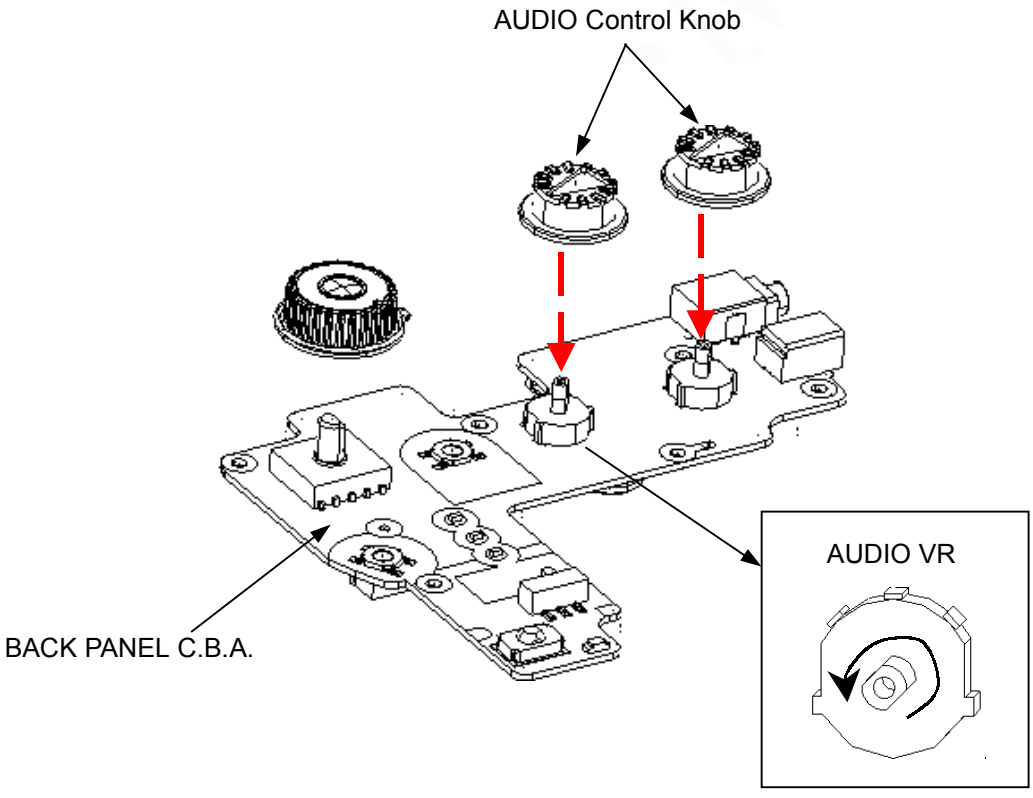
6. Caution when installing AUDIO Control Knob

The AUDIO VR is weak against stress. So when the AUDIO Control Knob is removed from the AUDIO VR, it is very possible that AUDIO VR is broken. Please replace the AUDIO VR by a new one, when you have removed the AUDIO Control Knob from the AUDIO VR. When installing the AUDIO Control Knob, set its direction as follows.



(Installation of AUDIO Control Knob)

1. Set the AUDIO VR to fully counter-clockwise as shown in figure A.
2. Install the AUDIO Control Knob to AUDIO VR as follows.



(Figure A)

7. Operation after major part exchanged

7-1. Operation List

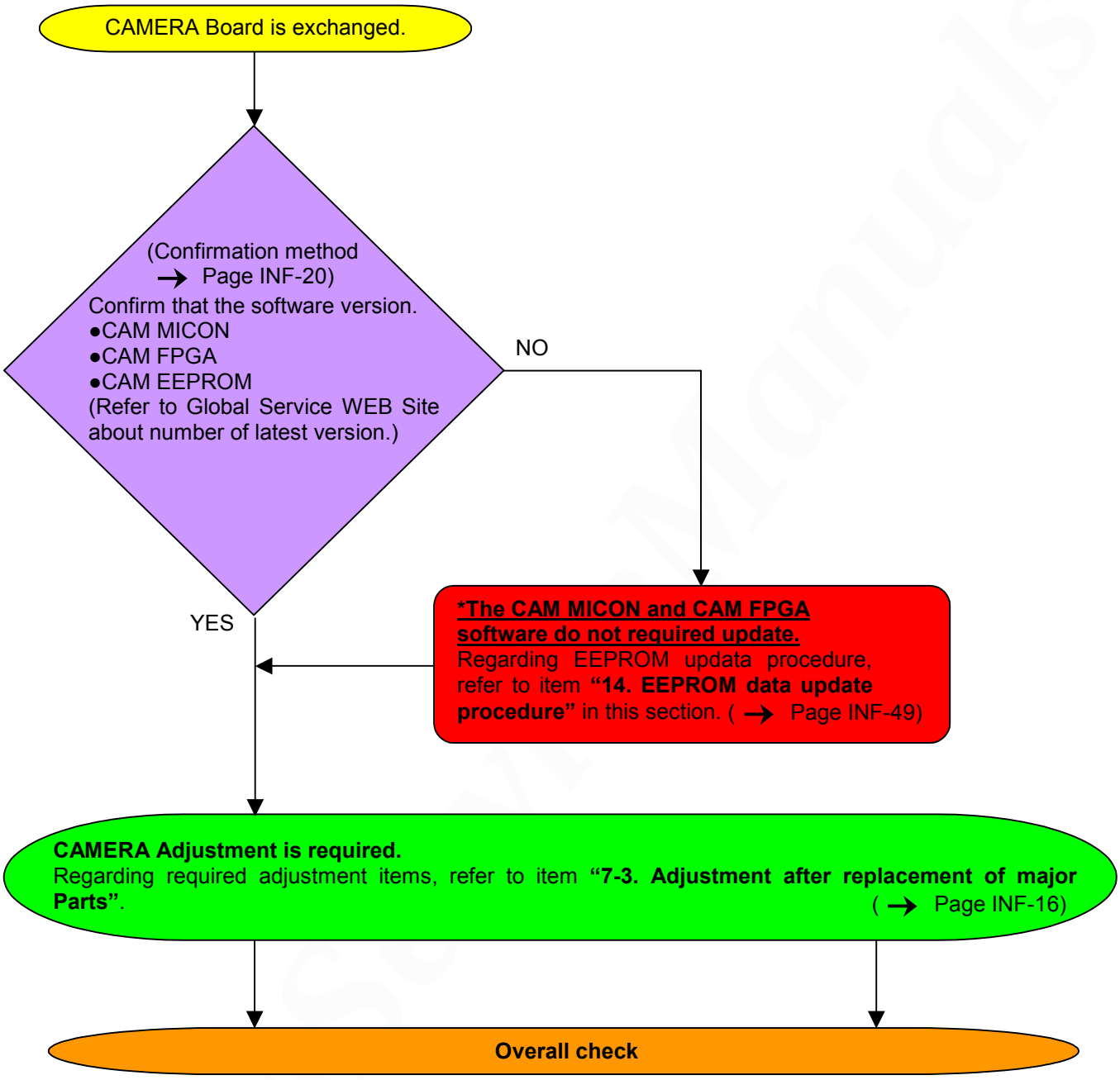
These are items that must be done when the major part has been changed.

X: Operation required

	Board or Ass'y	Adj.	Version conf.	EEPROM	Remark
	CAMERA	X	X	X	
	CODEC		X	X	
	VTR	X	X	X	
	POWER				Not required
	TOP OP				Not required
	P2 CARD				Not required
	SD CARD				Not required
	SIDE JACK2				Not required
	TOP CON				Not required
	BOTTOM CON				Not required
	GYRO				Not required
CAMERA LENS Ass'y	CAMERA LENS Ass'y	X			
	LENS Ass'y	X			
	PRISM Ass'y	X			
	ZOOM MOTOR Ass'y	X			
LCD Ass'y	LCD Ass'y				Not required
	LCD LEV				Not required
ZOOM SW Ass'y	ZOOM SW Ass'y	X			
	ZOOM SW	X			
FRONT JACK Ass'y	SIDE JACK1	X			Confirmation only
	EXT MIC2				Not required
BATTERY CASE Ass'y	POWER SW				Not required
	BATTEY				Not required
	DC IN				Not required
EVF Ass'y	EVF Ass'y				Not required
	EVF CONNECT				Not required
HANDLE Ass'y	HANDLE Ass'y				Not required
	HANDLE PB				Not required
	REMOCON F				Not required
SIDE CASE R Ass'y	R SIDE				Not required
	CAM OP1				Not required
	CAM OP2				Not required
	CAM OP3				Not required
MECHANISM Ass'y	MECHANISM Ass'y	X			
	MECHA I/F	X			

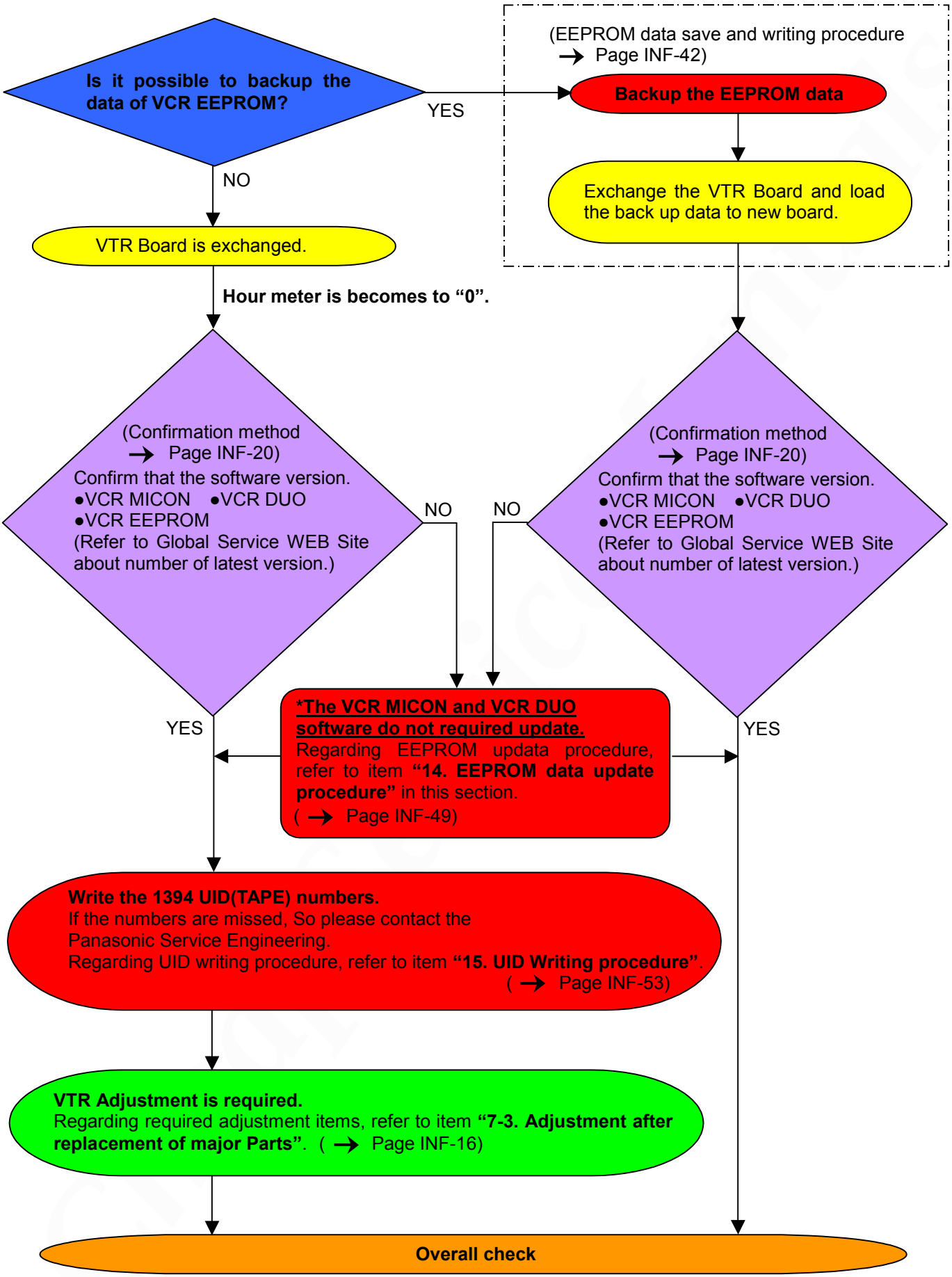
7-2. Operation flow chart after board exchanged

7-2-1. CAMERA Board

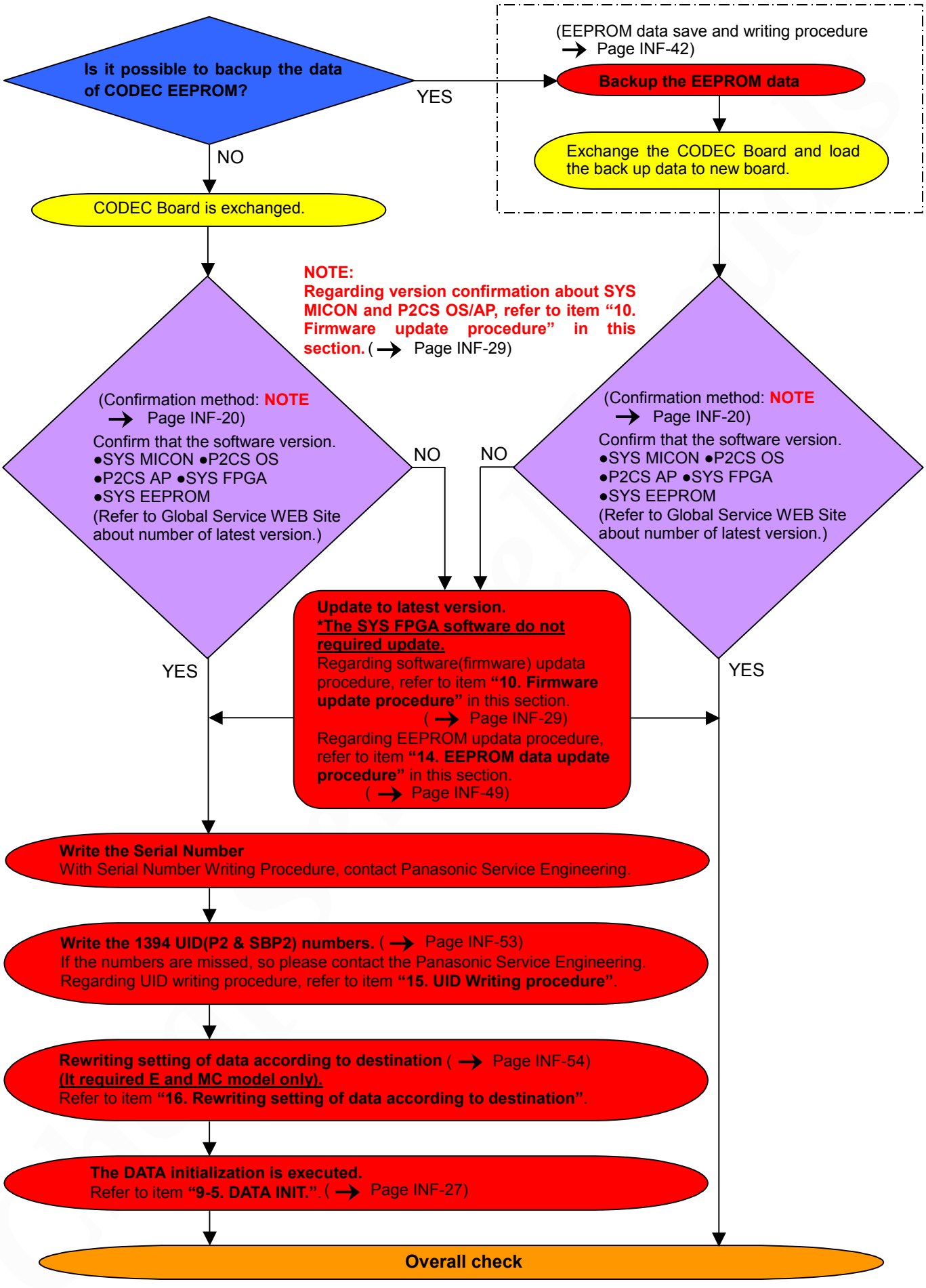


Checked manuals

7-2-2. VTR Board

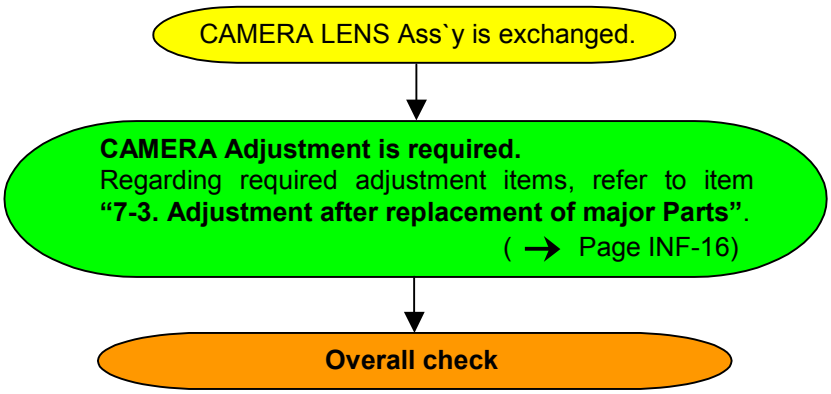


7-2-3. CODEC Board



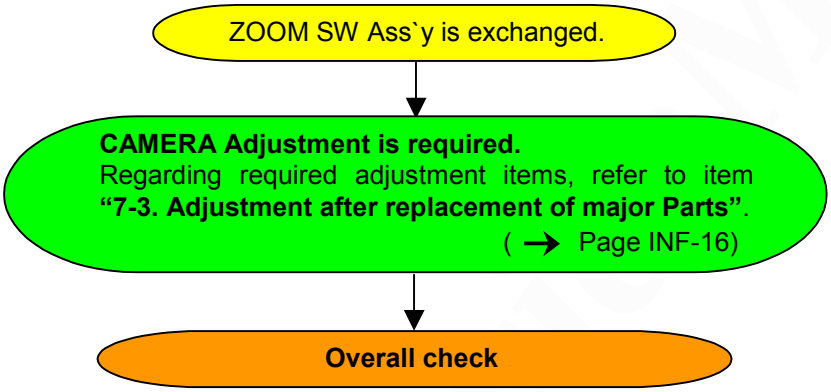
7-2-4. CAMERA LENS Ass`y

When LENS Ass`y, PRISM Ass`y and ZOOM MOTOR Ass`y are is exchanged, it requires same operation.

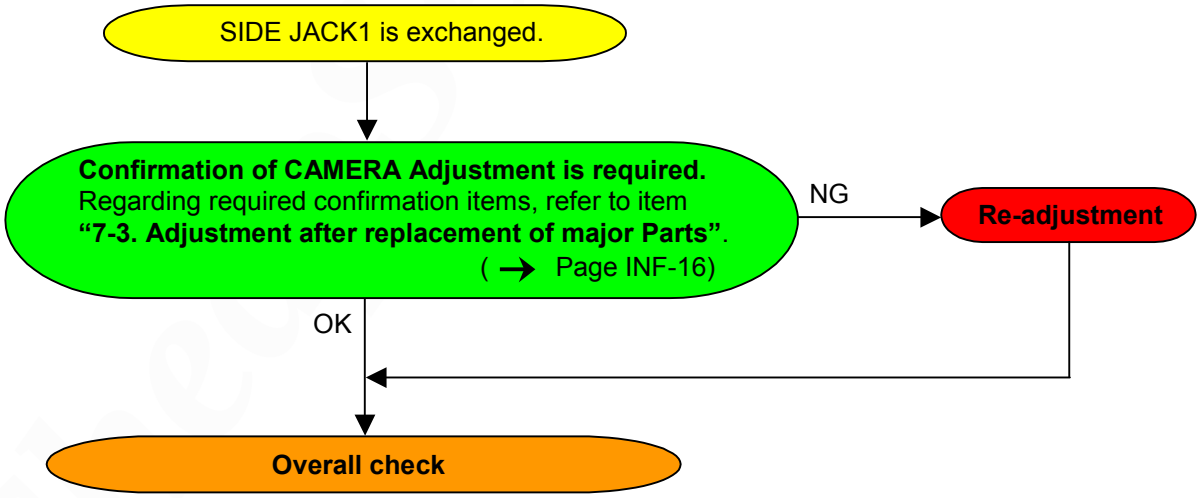


7-2-5. ZOOM SW Ass`y

When ZOOM SW board is exchanged, it requires same operation.



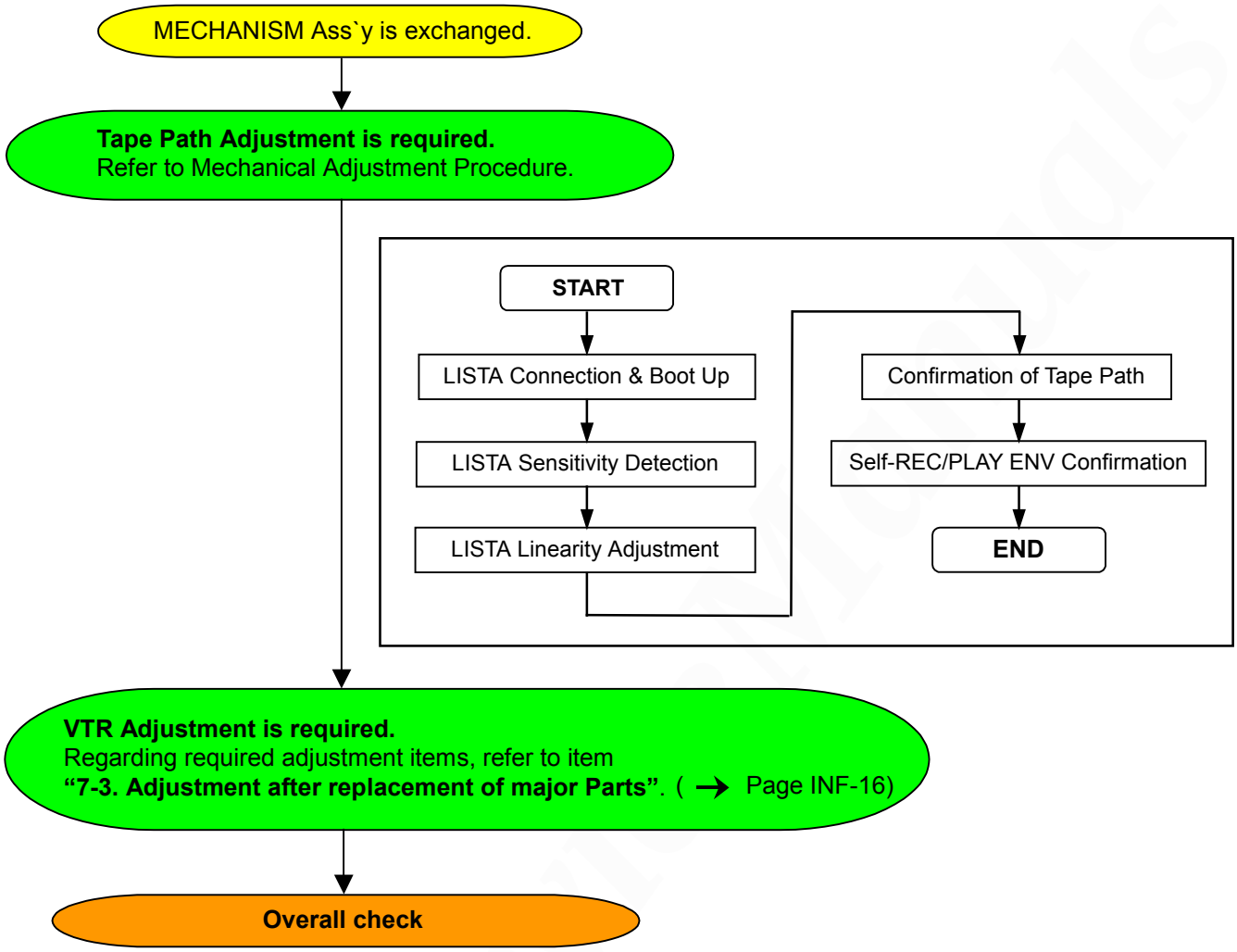
7-2-6. SIDE JACK1 Board



Circuit Diagrams

7-2-7. MECHANISM Ass`y

When MECHA I/F Board is exchanged, it requires same operation.



Circuit Diagrams

7-3. Adjustment after replacement of major parts

If one of the Major part listed requires replacement, the table below indicates what electrical adjustments are required.

7-3-1. CAMERA Adjustment

ADJUSTMENT ITEM	CAMERA Board	CAMERA LENS Ass`y			ZOOM SW Ass`y	SIDE JACK1 Board
		LENS Ass`y	PRISM Ass`y	ZOOM MOTOR Ass`y		
Zoom SW Center Value	X				X	
Hall Amp (Auto)	X	X				
Iris PWM (Auto)	X	X				
OIS (Auto)	X	X				
Zoom Tracking (Auto)	X	X		X		
CCD White scratch damage revision	X		X			
Preparation of White Balance	X		X			
White Balance (3100K) (Auto)	X		X			
White Balance (5100K) (Auto)	X		X			
White Balance (4500K) (Auto)	X		X			
White Balance (3600K) (Auto) *NOTE	X		X			
White Shading (Auto)	X		X			
Sync Level	X					●
Y Level	X					●
Pb Level	X					●
Pr Level	X					●
Luminance Level	X					●
Chroma Level	X					●
SETUP *NOTE	X					

X: Adjustment Required
● : Confirmation Required

***NOTE:** White Balance (3600K) and SETUP adjustment is required only for NTSC model.

7-3-2. VTR Adjustment

ADJUSTMENT ITEM	VTR Board	MECHANIZM Ass`y	MECHA IF Board
Sensitivity adj of Tape sensor	X	X	X
PG Shifter	X	X	X

X: Adjustment Required

NOTE:
When the adjustment data backed up is written in a new board when VTR board is exchanged, the adjustment is unnecessary.

Circuit Diagram

8. Service menu

The DIAGNOSTIC and ADJUST menu can be displayed as follows.

Press the button in order of **“COUNTER-RESET button”** → **“STOP button”** → **“MODE CHK button”** → **“MENU button”**, DIAGNOSTIC and the ADJUST menu can be displayed in addition to a setup menus.



Next, press the PLAY or STOP button to select the DIAGNOSTIC or ADJUST menu. And press SET(STILL) button to open the DIAGNOSTIC or ADJUST menu.

NOTE 1: P2-PC and TAPE-DUB mode can not be display the DIAGNOSTIC and ADJUST menu.
NOTE 2: Before performing menu operations on P2-MCR mode, you must clear the thumbnail screen. If the thumbnail menu is displayed, press the THUMBNAIL button to release the display.

Normal Screen (CAMERA mode)

Normal Screen (MCR or VCR mode)

Press the button in order of **“COUNTER-RESET button”** → **“STOP button”** → **“MODE CHK button”** → **“MENU button”**.

CAMERA MENU

1. SCENE FILE
2. CAMERA SETUP
3. SW MODE
4. AUTO SW
5. RECORDING SETUP
6. AV IN/OUT SETUP
7. DISPLAY SETUP
8. CARD FUNCTIONS P2

PUSH MENU TO EXIT

MCR or VCR MENU

1. RECORDING SETUP
2. PLAYBACK FUNCTIONS
3. AV IN/OUT SETUP
4. DISPLAY SETUP
5. OTHER FUNCTIONS
6. OPTION MENU
7. DIAGNOSTIC MENU
8. ADJUST MENU

PUSH MENU TO EXIT

Press the **“STOP”** or **“PLAY”** button.

CAMERA MENU

9. OTHER FUNCTIONS
10. OPTION MENU
11. DIAGNOSTIC MENU
12. ADJUST MENU

PUSH MENU TO EXIT

P2 CARD FUNCTIONS MENU is only display in P2 mode.

Display the following items on the DIAGNOSTIC and ADJUST menu by setting of operation mode.

MENU	ITEM	OPERATION MODE			
		P2		TAPE	
		CAM	MCR	CAM	VCR
DIAGNOSTIC	BER DISPLAY	X	X	X	●
	SAMPLE SPEED	X	X	X	●
	SOFT VERSION	●	X	●	X
	EEPROM VERSION	●	●	●	●
	CYLINDER	X	X	●	●
	TAPE RUN	X	X	●	●
	THREADING	X	X	●	●
	1394 DIAG	●	●	●	●
	1394 UID	●	●	●	●
ADJUST	ATF GAIN	X	X	X	●
	LINEARITY	X	X	X	●
	AUDIO FILTER	●	●	●	●
	Y LEVEL	●	●	●	●
	C LEVEL	●	●	●	●
	CMPNT Y LEVEL	●	●	●	●
	CMPNT PB LEVEL	●	●	●	●
	CMPNT PR LEVEL	●	●	●	●
	DEFECT COMP	●	X	●	X
	DEBUG DISP	●	●	●	●
	DEBUG MODE	●	●	●	●
	LCD OFFSET	●	●	●	●
	EVF OFFSET	●	●	●	●
	1394 GAP COUNT	●	●	X	X

●: Displayed
X: Not displayed

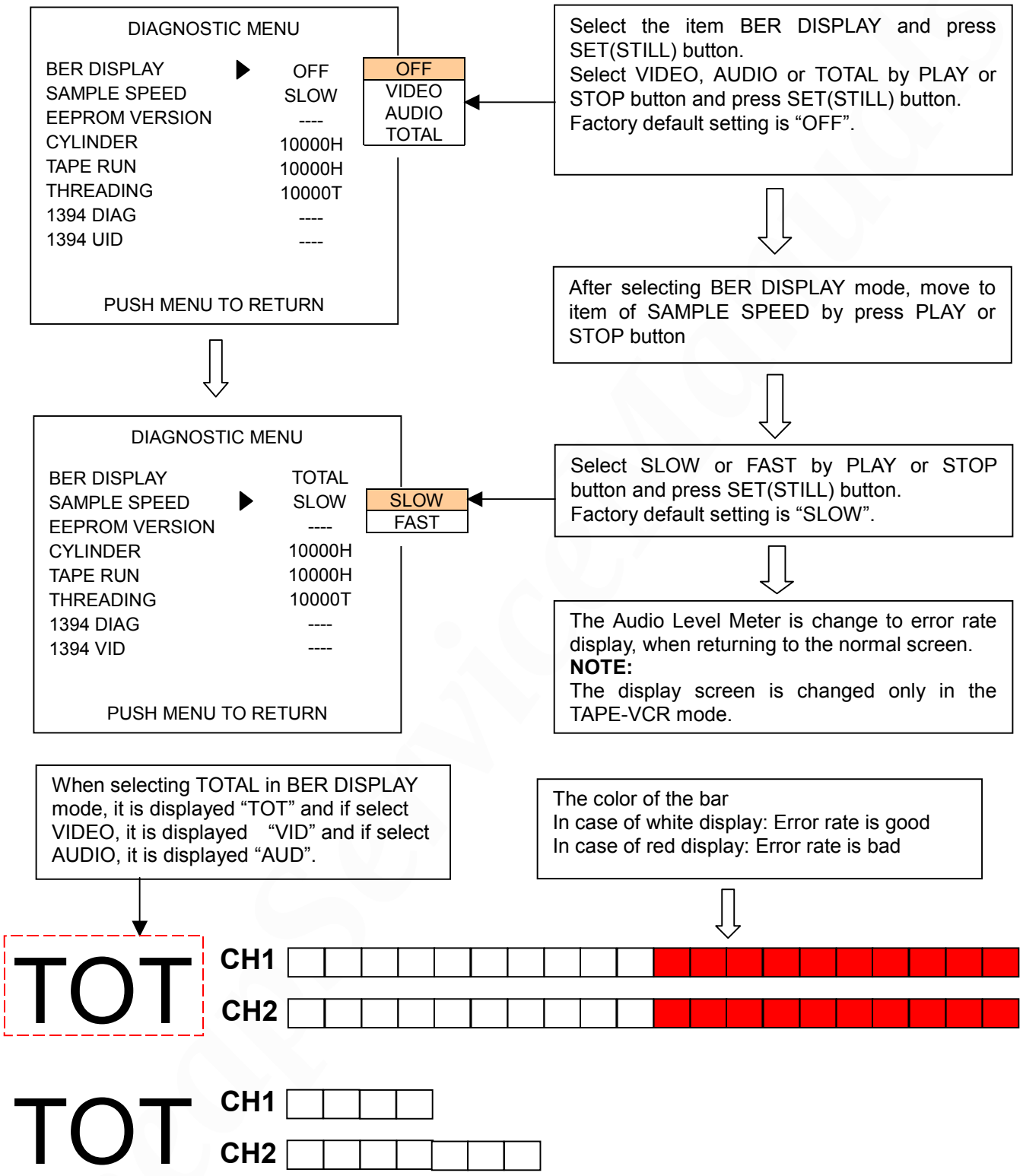
NOTE: Please do not change the setting of the items of “DEFFECT COMP”, “DEBUG DISP” and “DEBUG MODE”. These items are for factory use only.
Factory default setting is “OFF”.

Circuitdiagram.info

8-1. DIAGNOSTIC MENU

8-1-1. How to display the Error Rate.

This unit can be displayed Error Rate and it shows the playing condition of the VCR.
In case of the error rate is displayed, BER DISPLAY and SAMPLE SPEED mode is select on DIAGNOSTIC menu.



How to confirm the Error rate.

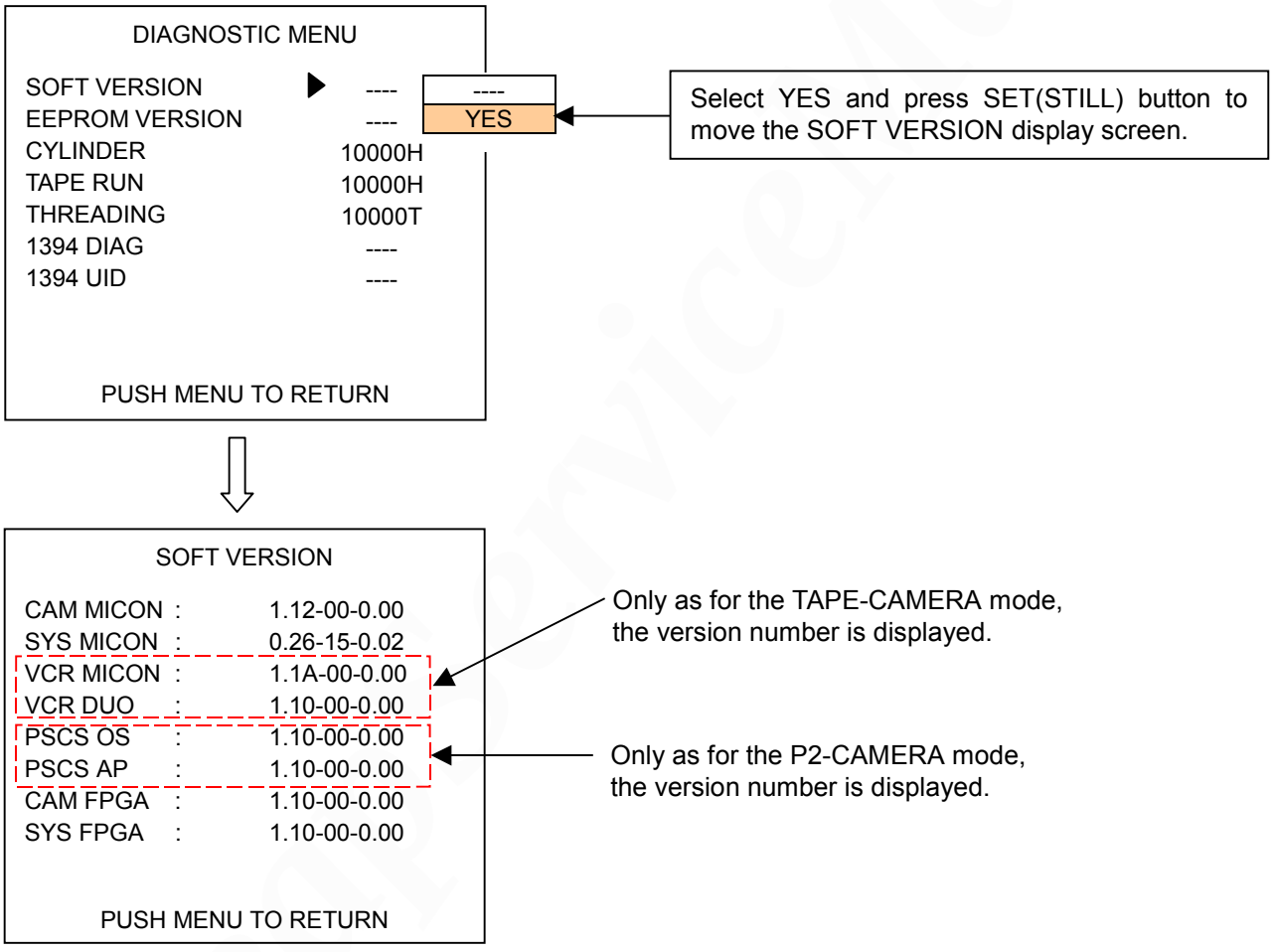
1. Select the TOTAL in item of BER DISPLAY.
2. Record the color bar signal on LP mode and playback the recorded portion. Confirm that the number of bar on display within 10 bars or less. The less bars displayed the better the error rate (LP mode can be set by item REC SPEED in RECORDING SETUP menu).

8-1-2. Software Version Display.

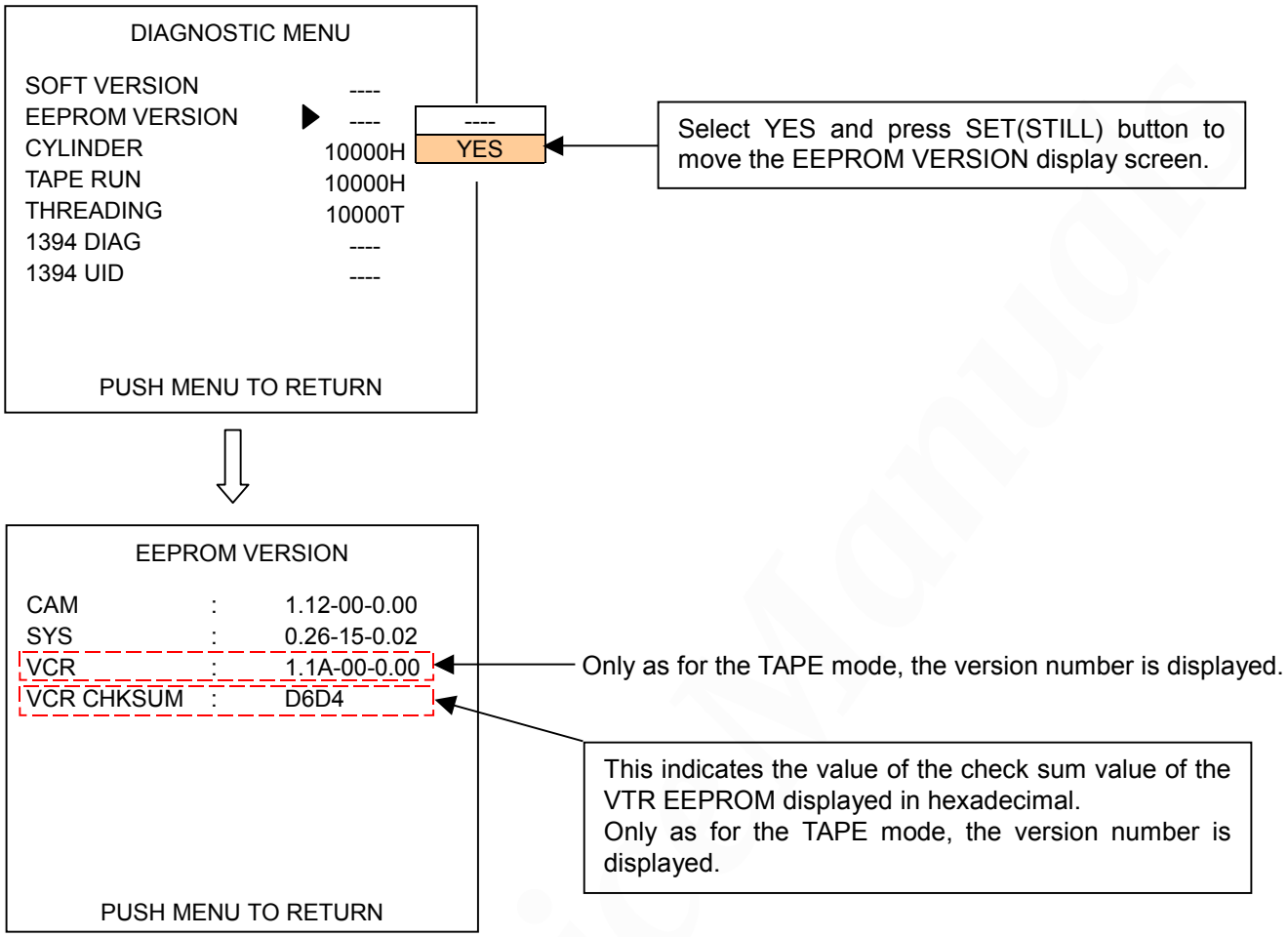
Each software version can be confirm at item **"SOFT VERSION"** and **"EEPROM VERSION"** in DIAGNOSTIC menu.

Type	Name on display	Ref No.	Board
Microprocessor	CAM MICON	IP504	CAMERA
	SYS MICON	IP305	CODEC
	VCR MICON	IP1(VTR MAIN MICON)	VTR
	VCR DUO	IC9(VTR SUB MICON)	VTR
FLASH	P2CS OS	IP202(SH4)	CODEC
	P2CS AP	IP203(SH4)	
	CAM FPGA	IP100(TG FPGA)	CAMERA
	SYS FPGA	IP706(OSD FPGA)	CODEC
EEPROM	CAM	IP500	CAMERA
	SYS	IP306	CODEC
	VCR	IP2	VTR

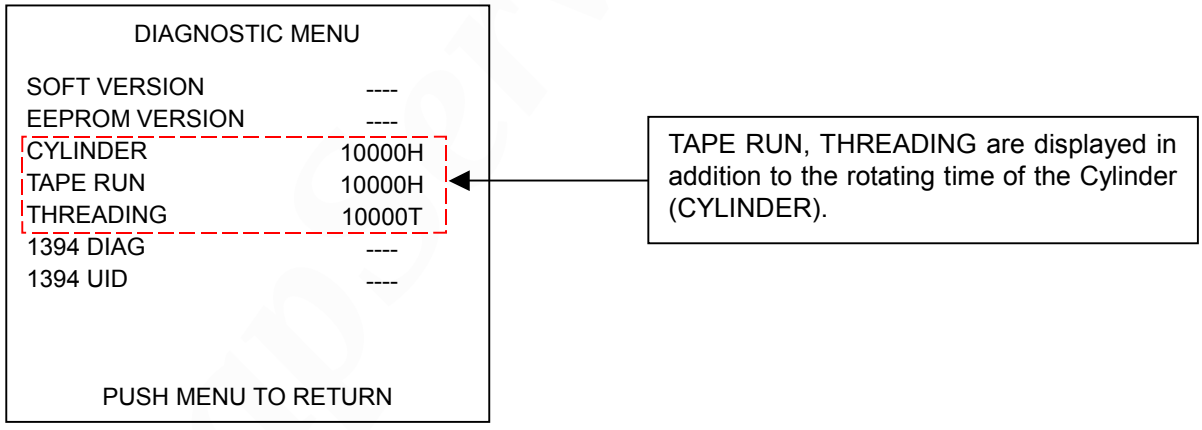
SOFT VERSION



EEPROM VERSION

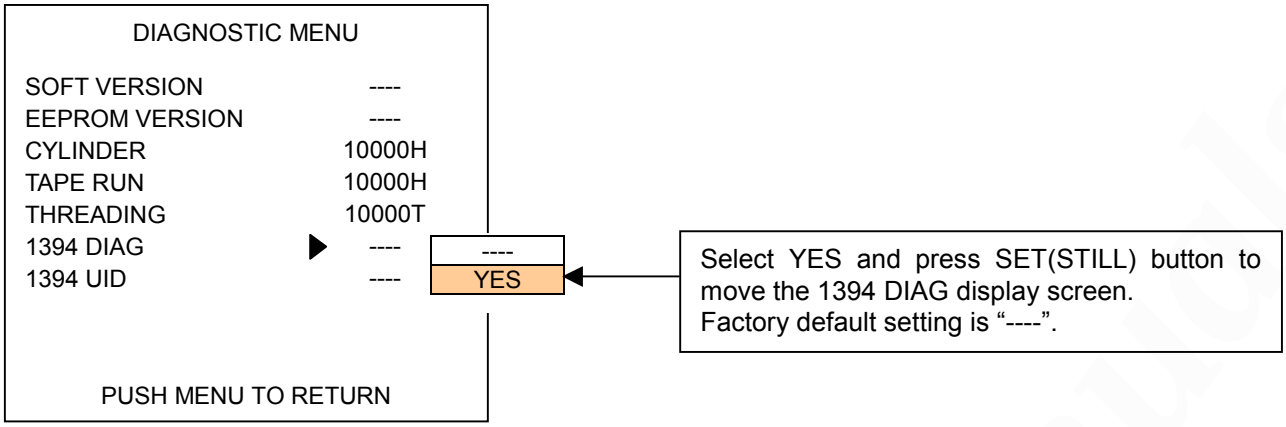


8-1-3. Hour Meter Display.



ITEM	Display Data	Description
TAPE RUN	00000H – 99999H	It displays the time that the tape is running in units of hours.
THREADING	00000T – 99999T	It displays the number of times the tape is inserted.
CYLINDER	00000H – 99999H	It displays the time that the cylinder is rotating in units of hours. It displays same time as in the item HOUR METER of OTHER FUNCTION menu.

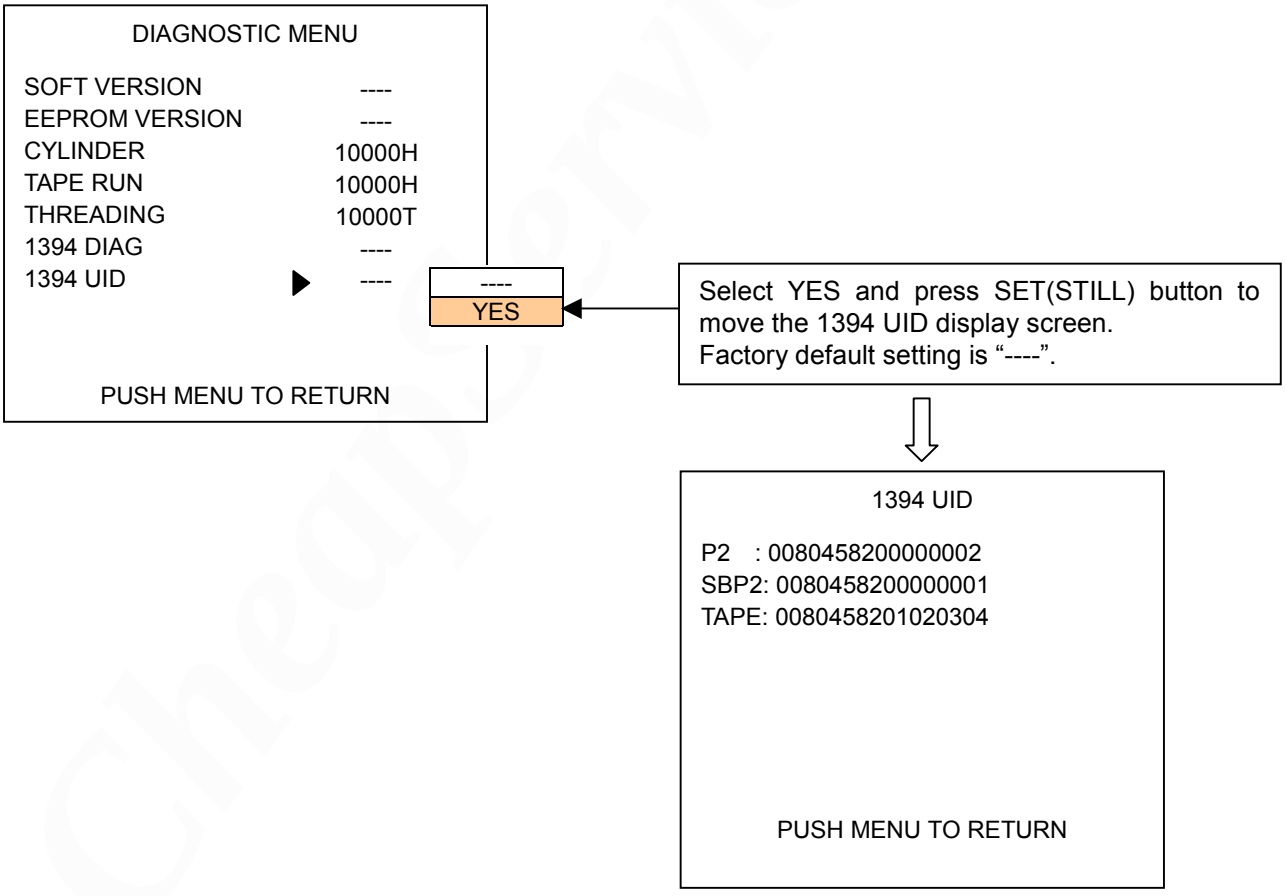
8-1-4. 1394 DIAG Display.



Items	Description	Remark
NODE CNT	Number of NODE connections.	
MY_ID	NODE ID of this unit.	
ROOT_ID	ROOT ID	
IRM_ID	PHY ID of IRM	IRM(Isochronous Resonance Manager)
RCV_ID	PHY ID of the equipment which is transmitting the data to be receiving of this unit.	
GAP CNT	Current gap count value	

8-1-5. 1394 UID Display.

1394 UID screen is indicate 3 kinds of ID product number P2, SBP2 and TAPE.



8-2. ADJUST MENU

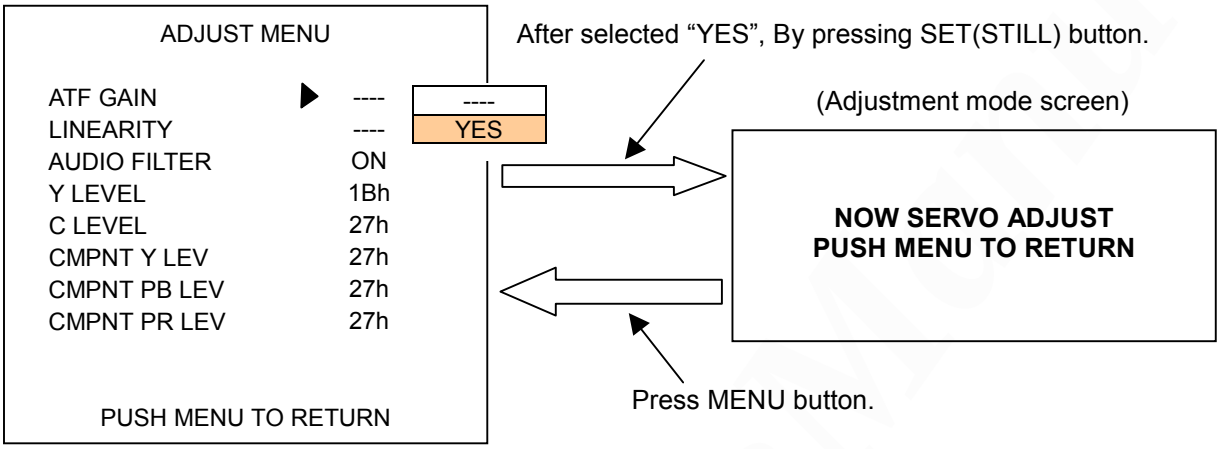
8-2-1. Setting item for LISTA Measurement

ATF GAIN

The speed of the tape changes if this item set to “YES” for the ATF sensitivity confirmation.
After selected “YES”, by pressing SET(STILL) button, enter the adjustment mode and then exit the menu once. The VTR mode is operated when the menu mode is exited temporarily. The screen below is displayed.

NOW SERVO ADJUST
PUSH MENU TO RETURN

It will be returned to ADJUST MENU when the MENU button is pressed in this condition.



LINEARITY

The ATF sensitivity changes if this item set to “YES” for the LINEARITY confirmation.
After selected “YES”, by pressing SET(STILL) button, enter the adjustment mode and then exit the menu once. The VTR mode is operated when the menu mode is exited temporarily. The screen below is displayed.

NOW SERVO ADJUST
PUSH MENU TO RETURN

It will be returned to ADJUST MENU when the MENU button is pressed in this condition.

8-2-2. Audio Filter

AUDIO FILTER

ON: The mechanism noise cancellation function operates by IC9(DUO).
OFF: The mechanism noise cancellation function does not operates by IC9(DUO).

Factory default setting is “ON”.

8-2-3. Adjustment item for Video Level

Y LEVEL
Y level of VIDEO OUT and S-VIDEO OUTPUT signal can be adjusted on this item.
The displayed value is the same as value for Luminance level adjustment in EVR adjustment.

C LEVEL
C level of VIDEO OUT and S-VIDEO OUTPUT signal can be adjusted on this item.
The displayed value is the same as value for Chroma level adjustment in EVR adjustment.

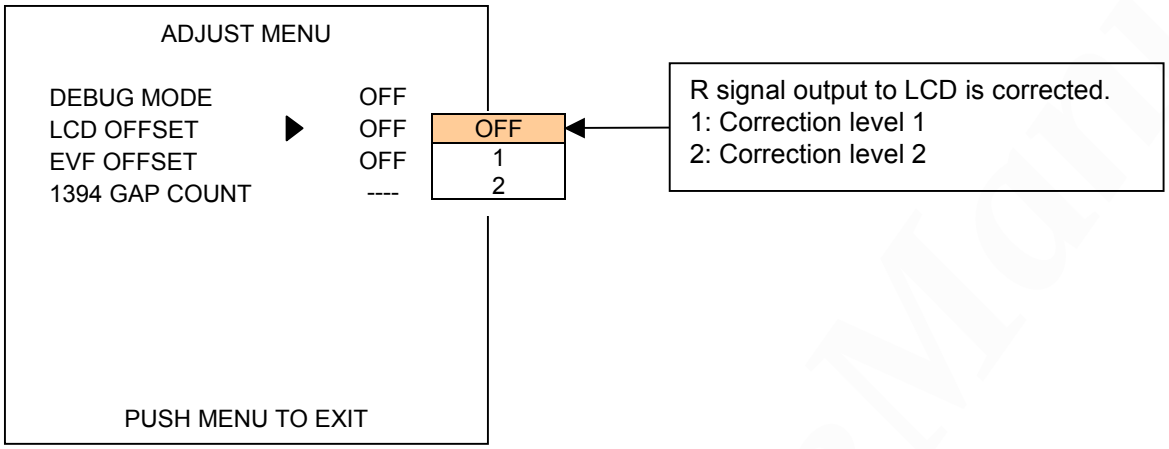
CMPNT Y LVL
Component Y level of COMPONENT OUTPUT signal can be adjusted on this item.
The displayed value is the same as value for Component Y level adjustment in EVR adjustment.

CMPNT PB LVL
Component PB level of COMPONENT OUTPUT signal can be adjusted on this item.
The displayed value is the same as value for Component PB level adjustment in EVR adjustment.

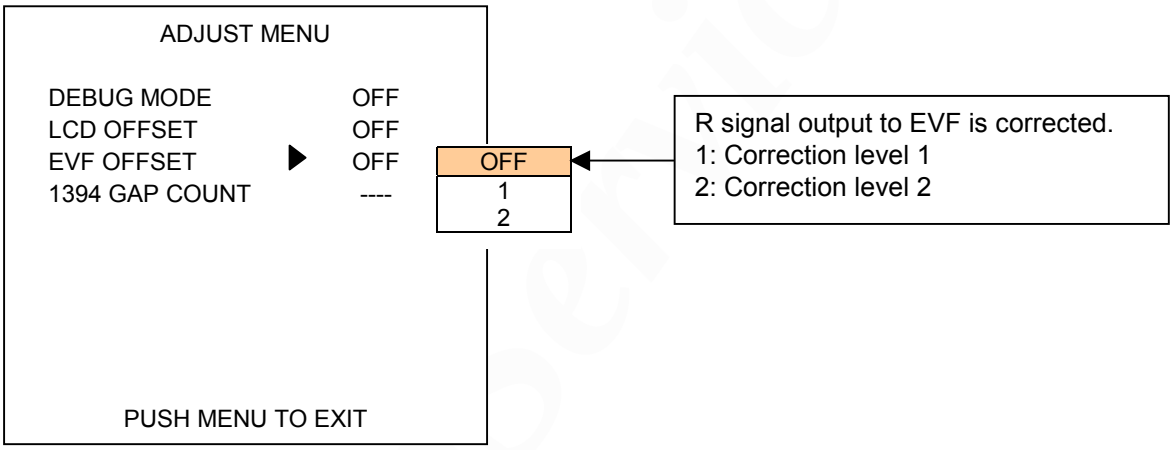
CMPNT PR LVL
Component PR level of COMPONENT OUTPUT signal can be adjusted on this item.
The displayed value is the same as value for Component PR level adjustment in EVR adjustment.

8-2-4. LCD/EVF Correction

LCD OFFSET



EVF OFFSET



8-2-5. 1394 GAP COUNT
Setting at communication response time.

Circuit Diagrams

9. Service menu (GUI)

9-1. Making of Service SD Card

The Service SD card is required to display the service menu on GUI screen.

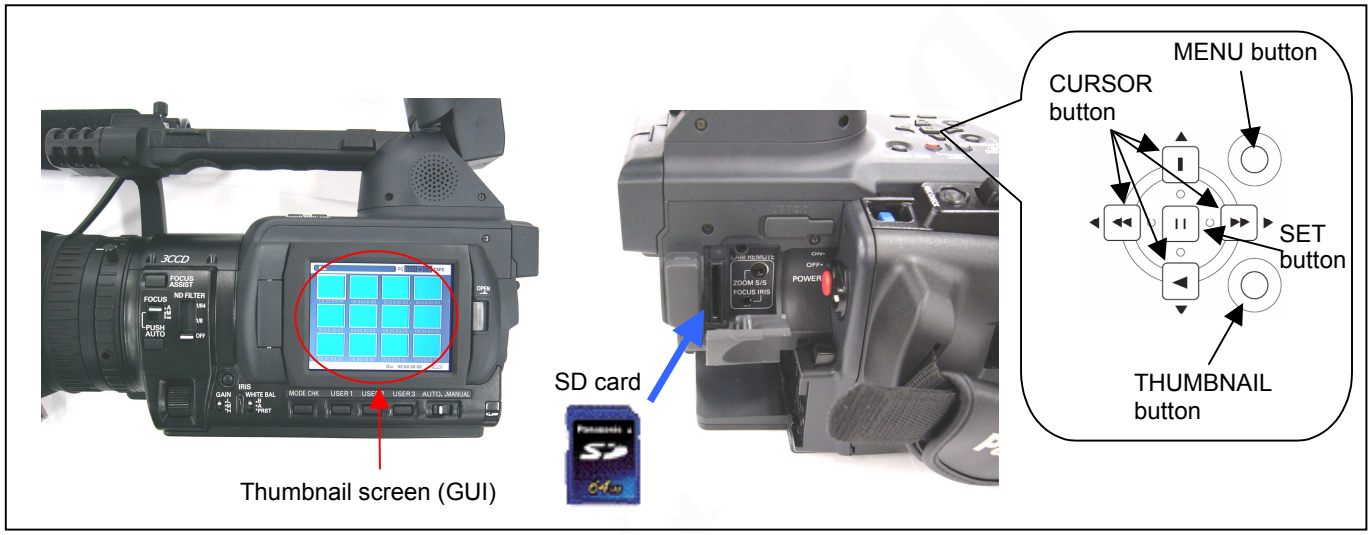
1. Download the file **"Service SD Card"** from Global Service Web Site.
2. Copy the file **"Service SD Card"** to hard disk of your PC and extract the file **"Service SD Card".**
3. Insert a formatted SD card into the card slot of PC and copy the folder **"PRIVATE"** to SD card. The downloaded file **"passwd"** is included in folder **"PRIVATE"**.

NOTE: Do not change the construction of folder and file name. The folder construction shown in the following and top of directory should be **"PRIVATE"**.

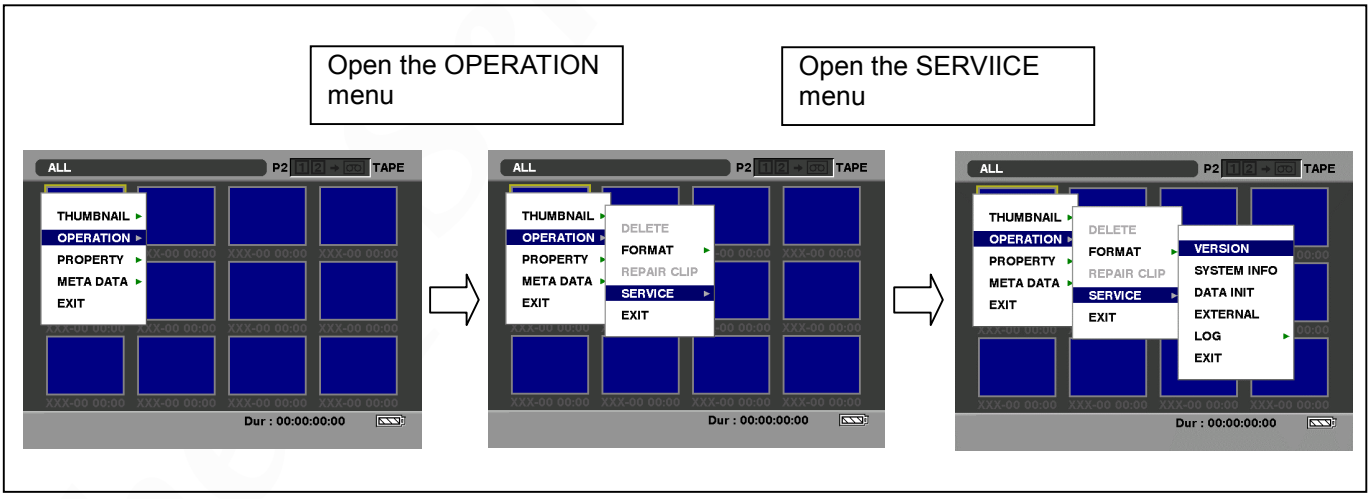
**Folder: PRIVATE \ MEIGROUP \ PAVCN \ SBG \ P2SD \ mntnc **
File Name: passwd

9-2. How to open the menu

1. Press the **THUMBNAIL button** to display the thumbnail screen.
2. Insert a Service SD card into the SD card insertion slot of this unit.



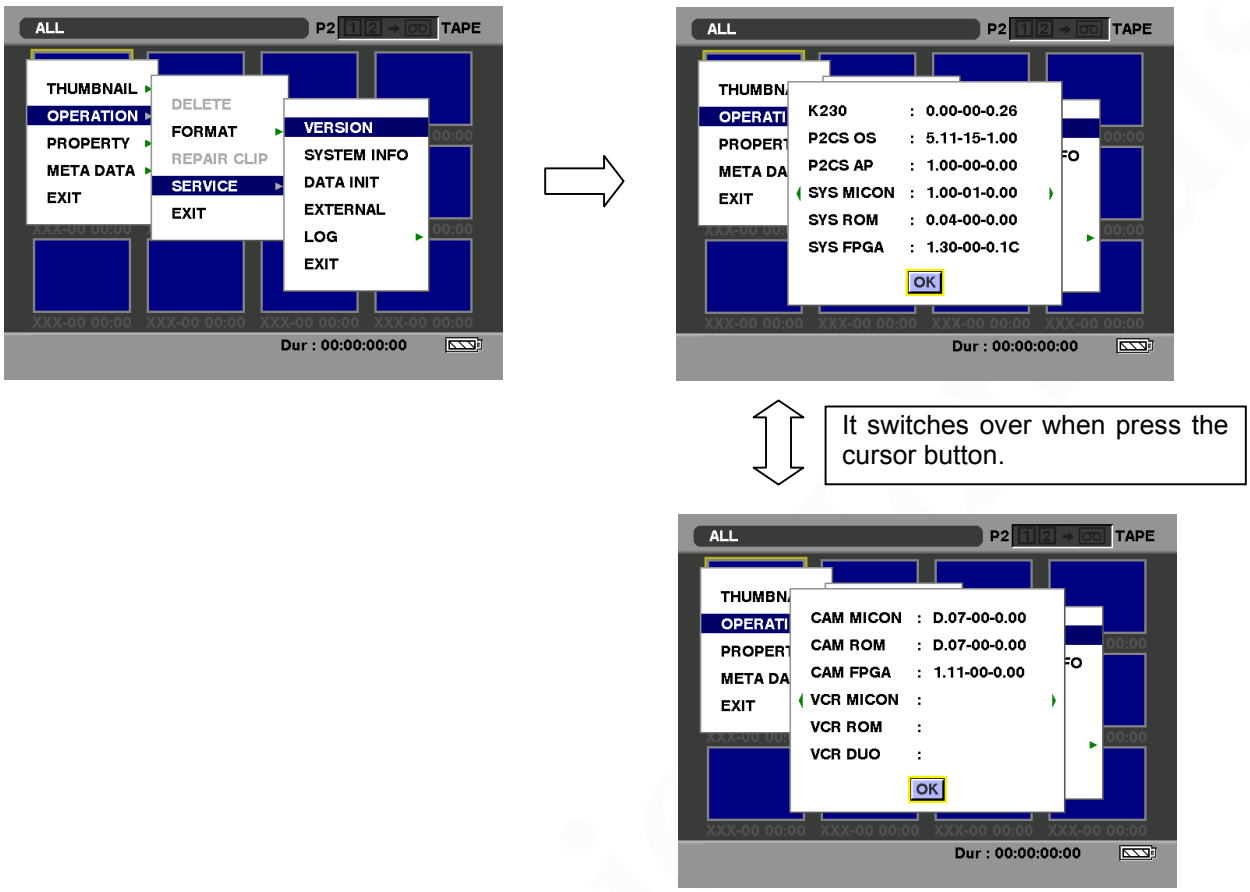
3. Press the **MENU button** to display the menu. Use the **CURSOR buttons** to select the **"OPERATION"** and press **SET button** to open the OPERATION menu.
4. Select the item **"SERVICE"** on the menu and press the **SET button**. The service menu is displayed.



9-3. VERSION

Each software version can be confirmed.

1. Select the item **"VERSION"** on the service menu and press the **SET button**. The following screen is displayed.
2. Press the **CURSOR button** so that the version screen is switched over.

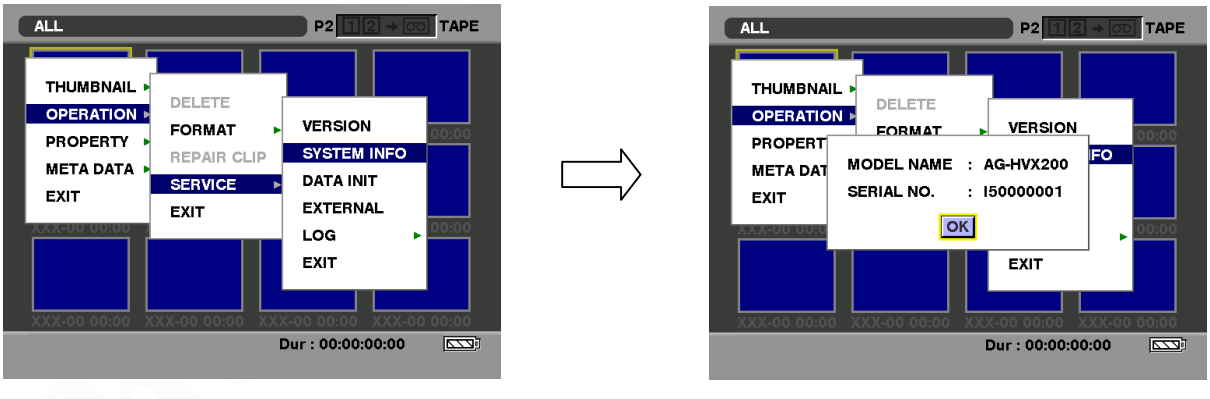


3. Press the **SET button** to exit this screen.

9-4. SYSTEM INFO

The information of model name and serial number can be confirmed.

1. Select the item **"STSTEM INFO"** on the service menu and press the **SET button**. The following screen is displayed.



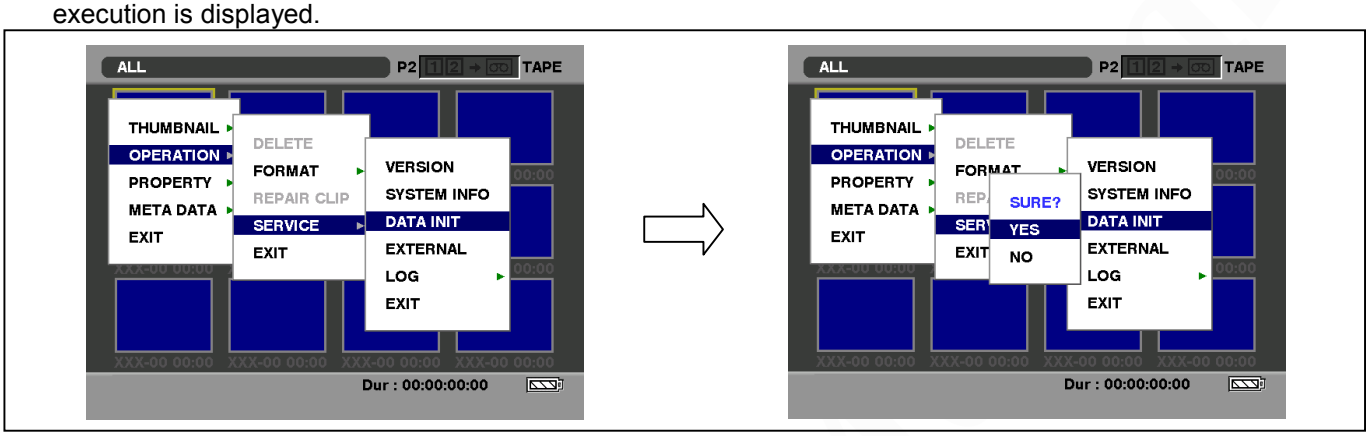
2. Press the **SET button** to exit this screen.

9-5. DATA INIT.

The GUI menu and the meta data is initialized by executing the DATA initialization.
In case of the FLASH ROM (IP202 and 203) is exchanged to new one on CODEC board or after rewriting setting of data according to destination on CODEC board, it is necessary to execute the DATA initialization.

NOTE: Please exchange both IP202 and 203 to new one when you exchange FLASH ROM. And it is necessary to write the program in FLASH ROM. Please contact Panasonic Service Engineering about writing procedure.

1. Select the item **"DATA INIT"** on the service menu and press the **SET button**. The confirmation menu of the execution is displayed.

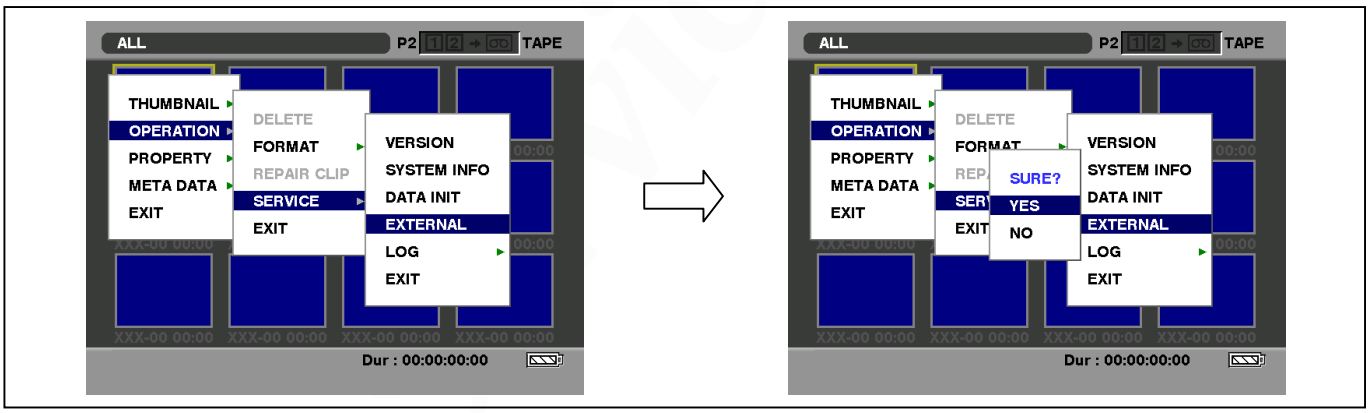


2. Select the item **"YES"** and press **SET button**.

9-6. EXTERNAL

NOTE: This menu is only use at factory.

1. Select the item **"EXTERNAL"** on the service menu and press the **SET button**. The confirmation menu of the execution is displayed.

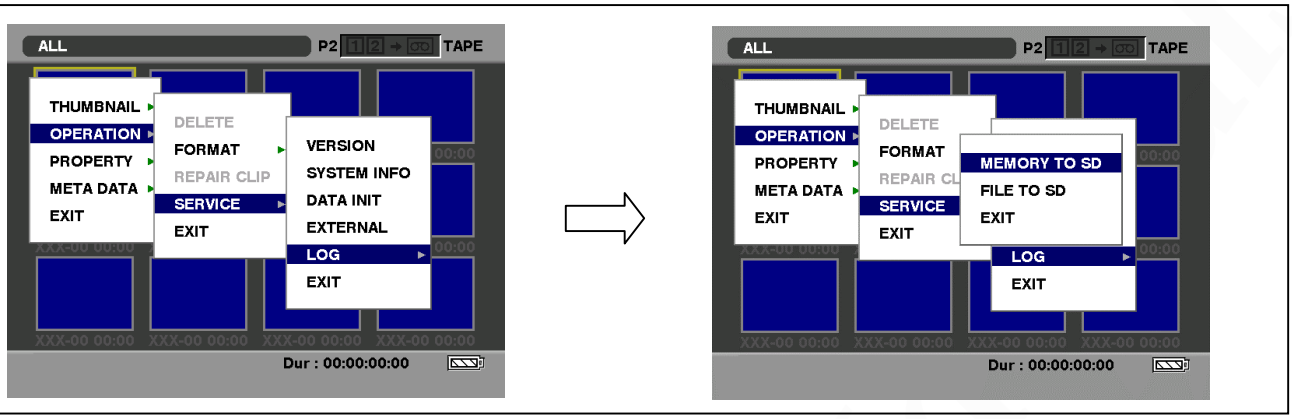


9-7. LOG

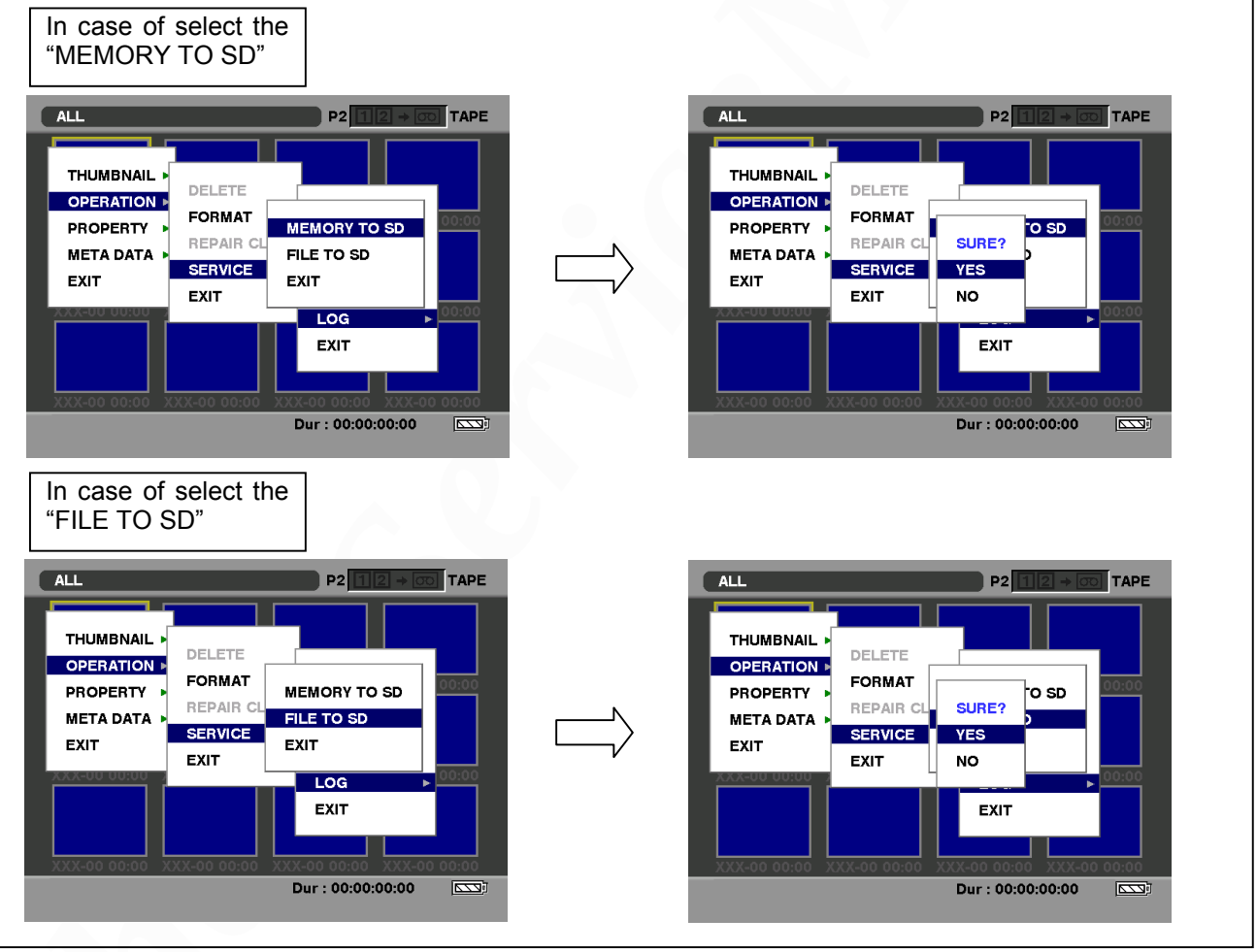
The LOG data can be written on the SD card.
Please execute **"MEMORY TO SD"** and **"FILE TO SD"**, when you write the LOG data on the SD card,.

MEMORY TO SD: The LOG data is transfer to SD card from FLASH ROM on CODEC board.
FILE TO SD: The LOG data is transfer to SD card from SH4MICON on CODEC board.

1. Select the item **"LOG"** on the service menu and press the **SET button**. The following screen is displayed.



2. Select the item **"MEMORY TO SD"** or **"FILE TO SD"** on the menu and press the **SET button**. The confirmation menu of the execution is displayed.



3. Select the item **"YES"** and press **SET button**, the LOG data is written on the SD card.

NOTE: There is no problem even if the LOG data is written on the Service SD card.

10. Firmware update procedure

NOTE: (Only the MC model)
The thumbnail screen described in this item **"10. Firmware Update procedure"** is an English display. When **"CHINESE"** is selected by item **"LAUNGAGE"** of the OTHER FUNCTION screen (Setting menu), it becomes a Chinese display (The factory setting mode is **"CHINESE"**). Moreover, the screen shown by mark A, B, and C that has been described to the INF-32 page is only an English display.

10-1. MICROCOMPUTER / FPGA CHART

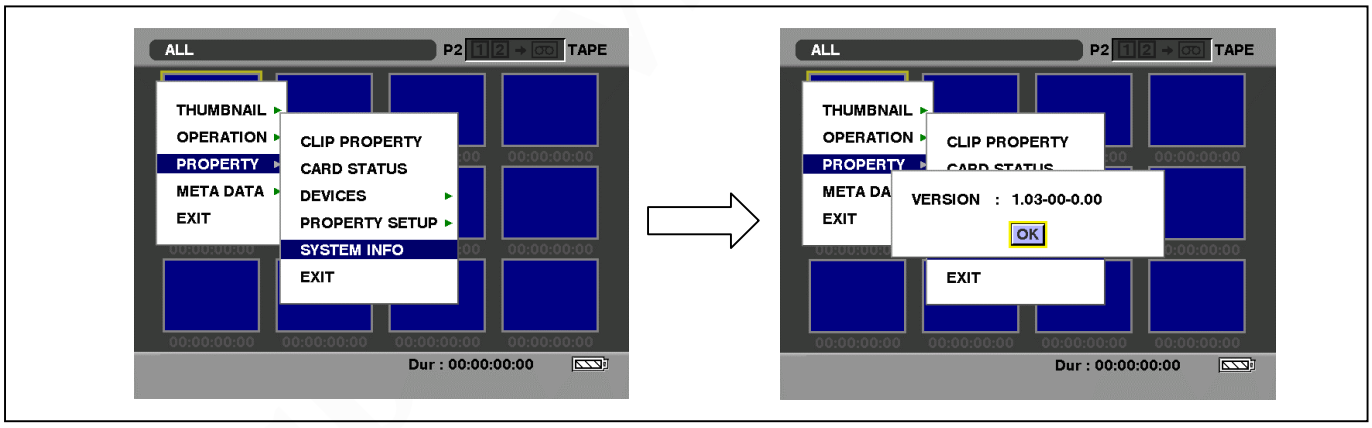
Board	Name	Ref No.	IC type	Manufacture	Version display	Remark
CAMERA	CAM MICON	IP504	FLASH	NEC	●	
	CAM ROM	IP500	EEPROM	ASAHI KASEI	●	
	CAM FPGA	IP100	FLASH	Lattice	●	TG FPGA
CODEC	SYS MICON	IP305	FLASH	TOSHIBA	●	
	SYS ROM	IP306	EEPROM	ASAHI KASEI	●	
	P2CS OS	IP202, IP203	FLASH	TOSHIBA	●	
	P2CS AP				●	
	SYS FPGA	IP706	FLASH	Xilinx	●	OSD FPGA
VTR	VCR MICON	IP1	FLASH	TOSHIBA	●	
	VCR ROM	IP2	EEPROM	ASAHI KASEI	●	

: These are not required for update.

10-2. Version information

The firmware of AG-HVX200/202 is updated by the customer. Therefore, to facilitate the version information confirmation, the version number is given by combining SYS MICON, P2CS OS, and P2CS AP. In a word, SYS MICON, P2CS OS, and P2CS AP need not be individually updated.
Please confirm that the version number has been updated as follows, when you execute the update of the firmware.

1. This camera recorder is set to P2-MCR mode.
2. On the thumbnail screen, press **MUNU button** to display the menu.
3. Select the item **"PROPERTY"** on the menu and press the **SET button**.
4. Next, select the item **"SYSTEM INFO"** on the menu and press the **SET button** to display the version.



NOTE: The version number of SYS MICON, P2CS OS, and P2CS AP can be confirmed individually by the GUI service menu and the DIAGNOSTIC menu. Please refer to the content that has been described to the item **"9-3. VERSION"** and the item **"8-1-2. Software Version Display"** for the confirm method of the version.

SYSTEM INFO
1.02-00-0.00

Version opened to the public to customer
It is possible to display by the user-mode.

SYS MICON	P2CS OS	P2CS AP
1.07-00-0.00	1.00-00-0.00	1.02-00-0.00

Individual version of firmware
Only the service-mode can be displayed.

NOTE: The confirmed version is only SYSTEM INFO after completing the update. The version of an individual firmware need not be confirmed.

10-3. Update with the SD Card

NOTE: Please refer to the most recent execution outline, as the contents of this item "10-2. Update with the SD Card" may change.

CAUTION: Before Updating Software

- **Do not power down or pull card while upgrading.** If the program quits during loading, the data will be erased or part writing condition and the restart is not made. However software can not be update, please contact Panasonic Service Engineering.

10-3-1. General

1. Software version can be updated by using SD card. Update using SD card can be made with just file copy to a SD card.

10-3-2. Preparation

< Preparation for SD Card >

1. SD Card (more than 64MB memory card) are required.
2. Insert an SD card into the P2 camera or P2 deck and format SD card.

NOTE: You must format SD card with the P2 camera or P2 deck. SD card formatted by PC will not work without special software.

< Copy of Image data for update >

1. Download the file **"VVVSI*****.zip"** from Global Service Web Site.
2. Copy the file **"VVVSI*****.zip"** to hard disk of your PC and extract the file.
3. Insert a formatted SD card into the card slot of PC.
4. Copy the folder **"PRIVATE"** to SD card. The downloaded image data (upgrade file: **k230****.img**) is included in folder **"PRIVATE"**.

NOTE: Do not change the construction of folder and file name. The folder construction shown in the following and top of directory should be **"PRIVATE"**.
**Folder: PRIVATE \ MEIGROUP \ PAVCN \ SBG \ P2SD \ FW **
File Name: k230**.img**

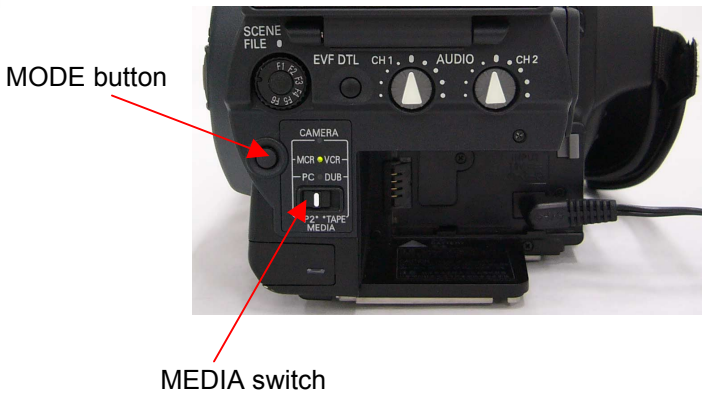
< External Power >

It is best to power the unit from the external power supply, this will prevent the unit from shutting off during upgrading.

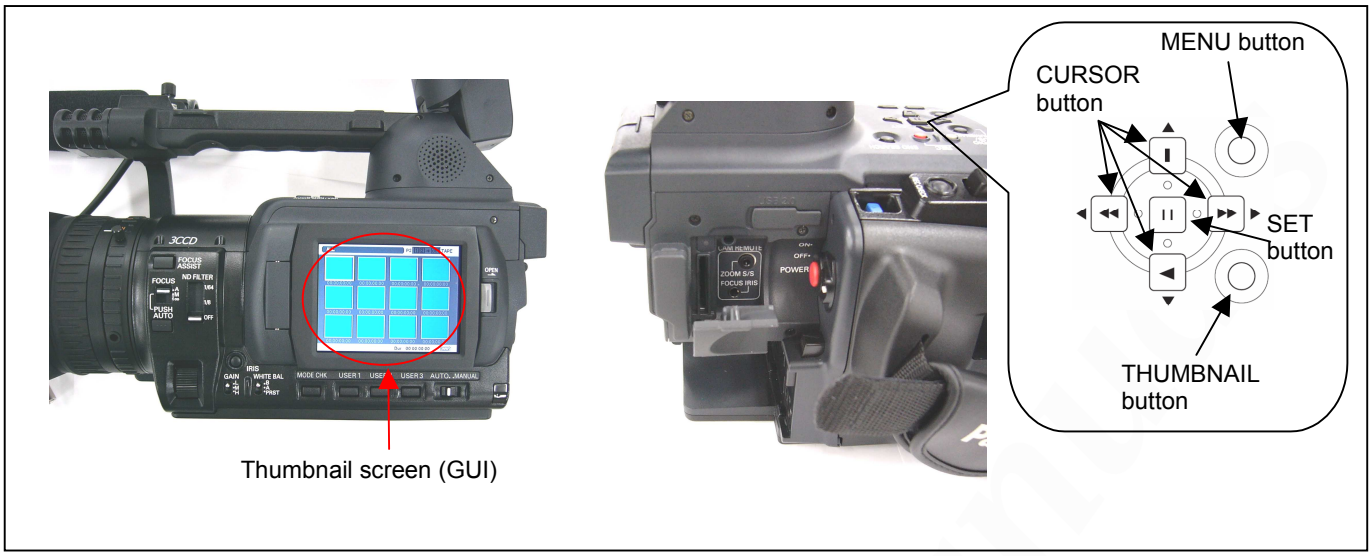
10-3-3. Updated procedure

1. Insert a formatted SD card into the SD card insertion slot of this camera recorder.
2. Set the **MEDIA** switch to **"P2"** side and turn power on.

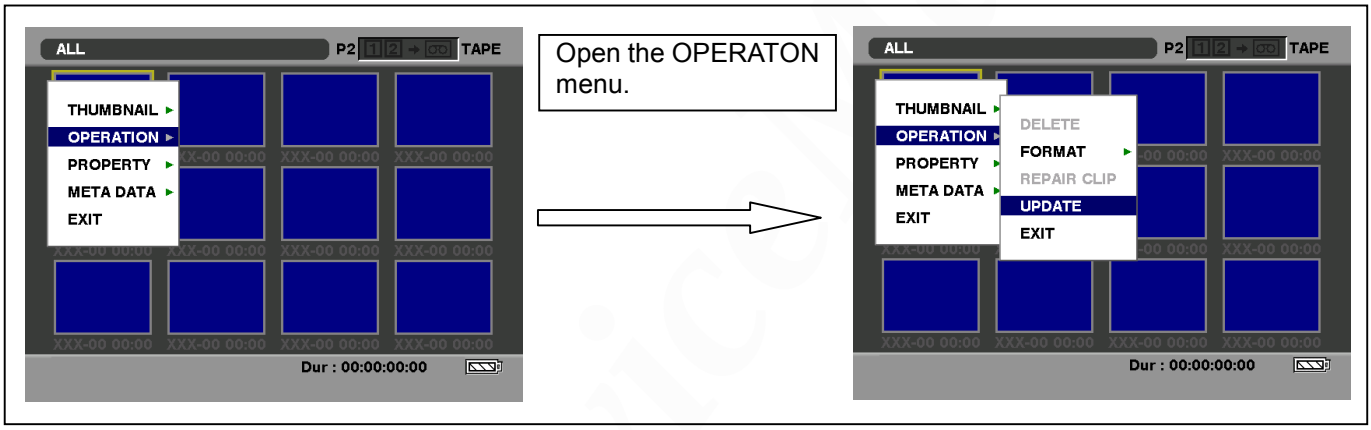




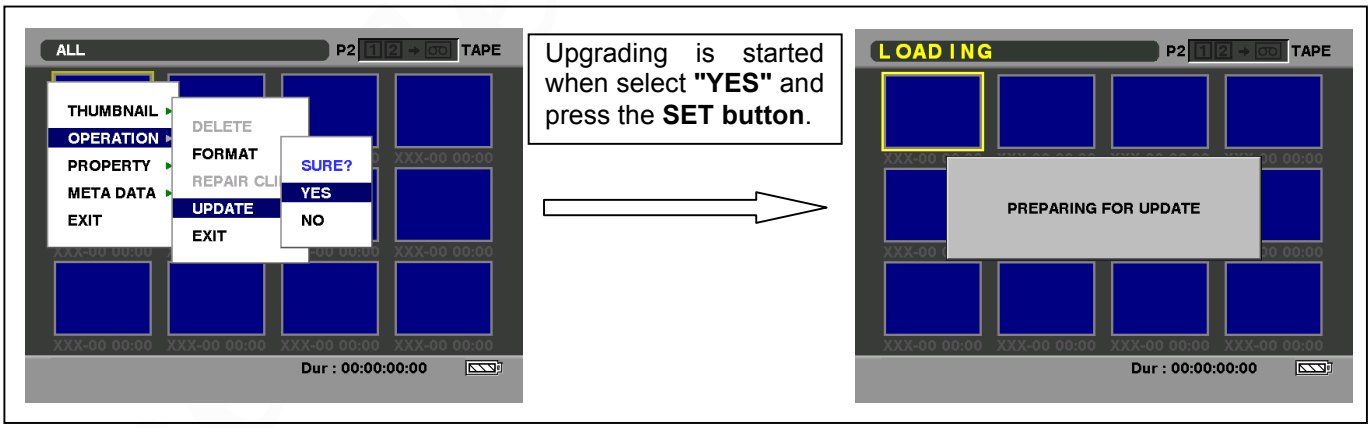
3. Press the **MODE button** to set to P2-MCR mode.



4. Press the **MENU button** to display the menu. Use the **CURSOR buttons** to select the item **"OPERATION"** and press **SET button** to open the OPERATION menu.



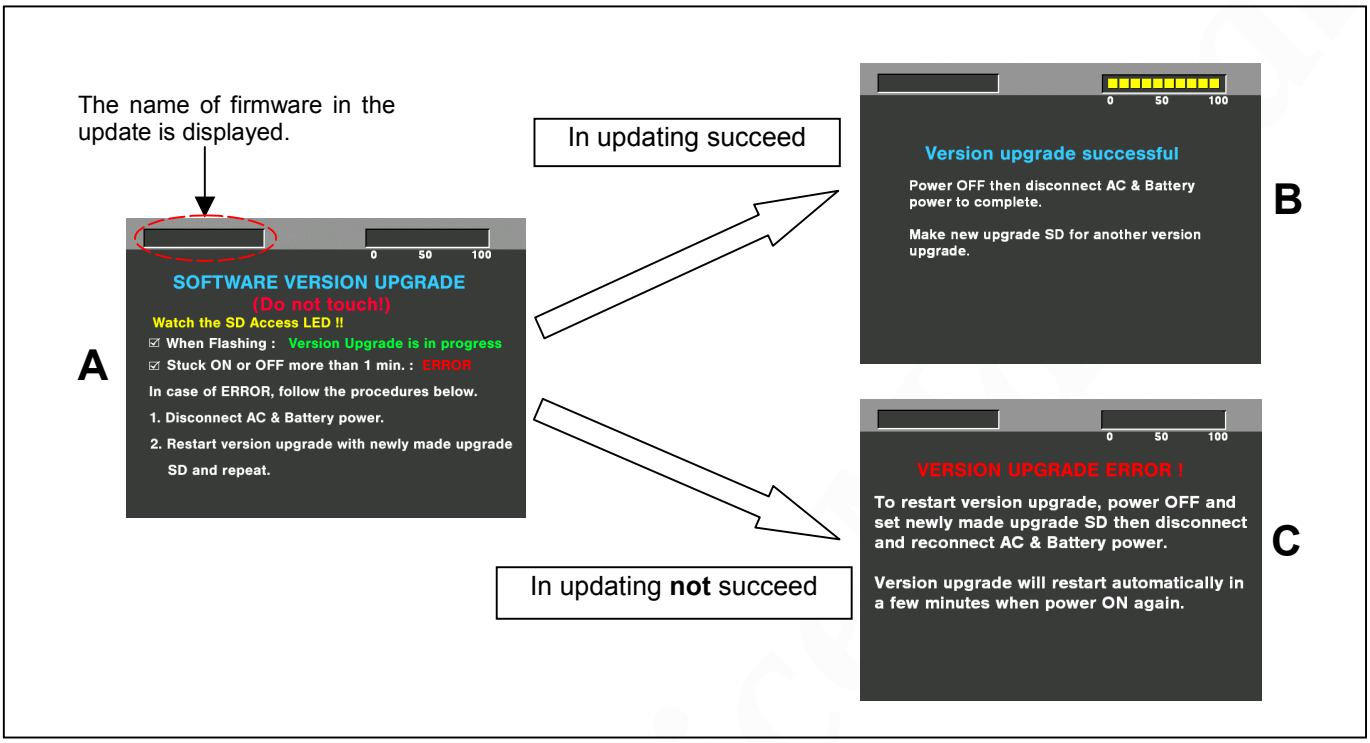
5. Select the item **"UPDATE"** on the menu and press the **SET button** (If the update SD card does not insert into the unit, item **"UPDATE"** does not appeared.). The confirmation menu of the execution is displayed. If upgrade is executed, select the item **"YES"** and press **SET button**.
6. Update program is started and the message **"PREPARING FOR UPDATE"** appears on screen. In this timing, it is doing preparation such as the confirmation of the data of the updating.



7. Following screen is displayed as indicate mark **"A"** while upgrading.
   - ◆ Software update takes **approx. 10 min**.
   - ◆ When starting the updating, the LED of SD Card slot is turned on. (Green LED)
8. In updating succeed, following screen is displayed as indicate mark **"B"**. Pull out the SD card and turn OFF and ON the unit in order to restart it.

NOTE:

- ◆ If the upgrade is not successful, an error message will appear on Display **"C"**.
- ◆ Although the screen is displayed as indicate mark **"A"** and the LED of SD Card slot is turned OFF for more than 5min, this status is NG.



- ◆ If the power supply is shut down on the way to update or above error operation is performed, turn the power ON then restart the write function again. If software can not be update by SD card, please contact Panasonic Service Engineering.

9. Remove the SD card and turn the power of camcorder to OFF and the DC cable is plugged OUT/IN. Then turn the power of camcorder to ON to restart it. You must do this operation to change the data.
10. Confirm that the firmware version is updated follow the item **"10-2. Version information"**. (→ Page INF-29)

Circuit Diagram

11. Information stored in EEPROM

Several information are stored in EEPROM. Please refer to following explanation, which data stored in EEPROM.

11-1. Setting menu data

●: Displayed
X: Not displayed
CAM: CAM EEPROM
VTR: VTR EEPROM
CODEC: CODEC EEPROM

11-1-1. SCENE FILE

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
OPERATION TYPE	CAM	●	X	●	X	X
FRAME RATE	CAM	●	X	X	X	X
SYNCRO SCAN	CAM	●	X	●	X	X
DETAIL LEVEL	CAM	●	X	●	X	X
V DETAIL LEVEL	CAM	●	X	●	X	X
DETAIL CORING	CAM	●	X	●	X	X
CHROMA LEVEL	CAM	●	X	●	X	X
CHROMA PHASE	CAM	●	X	●	X	X
COLOR TEMP	CAM	●	X	●	X	X
MASTER PED	CAM	●	X	●	X	X
A.IRIS LEVEL	CAM	●	X	●	X	X
NEWS GAMMA	CAM	●	X	●	X	X
GAMMA	CAM	●	X	●	X	X
KNEE	CAM	●	X	●	X	X
MATRIX	CAM	●	X	●	X	X
SKIN TONE DTL	CAM	●	X	●	X	X
V DETAIL FREQ	CAM	●	X	●	X	X
NAME EDIT	CODEC	●	X	●	X	X
SAVE/INT	-----	●	X	●	X	X

11-1-2. CAMERA SETUP

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
ASPECT CONV	CAM	●	X	●	X	X
SETUP(P2) ***P model only**	CAM	●	X	●	X	X
SETUP(TAPE) ***P model only**	CAM	●	X	●	X	X

11-1-3. SW MODE

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
MID GAIN	CAM	●	X	●	X	X
HIGH GAIN	CAM	●	X	●	X	X
ATW	CAM	●	X	●	X	X
HANDLE ZOOM	CAM	●	X	●	X	X
IRIS DIAL	CAM	●	X	●	X	X
USER1	CAM	●	X	●	X	X
USER2	CAM	●	X	●	X	X
USER3	CAM	●	X	●	X	X

11-1-4. AUTO SW

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
A.IRIS	CAM	●	X	●	X	X
AGC	CAM	●	X	●	X	X
ATW	CAM	●	X	●	X	X
AF	CAM	●	X	●	X	X

11-1-5. RECORDING SETUP

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
REC FORMAT(P2)	CODEC	●	X	X	X	X
REC FORMAT(TAPE)	CODEC	X	X	●	X	X
REC MODE	CODEC	●	X	X	X	X
REC FUNCTION	-----	●	X	X	X	X
ONE-SHOT TIME	CODEC	●	X	X	X	X
INTERVAL TIME	CODEC	●	X	X	X	X
PREREC MODE	CODEC	●	X	X	X	X
REC SPEED	CODEC	X	X	●	●	●
AUDIO REC	CODEC	X	X	●	●	X
MIC ALC	CODEC	●	X	●	X	X
MIC GAIN 1	CODEC	●	X	●	X	X
MIC GAIN 2	CODEC	●	X	●	X	X
25M REC CH SEL	CODEC	●	X	X	X	X
TC MODE	CODEC	●	●	●	●	●
TCG	CODEC	●	●	●	●	●
FIRST REC TC	CODEC	X	X	●	●	●
TC PRESET	CODEC	●	●	●	●	●
UB MODE	CODEC	●	●	●	●	●
UB PRESET	CODEC	●	●	●	●	●
1394 TC REGEN	CODEC	X	●	X	●	X
1394 UB REGEN	CODEC	X	●	X	●	X
1394 IN PRESET	CODEC	X	●	X	●	X

11-1-6. PLAYBACK FUNCTIONS

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
32K AUDIO	CODEC	X	X	X	●	X
AUDIO OUT(P2)	CODEC	X	●	X	X	X
AUDIO OUT(TAPE)	CODEC	X	X	X	●	X

11-1-7. AV IN/OUT SETUP

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
CMPNT OUT SEL	CAM	●	●	X	X	X
HP MODE	CODEC	●	X	●	X	X
A. DUB INPUT	CODEC	X	X	X	●	X
1394 OUT	CODEC	X	X	X	●	X

11-1-8. DISPLAY SETUP

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
ZEBRA DETECT 1	CAM	●	X	●	X	X
ZEBRA DETECT 2	CAM	●	X	●	X	X
MARKER	CODEC	●	X	●	X	X
SAFETY ZONE	CAM	●	X	●	X	X
VIDEO OUT OSD	CAM	●	●	●	●	X
DATE/TIME	CODEC	●	●	●	●	X
LEVEL METER	CODEC	●	●	●	●	X
ZOOM FOCUS	CAM	●	X	●	X	X
CARD/TAPE BATT	CODEC	●	●	●	●	X
OTHER DISPLAY	CODEC	●	●	●	●	X
CAMERA DATA	CODEC	X	●	X	●	X
LCD BACKLIGHT	CAM	●	●	●	●	X
LCD SET	CAM	●	●	●	●	X
EVF SET	CAM	●	●	●	●	X
SELF SHOOT	CAM	●	X	●	X	X
EVF MODE	CAM	●	●	●	●	X
DISPLAY ASPECT	CAM	●	●	●	●	X
EVF COLOR	CAM	●	●	●	●	X

11-1-9. CARD FUNCTIONS

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
SCENE FILE	-----	●	X	X	X	X
USER FILE	-----	●	X	X	X	X
SD CARD FORMAT	-----	●	X	X	X	X

11-1-10. OTHER FUNCTIONS

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
REMOTE	CODEC	●	●	●	●	X
1394 CONTROL	CODEC	●	X	●	X	X
1394 CMD SEL	CODEC	●	X	●	X	X
END SEARCH	CODEC	X	X	●	●	X
PC MODE	CODEC	●	●	X	X	X
REC LAMP	CODEC	●	X	●	X	X
ACCESS LED	CODEC	●	●	X	X	X
BEEP SOUND	CODEC	●	X	●	X	X
CLOCK SET	CODEC	●	●	●	●	X
TIME ZONE	CODEC	●	●	●	●	X
POWER SAVE	CODEC	●	X	●	X	X
USER FILE	-----	●	●	●	●	X
HOUR METER	VTR	X	X	●	●	X

11-1-11. OPTION MENU

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
1394 STATUS	-----	●	●	●	●	X
1394 CONFIG	CODEC	●	●	X	X	X

11-1-12. DUBBING SETUP

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
FORMAT SEL	-----	X	X	X	X	●
PULLDOWN SEL ***P model only**	CODEC	X	X	X	X	●
SETUP(TAPE) ***P model only**	CAM	X	X	X	X	●

11-2. Service menu data

●: Displayed
X: Not displayed
CAM: CAM EEPROM
VTR: VTR EEPROM
CODEC: CODEC EEPROM

11-2-1. DIAGNOSTIC MENU

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
BER DISPLAY	-----	X	X	X	●	X
SAMPLE SPEED	-----	X	X	X	●	X
SOFT VERSION	-----	●	X	●	X	X
EEPROM VERSION	-----	●	●	●	●	X
CYLINDER	VTR	X	X	●	●	X
TAPE RUN	VTR	X	X	●	●	X
THREADING	VTR	X	X	●	●	X
1394 DIAG	-----	●	●	●	●	X
1394 UID	P2: CODEC SBP2: CODEC TAPE: VTR	●	●	●	●	X

Circuit Diagram Manual

11-2-2. ADJUST MENU

ITEM	STORED IN	OPERATION MODE				
		P2		TAPE		DUB
		CAM	MCR	CAM	VCR	
ATF GAIN	-----	X	X	X	●	X
LINEARITY	-----	X	X	X	●	X
AUDIO FILTER	-----	●	●	●	●	X
Y LEVEL	CAM	●	●	●	●	X
C LEVEL	CAM	●	●	●	●	X
CMPNT Y LEVEL	CAM	●	●	●	●	X
CMPNT PB LEVEL	CAM	●	●	●	●	X
CMPNT PR LEVEL	CAM	●	●	●	●	X
DEFECT COMP	-----	●	X	●	X	X
DEBUG DISP	-----	●	●	●	●	X
DEBUG MODE	-----	●	●	●	●	
LCD OFFSET	CAM	●	●	●	●	X
EVF OFFSET	CAM	●	●	●	●	X
1394 GAP COUNT	CODEC	●	●	X	X	X

11-3. The other data

Except setting and service menu data, below indicated information are stored in EEPROM.

EEPROM	INFORMATION	REMARK
CAMERA	CAMERA adjustment value	Adjustment values are set by EVR software. **NOTE:** The values of the each video level adjustment can be set even by the ADJUST menu.
	Control data	----------
VTR	VTR adjustment Value	Adjustment values are set by EVR software.
	TAPE Time code data	----------
	Control data	----------
	Shipment Destination data	----------
CODEC	P2 Time code data	----------
	Control data	----------
	Shipment Destination data	----------

NOTE1: Serial number is stored in the SYS MICON on CODEC board.
NOTE2: LOG data are stored in the SH4 MICON on CODEC board.

12. PC EVR software

12-1. Required tools and equipment for PC EVR software

When the PC EVR software is used, the following tools are required.

NAME	Part Number	Pcs.	Remark
PC EVR software	VVS0030	1	Download from the Global Service WEB site.
Measuring board	VFK1988	1	
Extension cable	VFK1989	1	
DC cable	K2GJ2DC00002 or VJA1128	2	For AG-HVX200/202 and Measuring board
AC Adapter	---	2	For AG-HVX200/202 and Measuring board
9pin RS232C cross cable	---	1	
Personal Computer	---	1	***NOTE:**

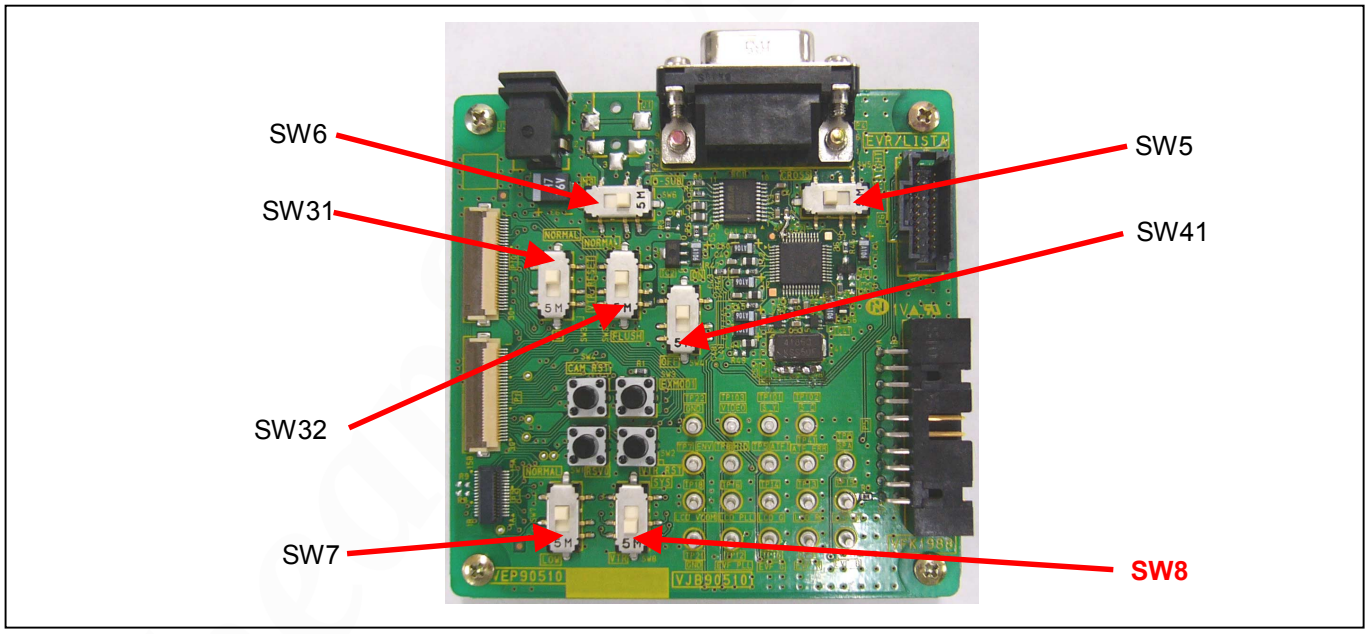
***OS: WINDOWS XP SP2**

12-2. Connection

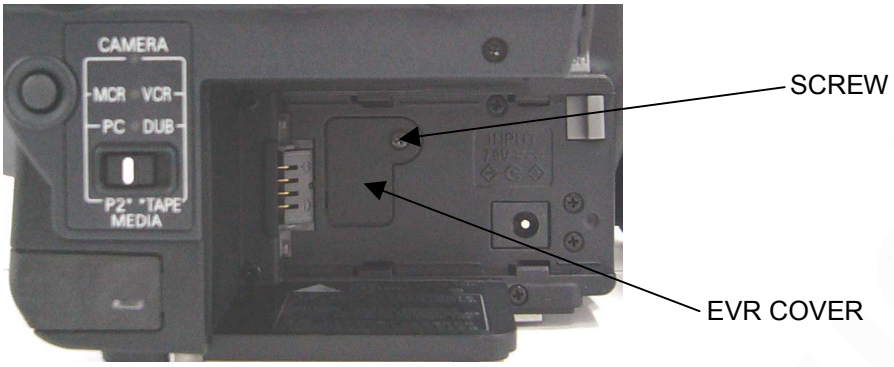
1. Unless otherwise specified, set the switches on the Measuring Board as shown in the table below.

NAME	SETTING POSITION
SW5	CROSS
SW6	D-SUB
SW7	NORMAL
SW8	***NOTE**
SW31	NORMAL
SW32	NORMAL
SW41	ON

***NOTE:** SW8 is VTR/SYS selection switch. When data read or write in the CAMERA/CODEC board, it sets it to the SYS side. When data read or write in VTR board, it sets it to VTR side.

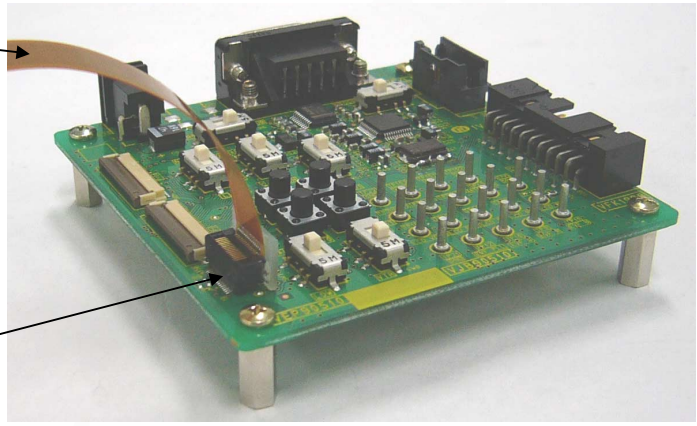


2. Loosen the screw and remove the EVR cover.



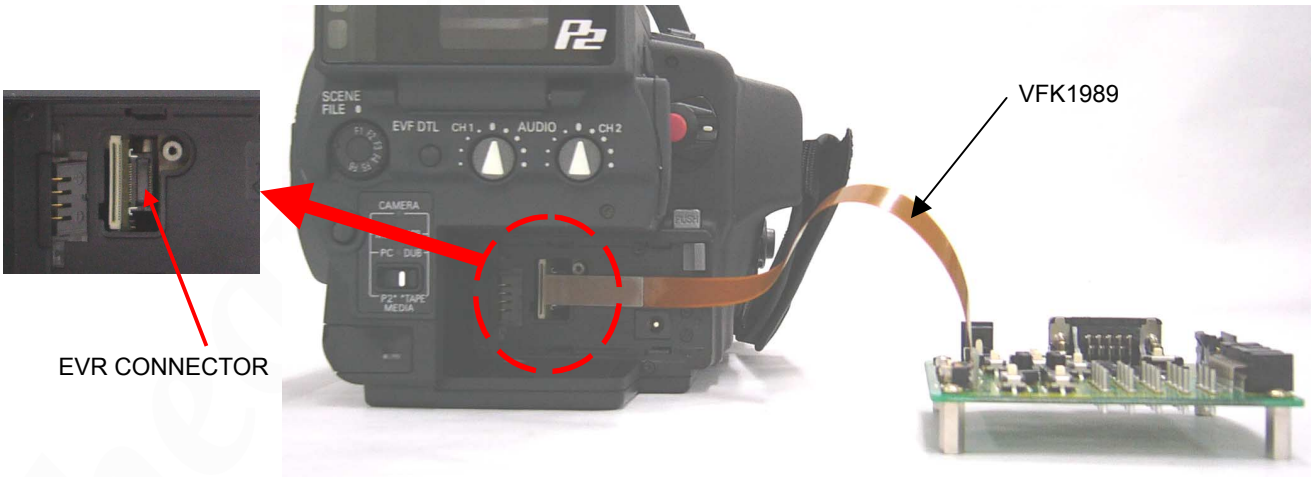
3. Connect the Extension Cable (VFK1989) to connector P2 on Measuring Board (VFK1988)

Connect VFK1989 with connector P2 as shown in picture.
The unit will not work if the connector is attached backwards.

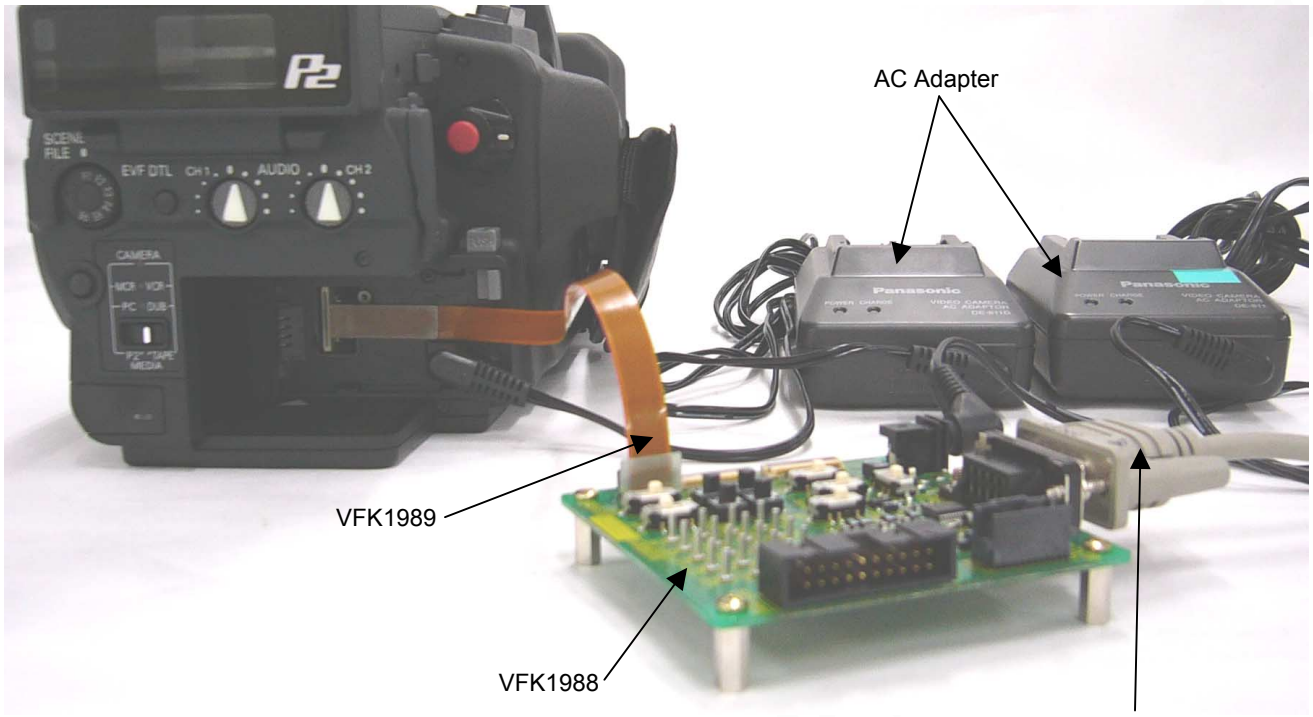


4. Connect the Extension Cable (VFK1989) to EVR connector in Unit. Then make sure that the direction of the VFK1989 is correct as shown in Figure.

When the VFK1989 is connected to EVR connector, be careful of the direction of connector on VFK1989. Please follow as shown in the figure.



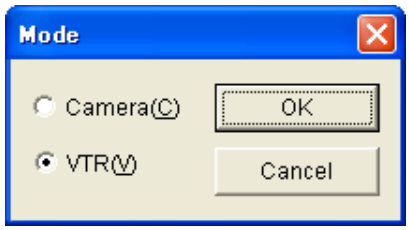
5. Supply DC6V-9V to the Measuring Board (VFK1988). Please use the DC cable and AC Adapter to supply DC voltage to Measuring Board.
6. Connect a 9 pin RS-232C cross cable between the Measuring Board and RS-232C connector on Personal Computer as shown in Figure.



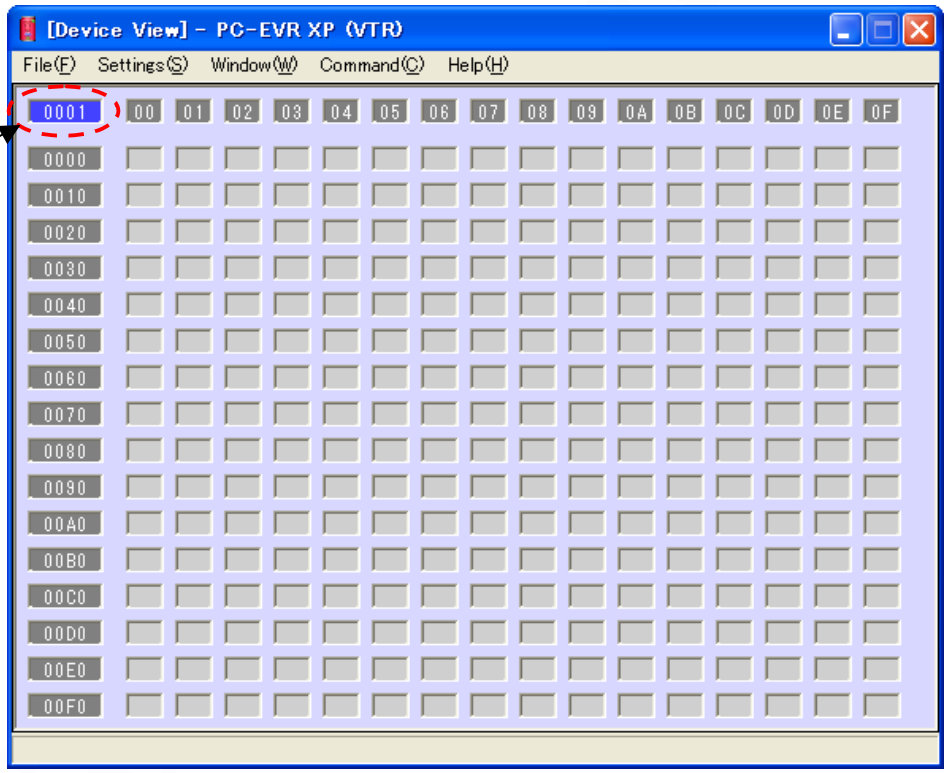
Circuitservice.ru

12-3. Setup of PC EVR software

1. Copy all files of the PC EVR software **(VVS0030)** for AG-HVX200/202 series to the PC.
2. Supply power to the Camera-Recorder and turn power ON.
3. Start up the PC EVR software by double-clicking **"VVS0030.exe"**. When communication between the PC and the Camera-Recorder has been succeeded, the following screen will appear.



4. Select the mode and click **"OK"** button. The following screen will appear and blue is displayed to the status lamp.



5. The communication status between the PC and the Camera-Recorder can be confirmed with the status lamp as following color.

Not Connected	:	black
Connected	:	blue
Reading	:	green
Writing	:	red

13. Save and write EEPROM data

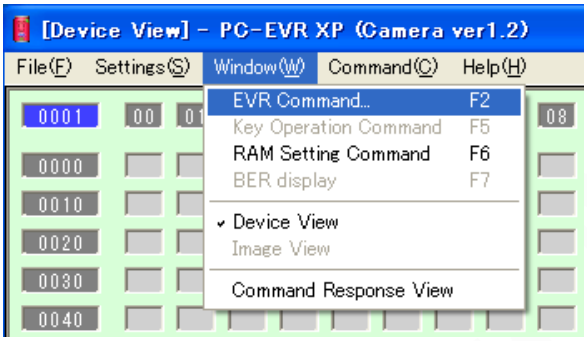
< PREPARATION >
When EEPROM data save and write, the PC EVR software is used. Please connect the tools and set up the PC EVR software follow the item **"12. PC EVR software"**. (→ Page INF-38)

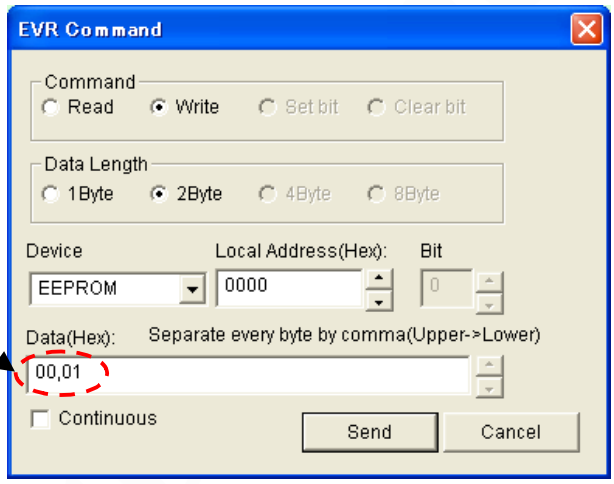
13-1. Save data of EEPROM data of Camera-Recorder to PC

13-1-1. Save data of Camera-EEPROM

There is 64K of CAMERA EEPROM of this unit. It is necessary to make a file by the latter half and first half part, because this EVR software can be saved at a time only 32K.
NOTE: Please save data in order of latter half part → first half part.

1. Set **SW8** on the measuring board to **"SYS"** side.
2. This camera recorder is set to **P2-CAMERA** mode.
3. Select **"Camera(C)"** mode after start up the PC EVR software, and click **"OK"** button.
4. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.

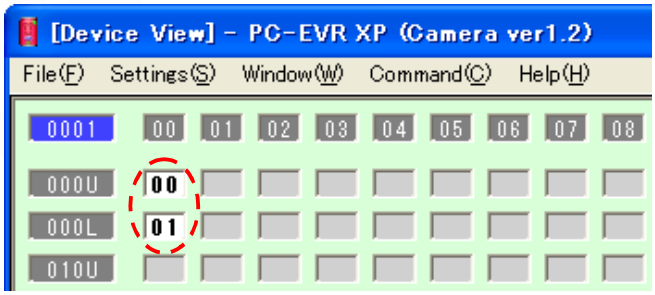




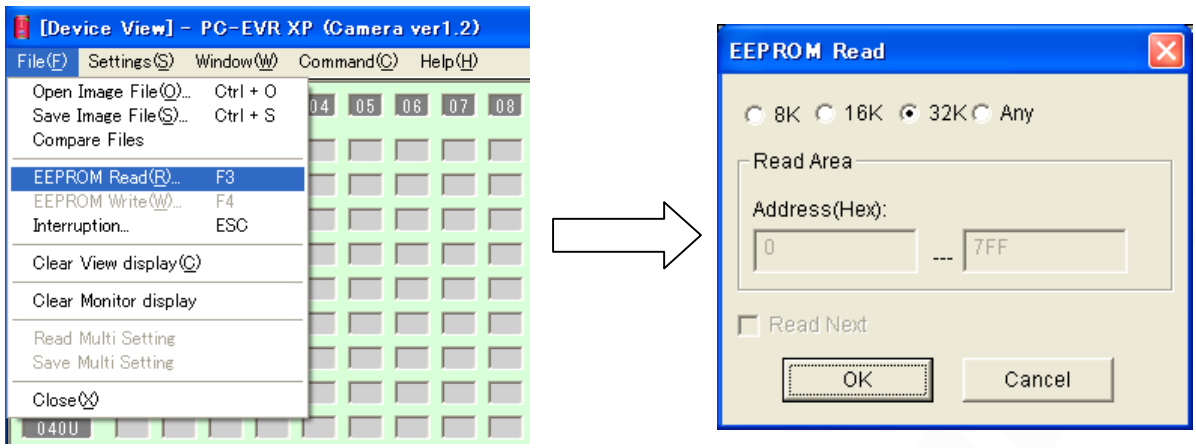
It is input as 00,01
(Setting to latter half)

Command	Write
Data Length	2Byte
Device	EEPROM
Local Address(Hex)	0000
Data(Hex)	00,01

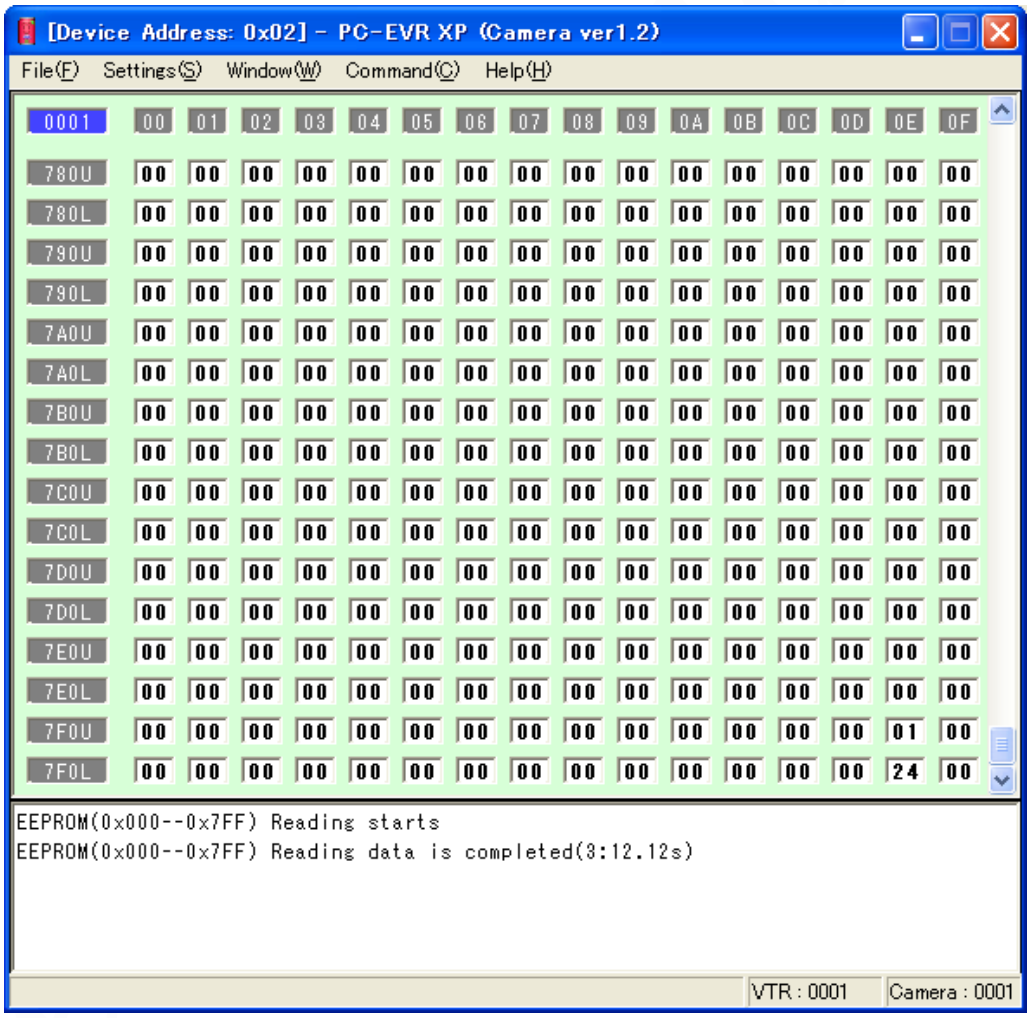
5. Confirm that the data of 0000UPPER address is **"00"** and LOWER address is displayed as **"01"**.



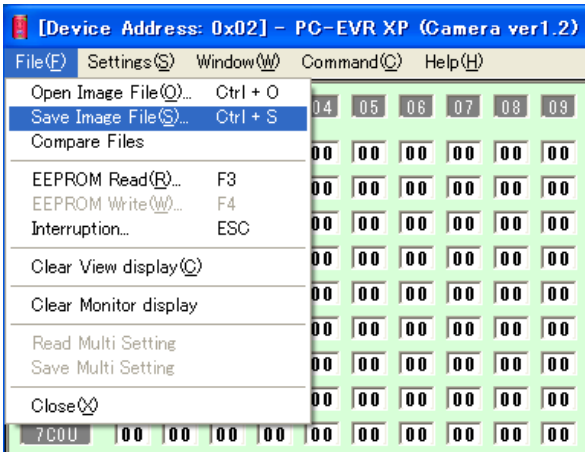
6. Select **“EEPROM Read(R)”** in **“File(F)”** menu and select **“32K”** on EEPROM Read screen.



7. Click **“OK”** button and reading starts.
8. Green is displayed to the status lamp while reading it. When writing is completed, the status lamp changes into a blue display and a message of the **“reading is completed”** will appear on screen.

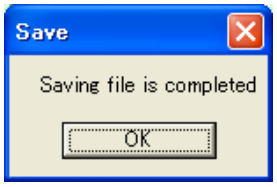


9. Select **“Save Image File(S)”** in **“File(F)”** menu.

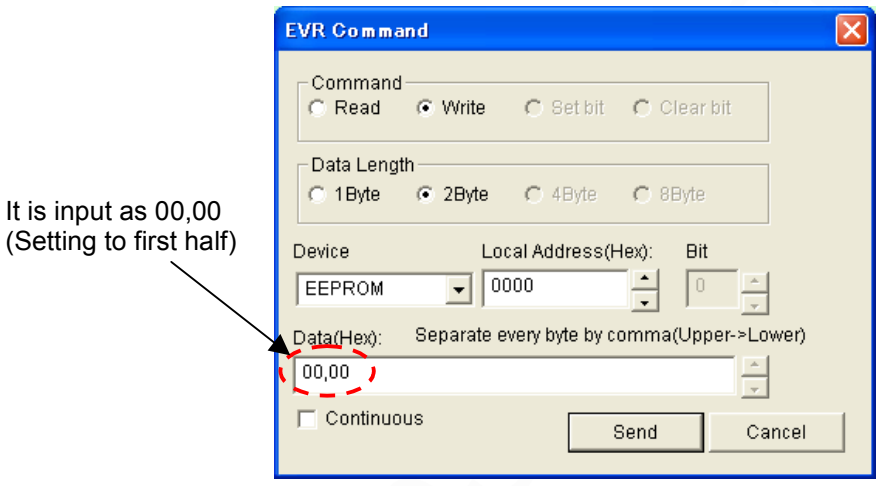


10. The file name is input, and the place that saves a file is specified. The following message is displayed when saving a file.

NOTE: Please make it to the file name to be able to distinguish the latter half part.

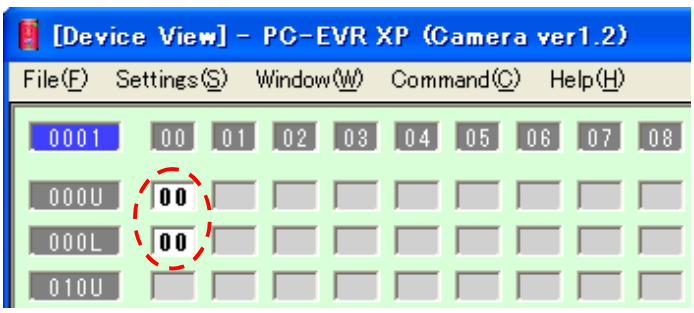


11. Next, the data of the first half part is saved. Select **“EVR Command”** in **“File(F)”** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	2Byte
Device	EEPROM
Local Address(Hex)	0000
Data(Hex)	00,00

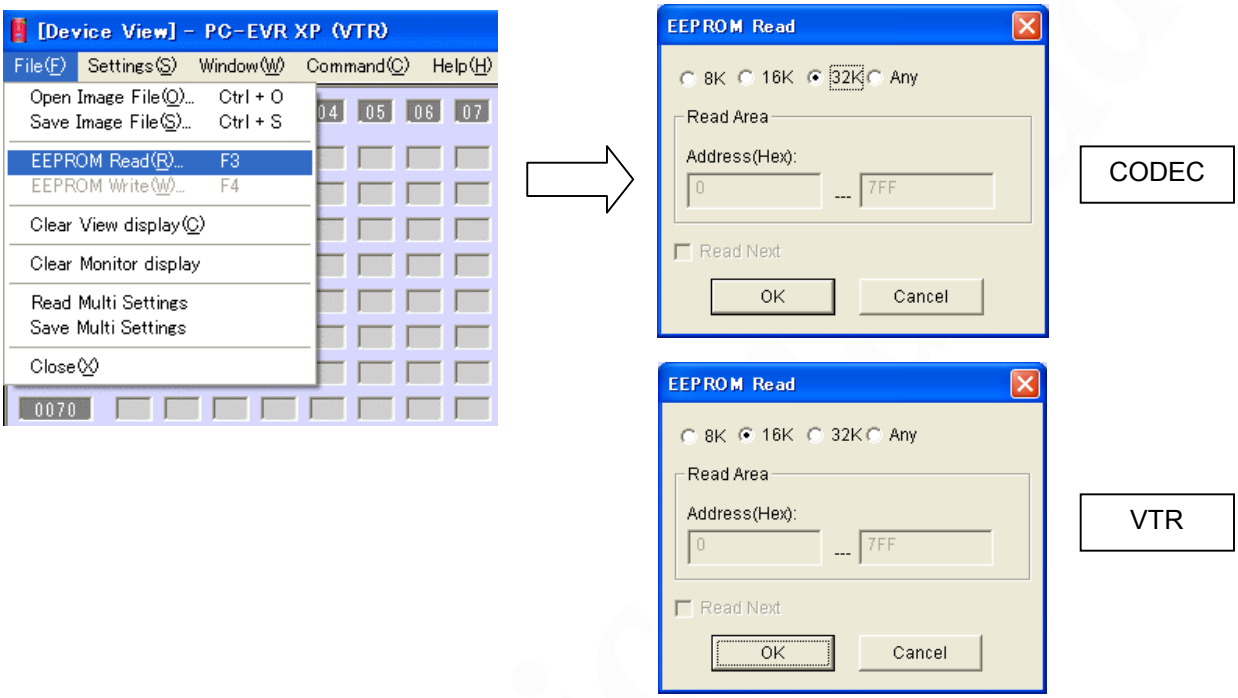
12. Click **“Send”** button and confirm that the data of 0000UPPER and LOWER address is displayed as **“00”**.



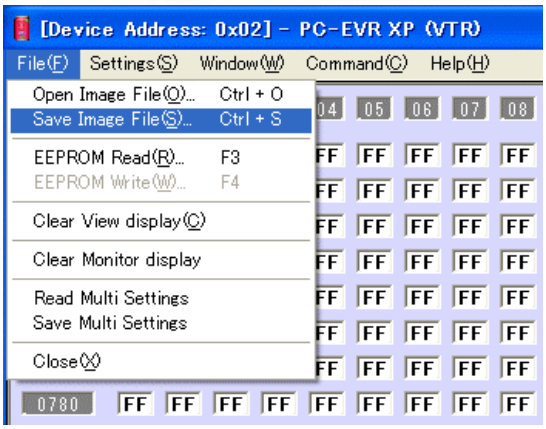
13. Save the data of first half part follow the step 6 to 10 (When you specify the saved file name, please make it to the file name to be able to distinguish the first half part.).

13-1-2. Save data of CODEC and VTR-EEPROM

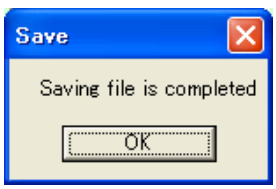
1. Set **SW8** on the measuring board to **"SYS"** side (For CODEC).
1. Set **SW8** on the measuring board to **"VTR"** side (For VTR).
2. This camera recorder is set to **P2-CAMERA** mode (For CODEC).
2. This camera recorder is set to **TAPE-CAMERA** mode (For VTR).
3. Select **"VTR(V)"** mode after start up the PC EVR software, and click **"OK"** button.
4. Select **"EEPROM Read(R)"** in **"File(F)"** menu. **"32K"** is selected for CODEC, **"16K"** is selected for VTR on EEPROM Read screen.



5. Click **"OK"** button and reading starts.
6. Green is displayed to the status lamp while reading it. When reading is completed, the status lamp changes into a blue display.
7. Select **"Save Image File(S)"** in **"File(F)"** menu.



8. The file name is input, and the place that saves a file is specified. The following message is displayed when saving a file.



13-2. Write EEPROM data from PC to Camera-Recorder

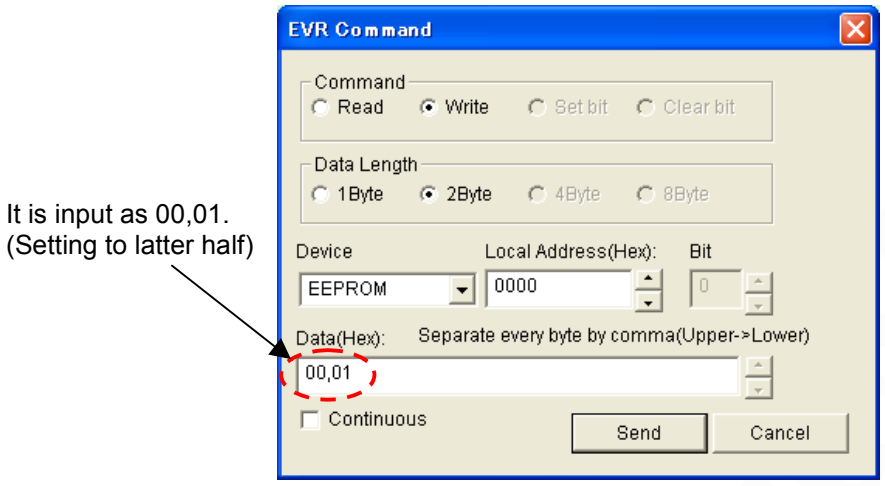
You can return the Camera-Recorder to the condition before board exchanged by writing EEPROM data to new board, which has been saved before board exchanged.

13-2-1. Write data of Camera-EEPROM

There is 64K of CAMERA EEPROM of this unit. It is necessary to write two files as the latter half and first half part, because this EVR software can be written at a time only 32K.

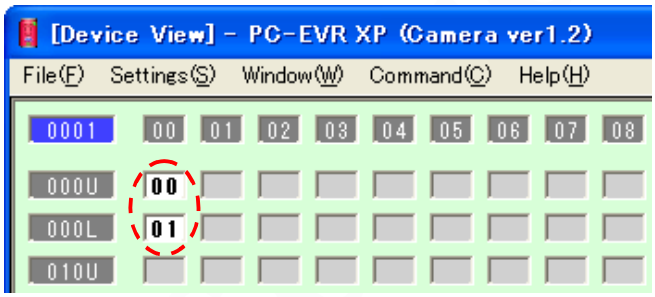
NOTE: Please write data in order of latter half part → first half part.

1. Set **SW8** on the measuring board to **"SYS"** side.
2. This camera recorder is set to **P2-CAMERA** mode.
3. Select **"Camera(C)"** mode after start up the PC EVR software, and click **"OK"** button.
4. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.

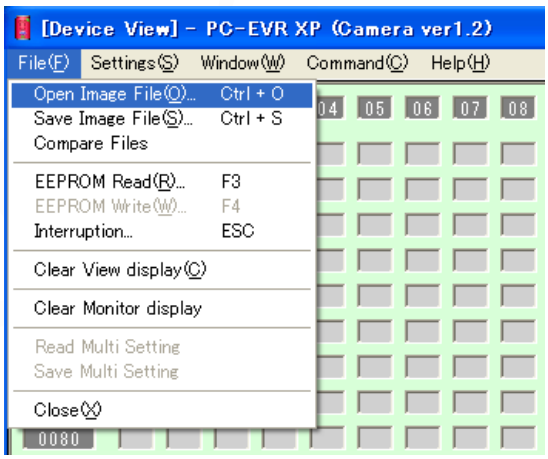


Command	Write
Data Length	2Byte
Device	EEPROM
Local Address(Hex)	0000
Data(Hex)	00,01

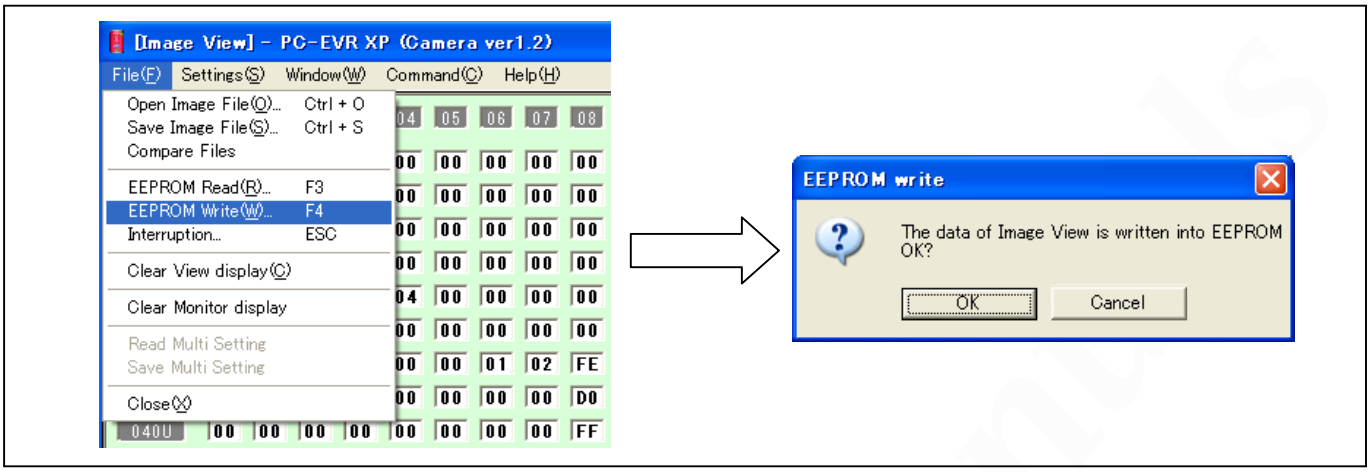
5. Confirm that the data of 0000UPPER address is **"00"** and LOWER address is displayed as **"01"**.



6. When select **"Open Image File(O)"** in **"File(F)"** menu, the screen for selecting the file to be written will appear.

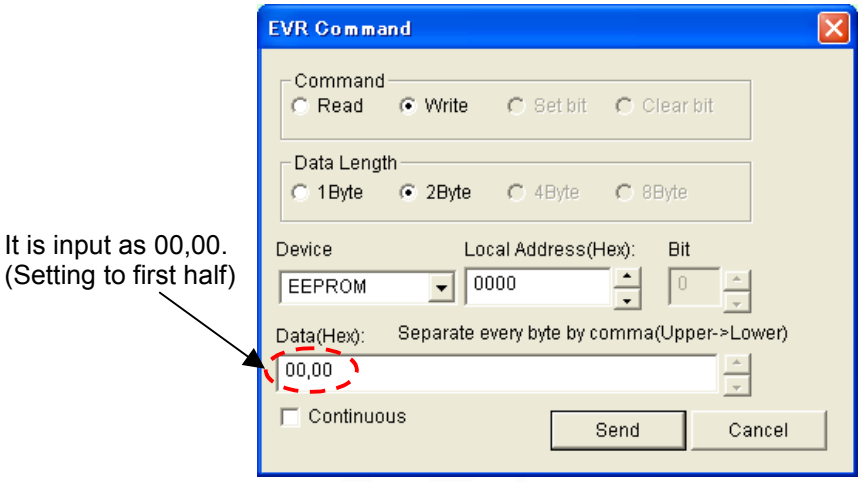


7. Select the file of latter half part to be written in the Camera-Recorder.
8. Click **"Open(O)"** button in the screen and reading starts.
9. Select **"EEPROM Write(W)"** in **"File(F)"** menu, following message will appear.



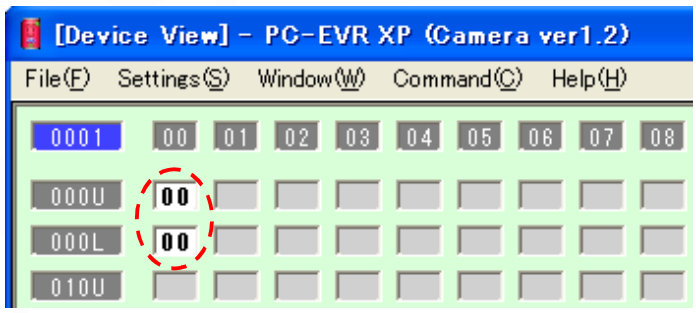
When **"Cancel(C)"** button is clicked, writing EEPROM data is canceled.
When **"OK"** button is clicked, the writing starts.

10. Red is displayed to the status lamp while writing it. When writing is completed, the status lamp changes into a blue display and a message of the **"writing data is completed"** will appear on screen.
11. Next, the data of the first half part is written. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	2Byte
Device	EEPROM
Local Address(Hex)	0000
Data(Hex)	00,00

12. Click **"Send"** button and confirm that the data of 0000UPPER and LOWER address is displayed as **"00"**.

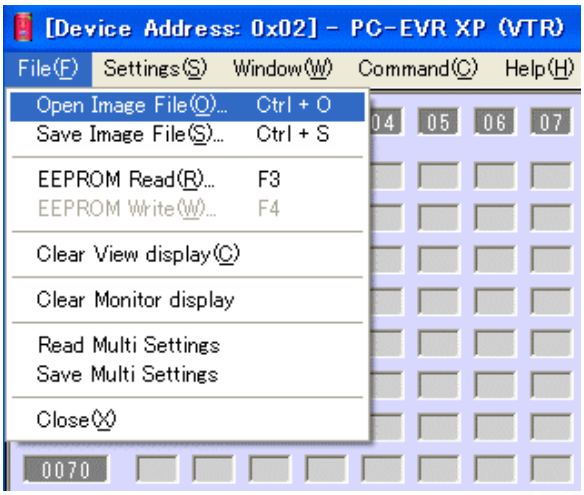


13. Write the data of first half part follow the step 6 to 10. (Select the file of the first half part.)

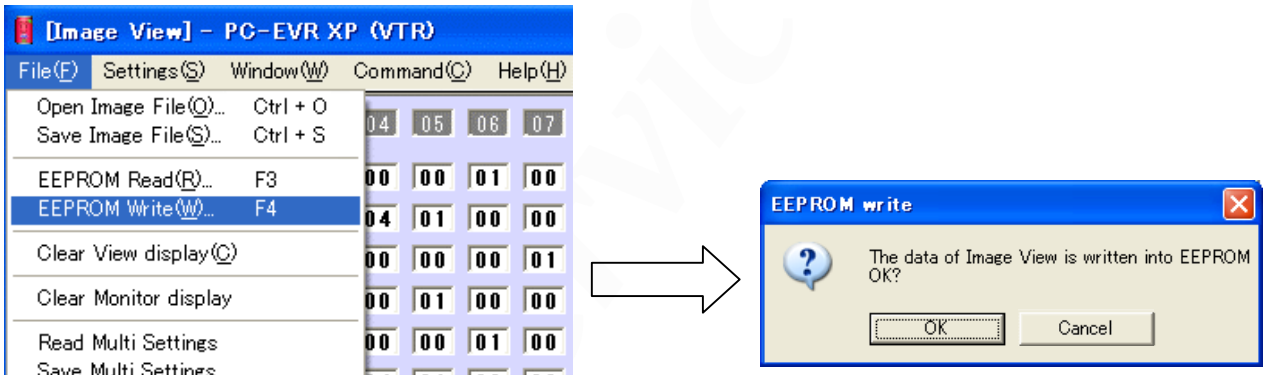
NOTE: When you over-write the saved EEPROM data to new board, please confirm whether it is the same EEPROM version of saved EEPROM and EEPROM on new board. In case of version is difference, please contact the Panasonic Service Engineering about interchange-ability.

13-2-2. Write data of CODEC and VTR-EEPROM

1. Set **SW8** on the measuring board to **"SYS"** side (For CODEC).
1. Set **SW8** on the measuring board to **"VTR"** side (For VTR).
2. This camera recorder is set to **P2-CAMERA** mode (For CODEC).
2. This camera recorder is set to **TAPE-CAMERA** mode (For VTR).
3. Select **"VTR(V)"** mode after start up the PC EVR software, and click **"OK"** button.
4. When select **"Open Image File(O)"** in **"File(F)"** menu, the screen for selecting the file to be written will appear.



5. Select the file to be written in the Camera-Recorder.
6. Click **"Open(O)"** button in the screen and reading starts.
7. Select **"EEPROM Write(W)"** in **"File(F)"** menu, following message will appear.



When **"Cancel(C)"** button is clicked, writing EEPROM data is canceled.
When **"OK"** button is clicked, the writing starts.

8. Red is displayed to the status lamp while writing it. When writing is completed, the status lamp changes into a blue display.

NOTE: When you over-write the saved EEPROM data to new board, please confirm whether it is the same EEPROM version of saved EEPROM and EEPROM on new board. In case of version is difference, please contact the Panasonic Service Engineering about interchange-ability.

14. EEPROM data update procedure

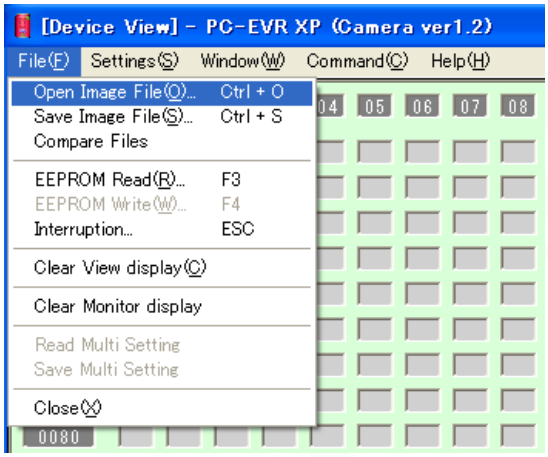
< PREPARATION >
When EEPROM data updates, the PC EVR software is used. Please connect the tools and set up the PC EVR software follow the item **"12. PC EVR software"**. (→ Page INF-38)

14-1. Update of Camera-EEPROM

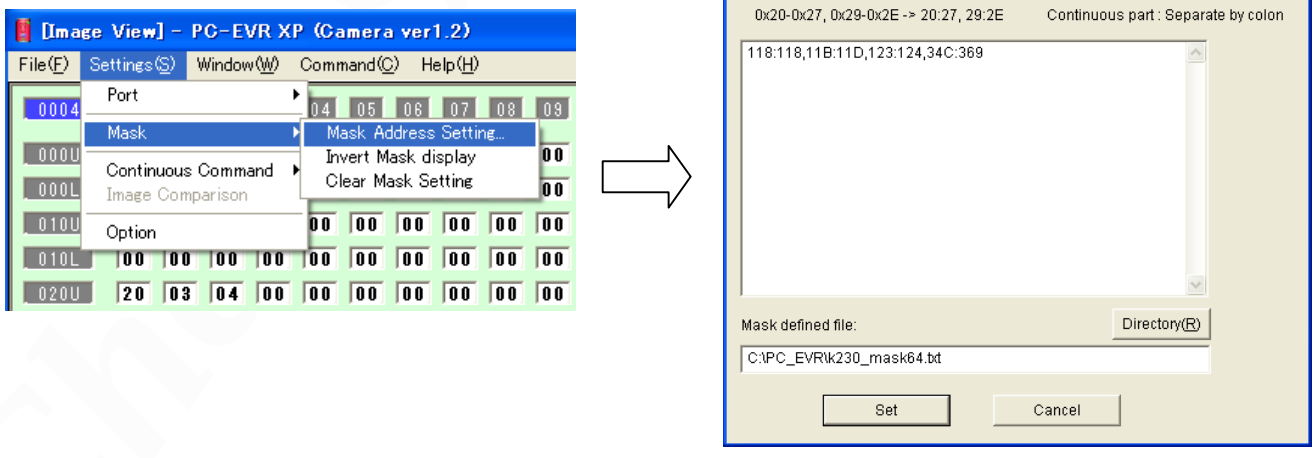
Please download software of latest CAMERA EEPROM and the mask file to PC.

There is 64K of CAMERA EEPROM of this unit. It is necessary to make a file by the latter half and first half part, because this EVR software can be saved at a time only 32K.
NOTE: Please save data in order of latter half part → first half part.

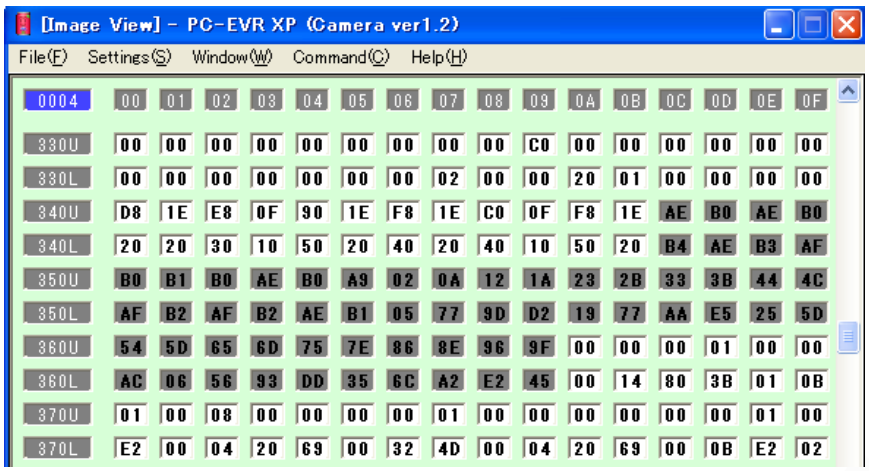
1. Set **SW8** on the measuring board to **"SYS"** side.
2. This camera recorder is set to **P2-CAMERA** mode.
3. Select **"Camera(C)"** mode after start up the PC EVR software, and click **"OK"** button.
4. Select **"Open Image File(O)"** in **"File(F)"** menu, the screen for selecting the file to be written will appear.



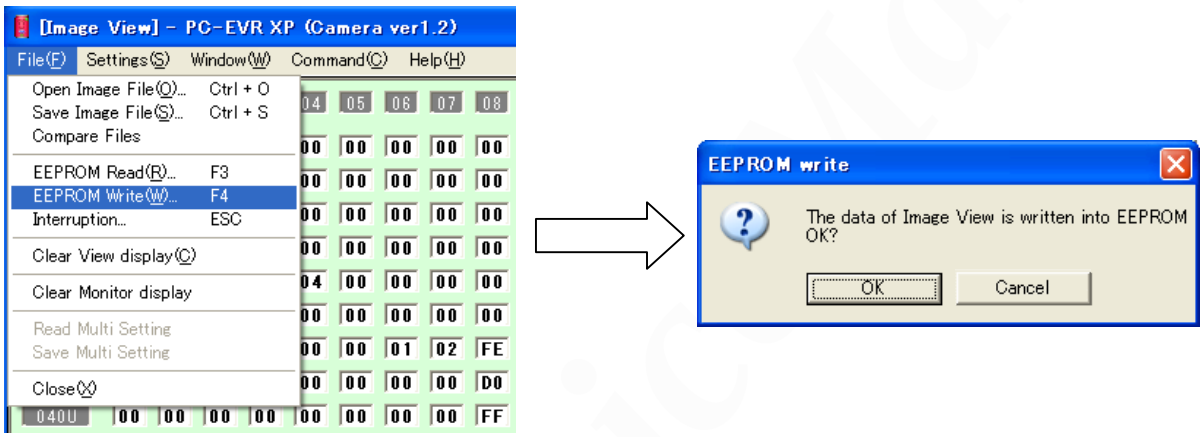
5. Select the file **"ex.) VVVSI*****-2.ee"** of latter half part to be written in the Camera-Recorder.
6. Click **"Open(O)"** button in the screen and reading starts.
7. After reading is completed, Select **"Mask Address Setting"** in **"Settings(S)"** menu, following screen will appear.
8. Click **"Directory(R)"** button in the screen, the screen for selecting the mask file to be written will appear.



9. Select the mask file **“ex.) K230_mask64.txt”** of latter half part.
10. Click **“Set”** button in the Mask Address Setting screen, the mask is set.



11. Select **“EEPROM Write(W)”** in **“File(F)”** menu, following message will appear.



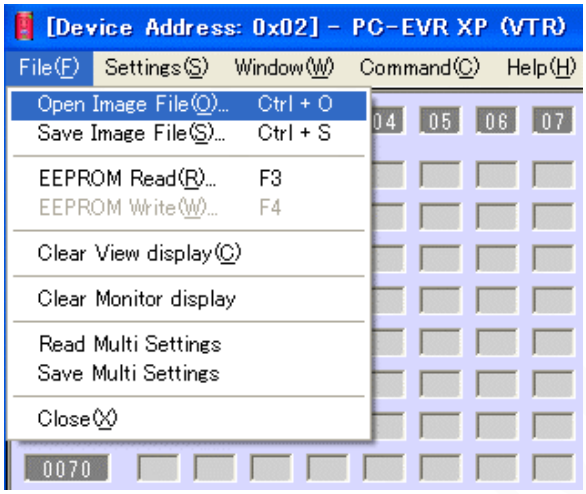
When **“Cancel(C)”** button is clicked, writing EEPROM data is canceled.
When **“OK”** button is clicked, the writing starts.

12. Red is displayed to the status lamp while writing it. When writing is completed, the status lamp changes into a blue display and a message of the **“writing data is completed”** will appear on screen.
13. Next, the data of the first half part is update. Update the data of first half part follow the step 4 to 12. (Select the data file **“ex.) VVVSI*****-1.ee”** and mask file **“ex.) K230_mask32.txt”** of the first half part.)
14. Turn the power of camera recorder to OFF and ON to restart it.
15. The version is displayed for the confirmation and whether it is updated is confirmed. As for the confirm method of the version, please refer to item **“8-1-2. Software version display”**.(→ Page INF-20)

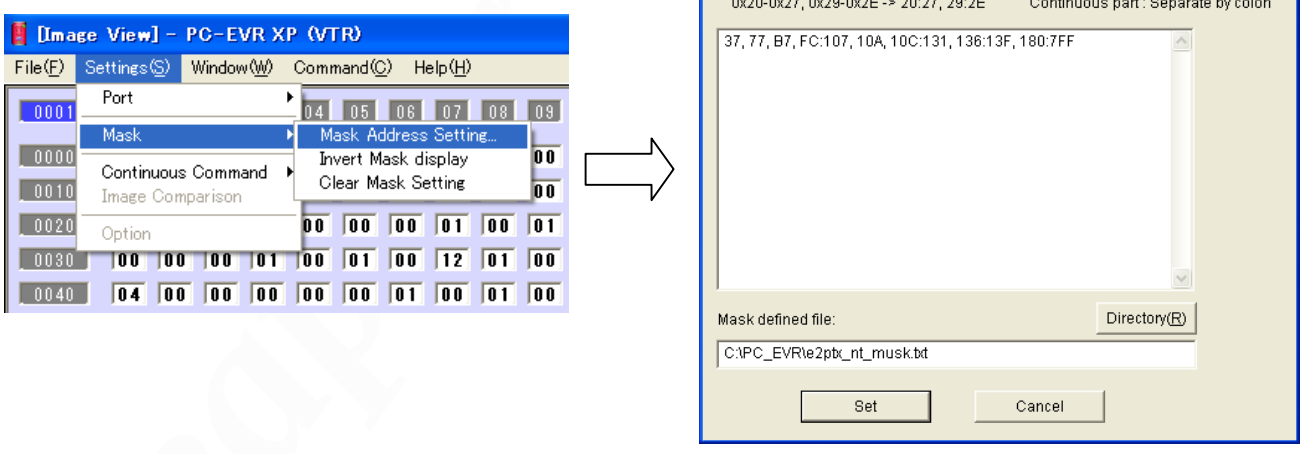
14-2. Update of CODEC and VTR-EEPROM

Please download software of latest CAMERA EEPROM and the mask file to PC.

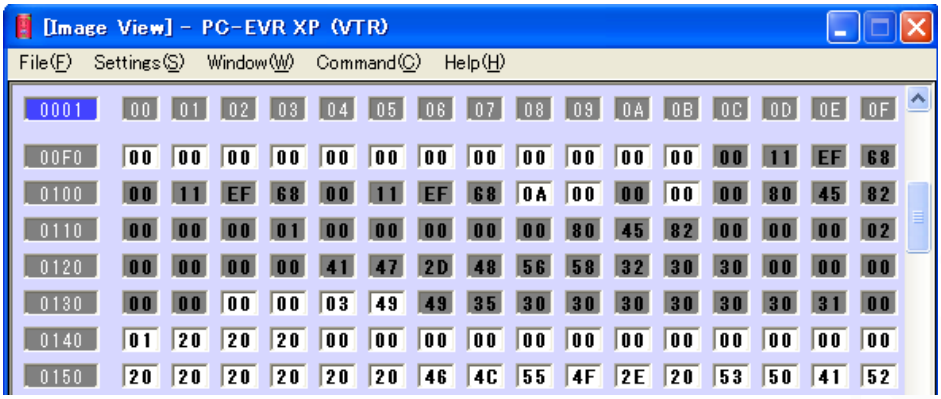
1. Set **SW8** on the measuring board to **"SYS"** side (For CODEC).
1. Set **SW8** on the measuring board to **"VTR"** side (For VTR).
2. This camera recorder is set to **P2-CAMERA** mode (For CODEC).
2. This camera recorder is set to **TAPE-CAMERA** mode (For VTR).
3. Select **"VTR(V)"** mode after start up the PC EVR software, and click **"OK"** button.
4. When select **"Open Image File(O)"** in **"File(F)"** menu, the screen for selecting the file to be written will appear.



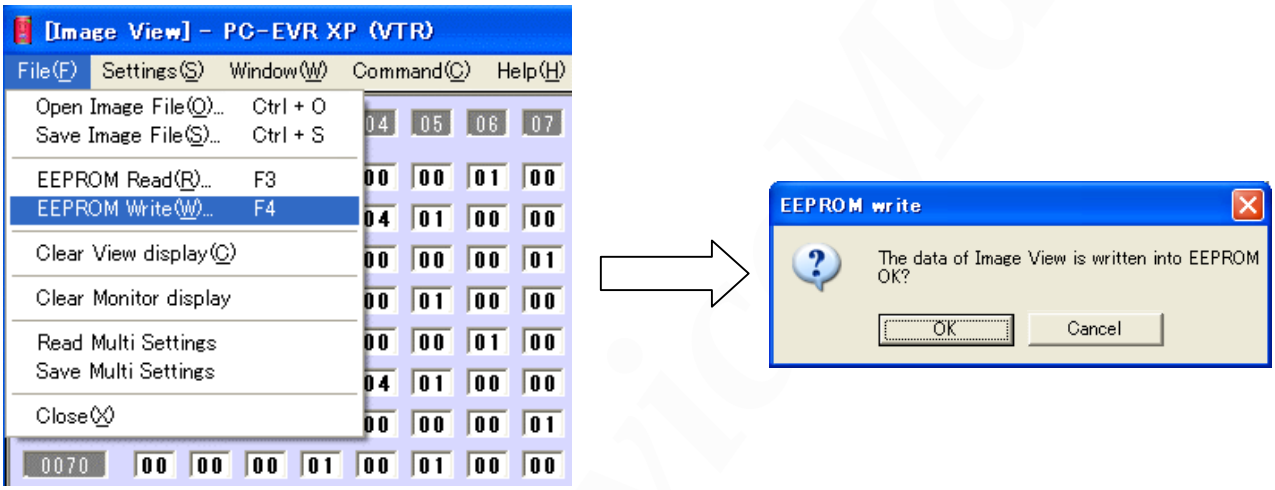
5. Select the file **"ex.) VVVSI*****.txt"** to be written in the Camera-Recorder
6. Click **"Open(O)"** button in the screen and reading starts.
7. After reading is completed, Select **"Mask Address Setting"** in **"Settings(S)"** menu, following screen will appear.
8. Click **"Directory(R)"** button in the screen, the screen for selecting the mask file to be written will appear.



9. Select the mask file and click **"Set"** button in the Mask Address Setting screen, the mask is set.
   Mask file for CODEC: **"ex.) e2ptx_nt_mask.txt "**
   Mask file for VTR: **"ex.) K230EEP_MASK.txt"**



10. Select **"EEPROM Write(W)"** in **"File(F)"** menu, following message will appear.



When **"Cancel(C)"** button is clicked, writing EEPROM data is canceled.
When **"OK"** button is clicked, the writing starts.

11. Red is displayed to the status lamp while writing it. When writing is completed, the status lamp changes into a blue display.
12. Turn the power of camera recorder to OFF and ON to restart it.
13. The version is displayed for the confirmation and whether it is updated is confirmed. As for the confirm method of the version, please refer to item **"8-1-2. Software version display"**. (→ Page INF-20)

15. UID Writing Procedure

< PREPARATION >
When UID is written, the PC EVR software is used. Please connect the tools and set up the PC EVR software follow the item **"12. PC EVR software"**. (→ Page INF-38)

15-1. Confirmation Method for UID

UID is registered on this camera recorder. The confirmation method is explained below.
UMID code is assigned the unique code (number/16 figures) every this camera recorder.

1. Press the button in order of **"COUNTER-RESET button"** → **"STOP button"** → **"MODE CHK button"** → **"MENU button"**, DIAGNOSTIC and the ADJUST menu can be displayed in addition to a setup menus.

NOTE: P2-PC and TAPE-DUB mode can not be display the DIAGNOSTIC and ADJUST menu.

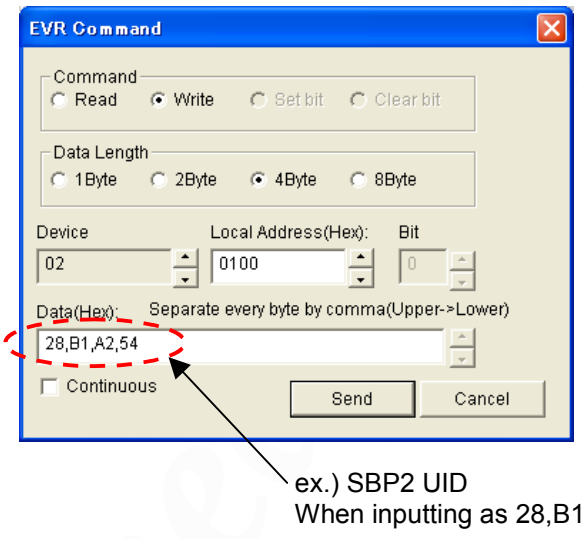


2. Next, press the PLAY or STOP button to select the DIAGNOSTIC menu. And press SET(STILL) button to open the DIAGNOSTIC menu.
3. When the item 1394 UID is selected, and press SET(STILL) button, 3 kinds of numbers are displayed as P2, SBP2 and TAPE UID. The displayed numbers of 16 figures is **"UID"**.

ex.) 00804582-38837003 (First 8 figures are fixed numbers and last 8 figures are unique numbers).

15-2. Writing Procedures for UID

1. Set **SW8** on the measuring board to **"SYS"** side (When you write P2 and SBP2 UID).
1. Set **SW8** on the measuring board to **"VTR"** side (When you write TAPE UID).
2. This camera recorder is set to **P2-CAMERA** mode (When you write P2 and SBP2 UID).
2. This camera recorder is set to **TAPE-CAMERA** mode (When you write TAPE UID).
3. Select **"VTR(V)"** mode after start up the PC EVR software, and click **"OK"** button.
4. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



	SBP2 UID	P2 UID	TAPE UID
Command	Write	Write	Write
Data Length	4Byte	4Byte	4Byte
Device	02	02	02
Local Address(Hex)	0110	011C	00B0

5. Input the last 8 figure numbers in Data(Hex) box. When the last 8 figure numbers are noted in advance, input the same numbers as noted ones. If the last 8 figures are missed, new numbers are given. So please contact the Panasonic Service Engineering.
6. Click **"Send"** button, the writing starts.
7. Confirm that it is corresponded to the inputted figures after writing the UID data. Just in case, confirm it by the DIAGNOSTIC menu.

16. Rewriting setting of data according to destination

When the CODEC board or VTR board is exchanged to new one, this operation is required (Refer to page INF-12 and 13).

< PREPARATION >

When rewriting setting of data according to destination, the PC EVR software is used. Please connect the tools and set up the PC EVR software follow the item **"12. PC EVR software"**. (→ Page INF-38)

16-1. In case of CODEC board is exchanged (Required only for AN, EN and MC model)

As for the CODEC board of the NTSC version, default is set to AG-HVX200P.

	AG-HVX200P (default)	
	Local Address(Hex)	Data(Hex)
MAIN AREA	010A	01
MODEL No. (T, P or AN)	012D	50
TIME ZONE initial value	0037	00
TIME ZONE user value	0077	00
TIME ZONE current value	00B7	00

As for the CODEC board of the PAL version, default is set to AG-HVX200E.

	AG-HVX200E (default)	
	Local Address(Hex)	Data(Hex)
MAIN AREA	010A	02
MODEL No. (200 or 202)	012C	30
MODEL No. (E, EN or MC)	012D	45
MODEL No. (E, EN or MC)	012E	00
LANGUAGE initial value	0039	00
LANGUAGE user value	0079	00
LANGUAGE current value	00B9	00

< PROCEDURE >

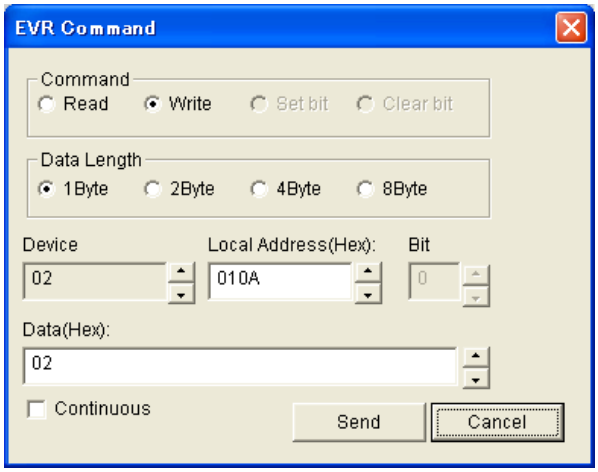
1. Set **SW8** on the measuring board to **"SYS"** side.
2. This camera recorder is set to **P2-CAMERA** mode.
3. In the item shown in the table below, the data change is needed. Please set a Local Address and the Data allocated in each item. The setting of the Command, Data Length and Device are common with all items.

   Command: Write
   Data Length: 1Byte
   Device: 02

	AG-HVX200AN	
	Local Address(Hex)	Data(Hex)
MAIN AREA	010A	01
MODEL No. (T or P)	012D	41
TIME ZONE initial value	0037	4E
TIME ZONE user value	0077	00
TIME ZONE current value	00B7	00

	AG-HVX202EN		AG-HVX200MC	
	Local Address(Hex)	Data(Hex)	Local Address(Hex)	Data(Hex)
MAIN AREA	010A	02	010A	03
MODEL No. (200 or 202)	012C	32	012C	30
MODEL No. (E, EN or MC)	012D	45	012D	4D
MODEL No. (E, EN or MC)	012E	4E	012E	43
LANGUAGE initial value	0039	00	0039	01
LANGUAGE user value	0079	00	0079	01
LANGUAGE current value	00B9	00	00B9	01

4. Select **"VTR(V)"** mode after start up the PC EVR software, and click **"OK"** button.
5. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen following the content shown in step 3.



ex.) AG-HVX202EN
When setting of MAIN AREA

6. Click **"Send"** button, the writing starts.

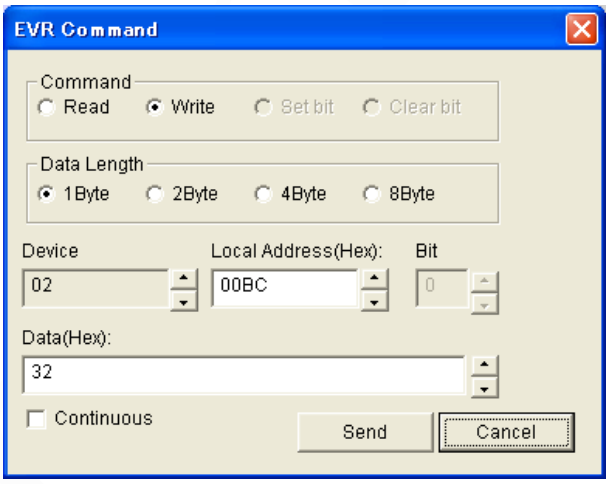
16-2. In case of VTR board is exchanged (Required only for EN model)

1. Set **SW8** on the measuring board to **"VTR"** side.
2. This camera recorder is set to **TAPE-CAMERA** mode.
3. In the item shown in the table below, the data change is needed. Please set a Local Address and the Data allocated in each item. The setting of the Command, Data Length and Device are common with all items.

AG-HVX202EN	
Local Address(Hex)	Data(Hex)
00BC	32
0428	04

Command: Write
Data Length: 1Byte
Device: 02

4. Select **"VTR(V)"** mode after start up the PC EVR software, and click **"OK"** button.
5. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen following the content shown in step 3.



6. Click **"Send"** button, the writing starts.

17. Factory Initialize

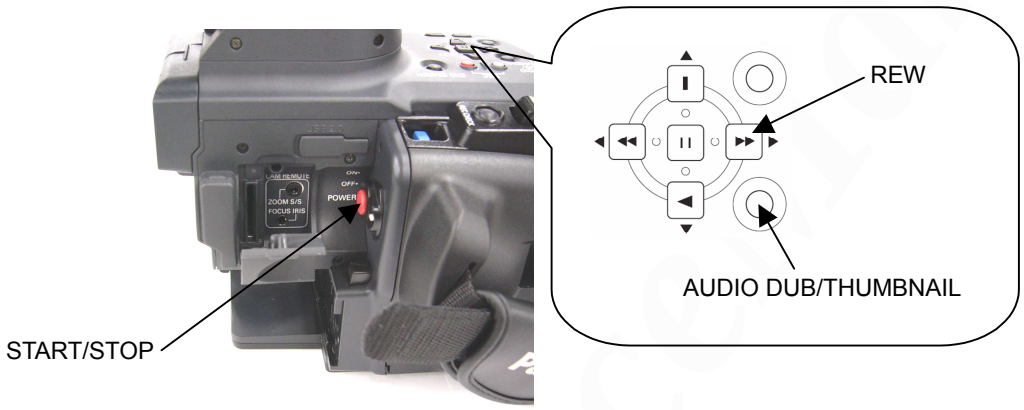
When the FACTORY initialization is executed, the following data etc. are initialized.

- Setting menu (factory default)
- GUI menu (factory default)
- META data
- Counter value of P2 and VTR

NOTE: The value of the hour meter is not reset.

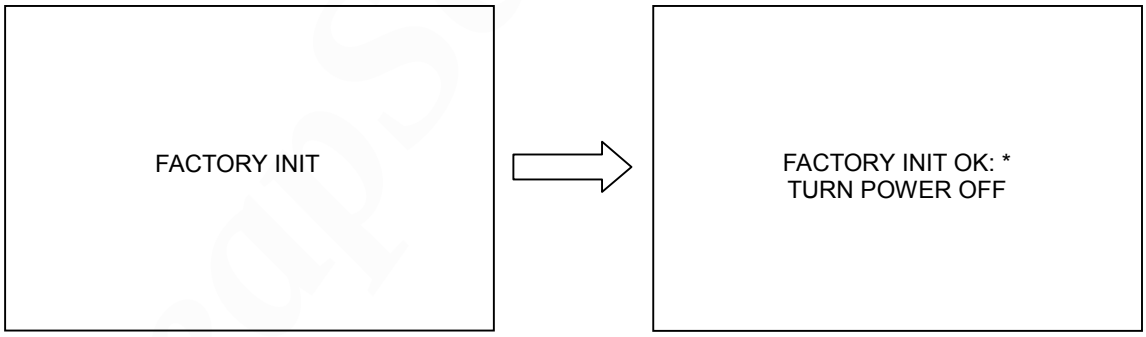
< Initialize procedure >

1. Set the camera recorder to Dubbing mode.
2. It waits until blinking the **"DUB"** display in the LCD display ends, and the thumbnail is displayed.
3. The following three buttons are pushed at the same time for two seconds or more.
   [AUDIO DUB/THUMBNAIL] + **[REW]** + **[START/STOP]**



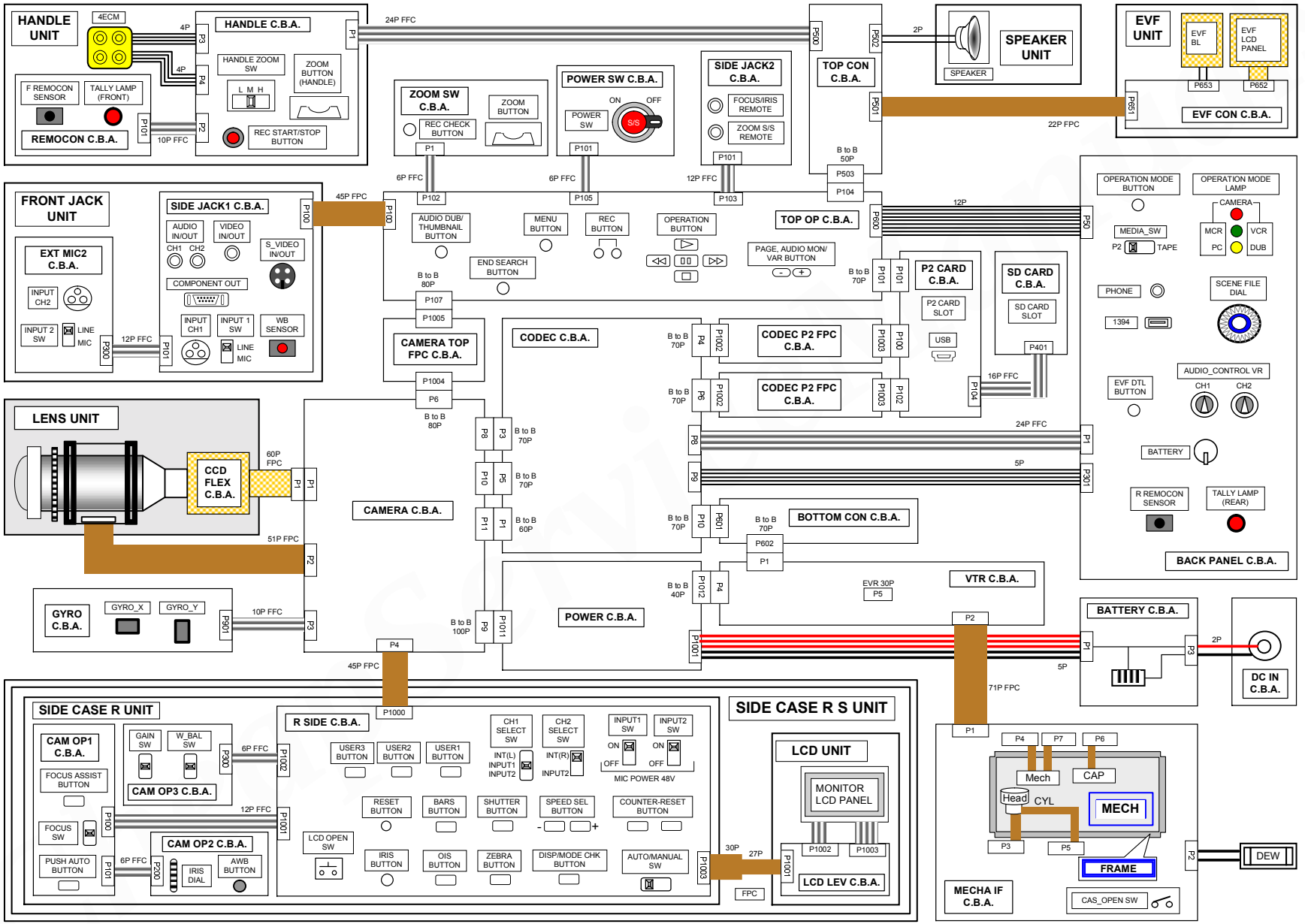
4. After it is blink displayed as **"FACTORY INIT"**, it replaces the **"FACTORY INIT OK: * "** display.
   The mark ***** is indicated as shipment destination information. Please confirm that mark is corresponding to the destination of the camera recorder.
   Ex.) In case of AG-HVX200P, it displayed as "P".

NOTE: The model AG-HVX202EN is displayed as "E" and AG-HVX200AN is displayed as "P".

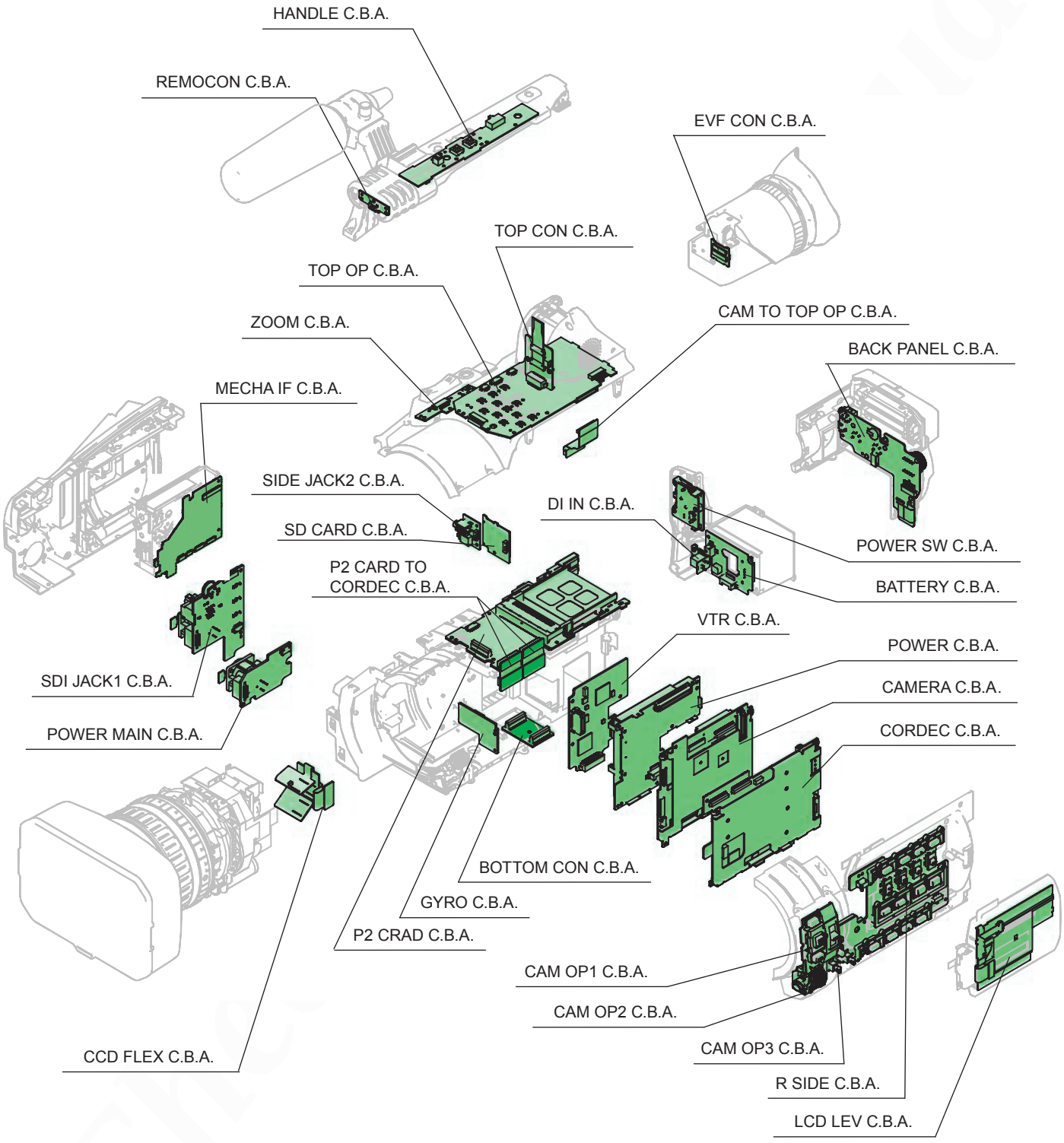


5. Turn power off this camera recorder.

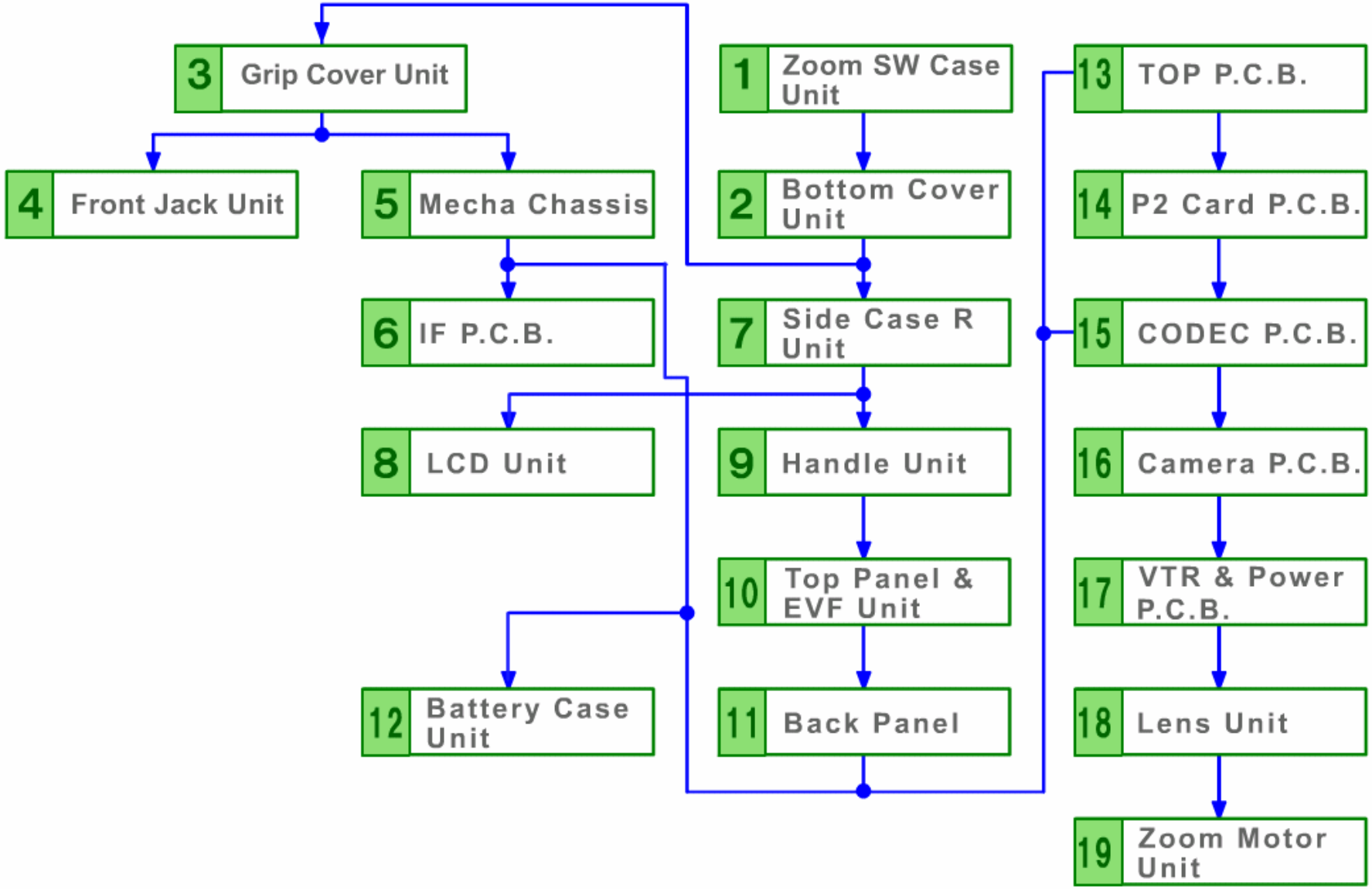
Confidential


HANDLE UNIT
4ECM
HANDLE C.B.A.
F REMOCON SENSOR
TALLY LAMP (FRONT)
REMOCON C.B.A.
HANDLE ZOOM SW
ZOOM BUTTON (HANDLE)
REC START/STOP BUTTON
24P FFC
ZOOM SW C.B.A.
ZOOM BUTTON
REC CHECK BUTTON
POWER SW C.B.A.
POWER SW
SIDE JACK2 C.B.A.
FOCUS/IRIS REMOTE
ZOOM S/S REMOTE
TOP CON C.B.A.
SPEAKER
SPEAKER UNIT
EVF UNIT
EVF BL
EVF LCD PANEL
EVF CON C.B.A.
22P FFC
FRONT JACK UNIT
EXT MIC2 C.B.A.
SIDE JACK1 C.B.A.
AUDIO IN/OUT
VIDEO IN/OUT
S_VIDEO IN/OUT
COMPONENT OUT
WB SENSOR
45P FPC
AUDIO DUB/ THUMBNAIL BUTTON
MENU BUTTON
REC BUTTON
OPERATION BUTTON
END SEARCH BUTTON
PAGE, AUDIO MON/ VAR BUTTON
TOP OP C.B.A.
12P FFC
OPERATION MODE BUTTON
OPERATION MODE LAMP
CAMERA
MEDIA_SW
TAPE
PHONE
1394
SCENE FILE DIAL
AUDIO_CONTROL VR
EVF DTL BUTTON
BATTERY
R REMOCON SENSOR
TALLY LAMP (REAR)
BACK PANEL C.B.A.
P2 CARD C.B.A.
P2 CARD SLOT
USB
SD CARD C.B.A.
SD CARD SLOT
16P FFC
CAMERA TOP FPC C.B.A.
CODEC C.B.A.
CODEC P2 FPC C.B.A.
CODEC P2 FPC C.B.A.
LENS UNIT
CCD FLEX C.B.A.
60P FPC
51P FPC
CAMERA C.B.A.
BOTTOM CON C.B.A.
VTR C.B.A.
EVR 30P
GYRO C.B.A.
GYRO_X
GYRO_Y
10P FFC
POWER C.B.A.
BATTERY C.B.A.
DC IN C.B.A.
71P FPC
SIDE CASE R UNIT
CAM OP1 C.B.A.
FOCUS ASSIST BUTTON
CAM OP3 C.B.A.
FOCUS SW
PUSH AUTO BUTTON
CAM OP2 C.B.A.
IRIS DIAL
AWB BUTTON
R SIDE C.B.A.
USER3 BUTTON
USER2 BUTTON
USER1 BUTTON
CH1 SELECT SW
CH2 SELECT SW
INPUT1 SW
INPUT2 SW
MIC POWER 48V
RESET BUTTON
BARS BUTTON
SHUTTER BUTTON
SPEED SEL BUTTON
COUNTER-RESET BUTTON
LCD OPEN SW
IRIS BUTTON
OIS BUTTON
ZEBRA BUTTON
DISP/MODE CHK BUTTON
AUTO/MANUAL SW
SIDE CASE R S UNIT
LCD UNIT
MONITOR LCD PANEL
LCD LEV C.B.A.
MECHA IF C.B.A.
Mech
CAP
Head
CYL
MECH
FRAME
CAS_OPEN SW
DEW

19. CIRCUIT BOARD LAYOUT



The following chart shows witch parts to remove for the removal of replacement part.Assembling the parts by following the flow chart, the replacement work is effective.(Press the item to display the details screen.)



Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

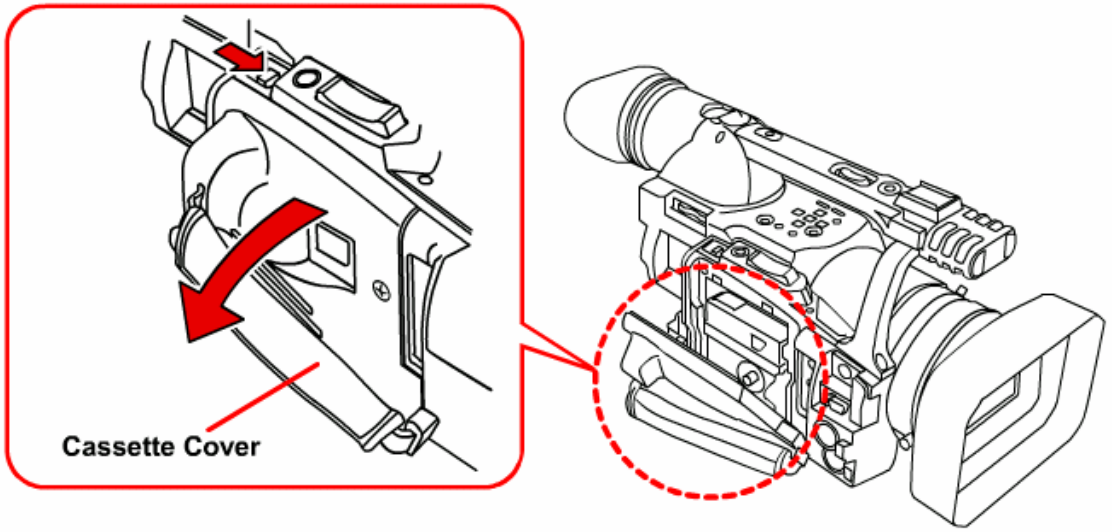
Close

Disassembly | Assembly

1. Open the cassette cover.
2. Remove the 6 screws.
3. Remove the zoom sw case unit.

Auto Play ON OFF

1 Zoom SW Case Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

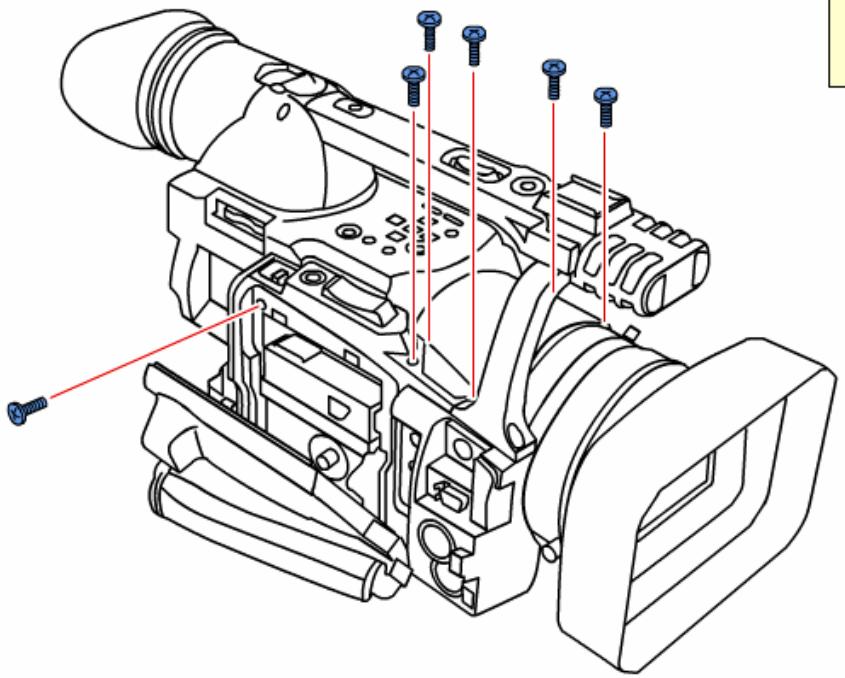
Close

Disassembly | Assembly

1. Open the cassette cover.
2. Remove the 6 screws.
3. Remove the zoom sw case unit.

Auto Play ON OFF

1 Zoom SW Case Unit





BLACK

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

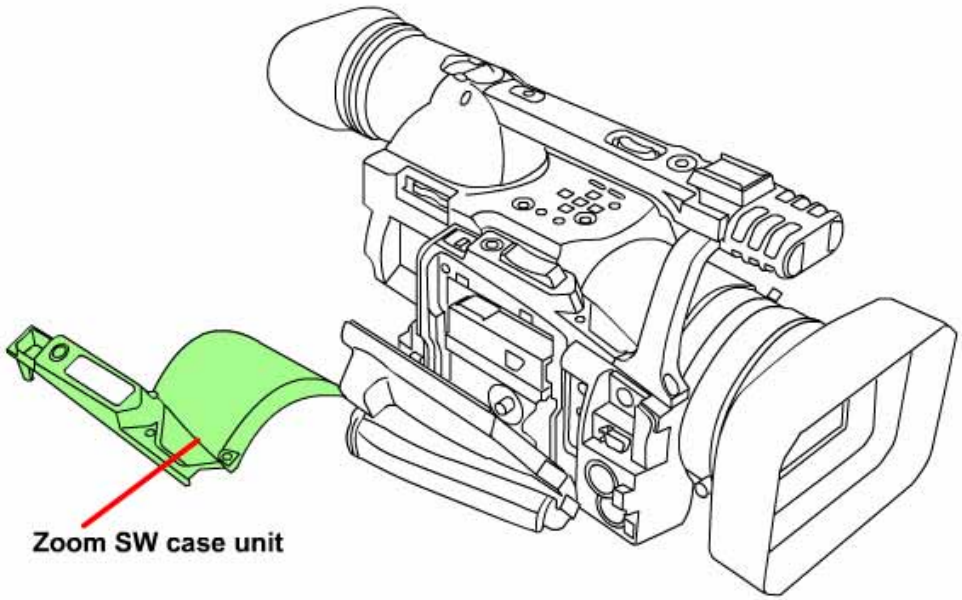
Close

Disassembly | Assembly

1. Open the cassette cover.
2. Remove the 6 screws.
3. Remove the zoom sw case unit.

Auto Play ON OFF

1 Zoom SW Case Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

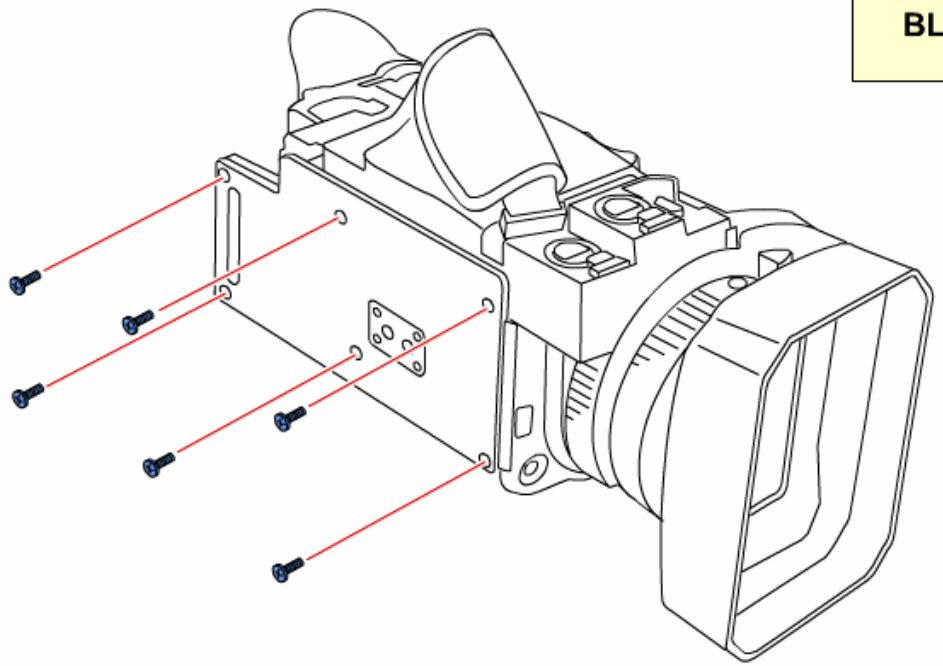
Disassembly | Assembly

1 Remove the 6 screws.

2 Remove the bottom cover unit.

Auto Play ON OFF

2 Bottom Cover Unit



4mm

BLACK

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

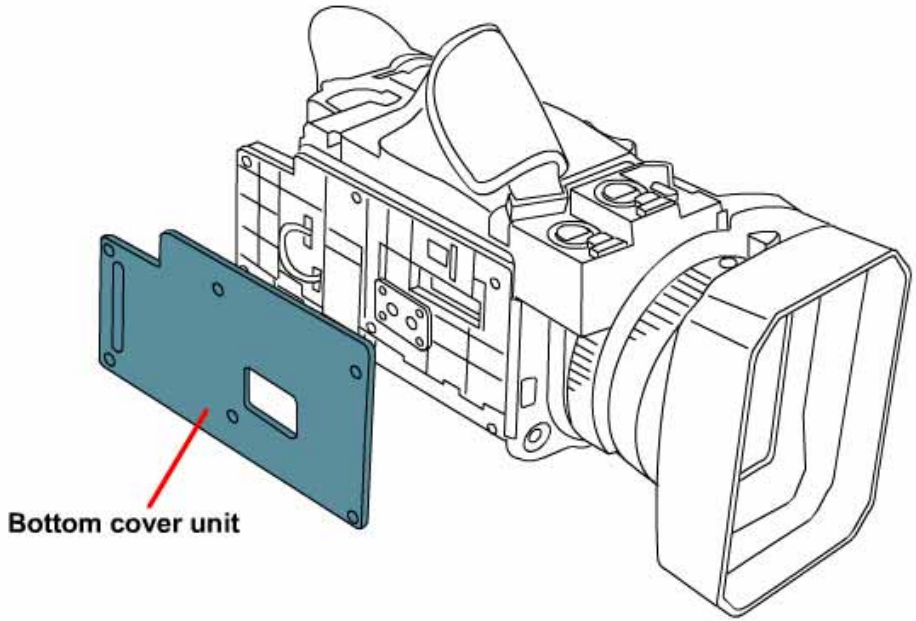
Disassembly | Assembly

1 Remove the 6 screws.

2 Remove the bottom cover unit.

Auto Play ON OFF

2 Bottom Cover Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

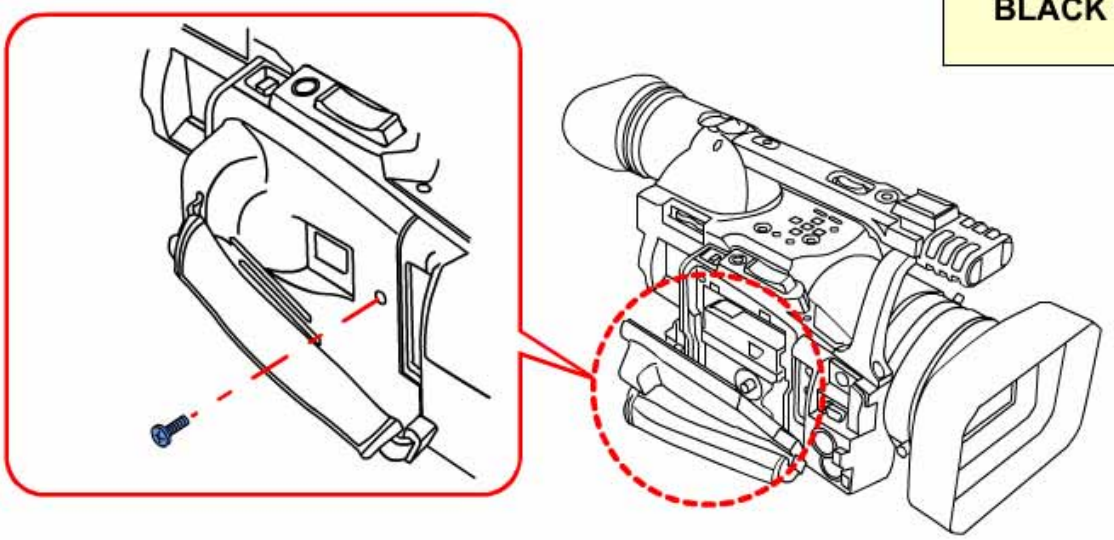
Close

Disassembly | Assembly

1. Remove the 1 screw and open the cassette cover.
2. Remove the 7 screws.
3. Rmove the grip cover unit.

Auto Play ON OFF

3 Grip Cover Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

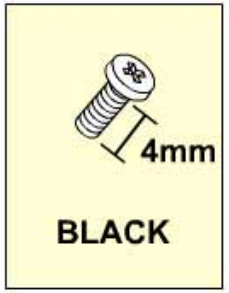
Close

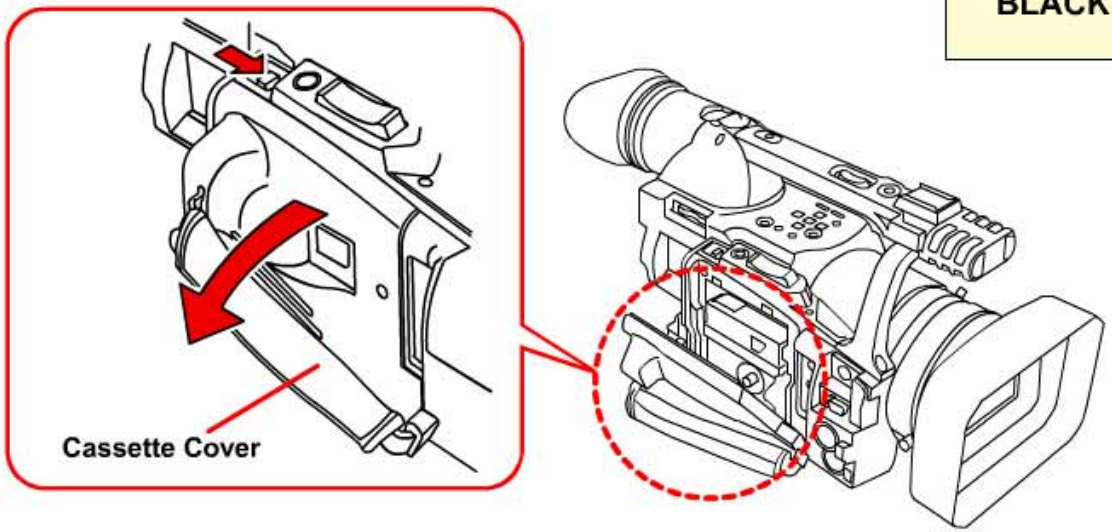
Disassembly | Assembly

1. Remove the 1 screw and open the cassette cover.
2. Remove the 7 screws.
3. Rmove the grip cover unit.

Auto Play ON OFF

3 Grip Cover Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

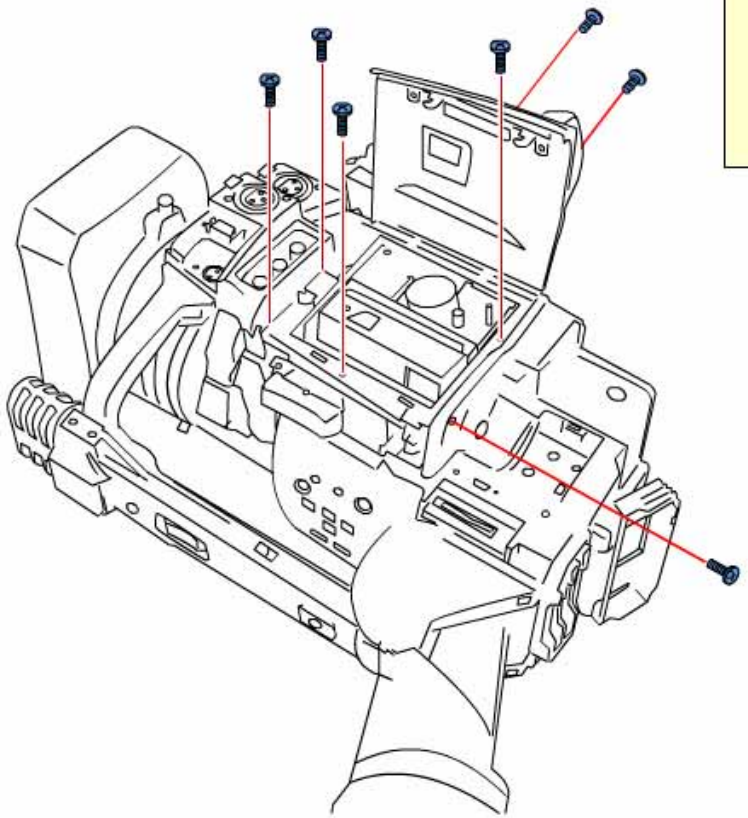
Close

Disassembly | Assembly

1. Remove the 1 screw and open the cassette cover.
2. Remove the 7 screws.
3. Rmove the grip cover unit.

Auto Play ON OFF

3 Grip Cover Unit





BLACK

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

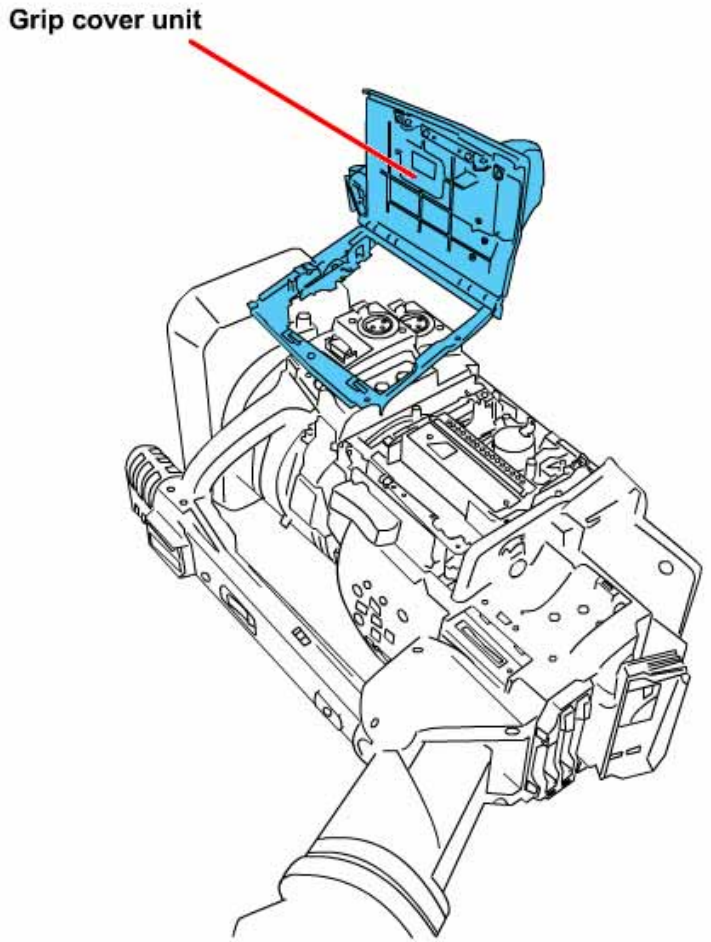
1 Remove the 1 screw and open the cassette cover.

2 Remove the 7 screws.

3 Rmove the grip cover unit.

Auto Play ON OFF

3 Grip Cover Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

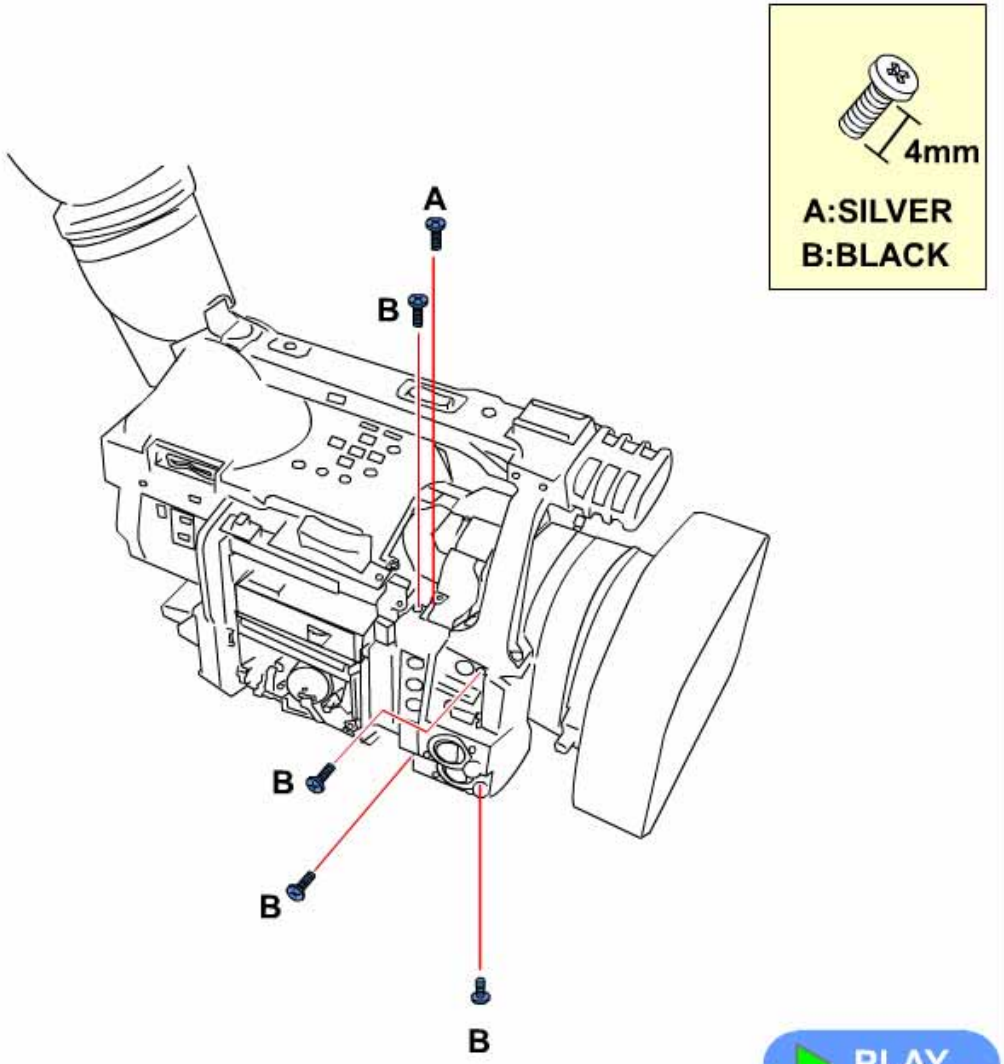
Close

Disassembly | Assembly

1 Remove the 5 screws.
2 Pull out the from jack unit.
3 Remove the 1 connector.

Auto Play ON OFF

4 Front Jack Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

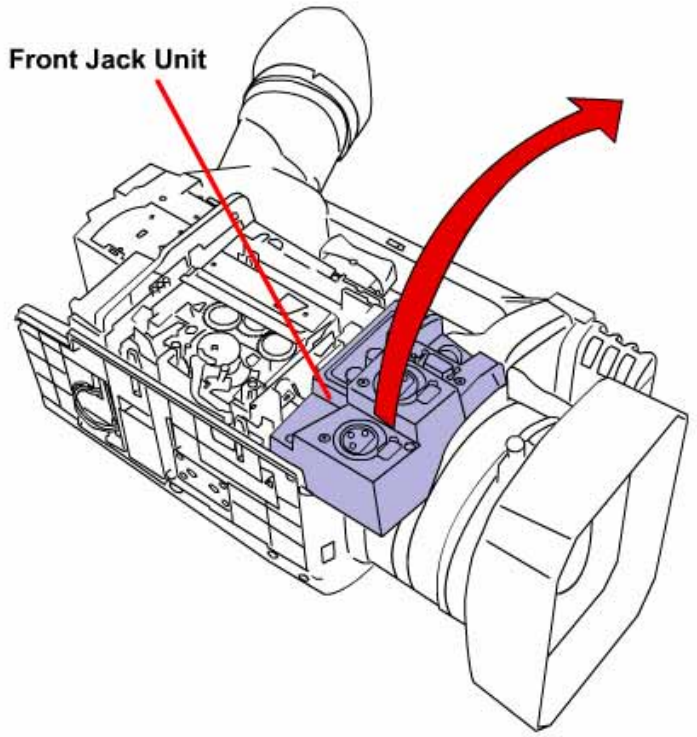
1 Remove the 5 screws.

2 Pull out the from jack unit.

3 Remove the 1 connector.

Auto Play ON OFF

4 Front Jack Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

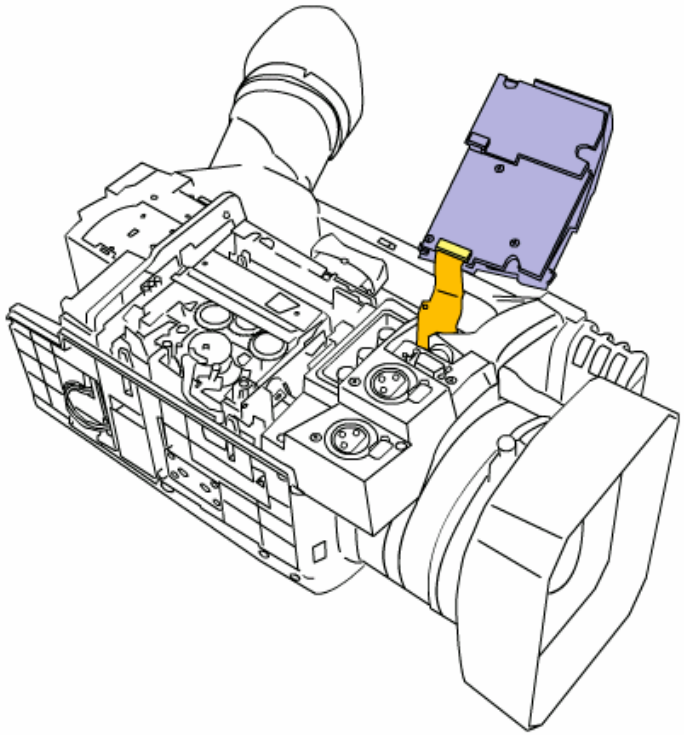
1 Remove the 5 screws.

2 Pull out the from jack unit.

3 Remove the 1 connector.

Auto Play ON OFF

4 Front Jack Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

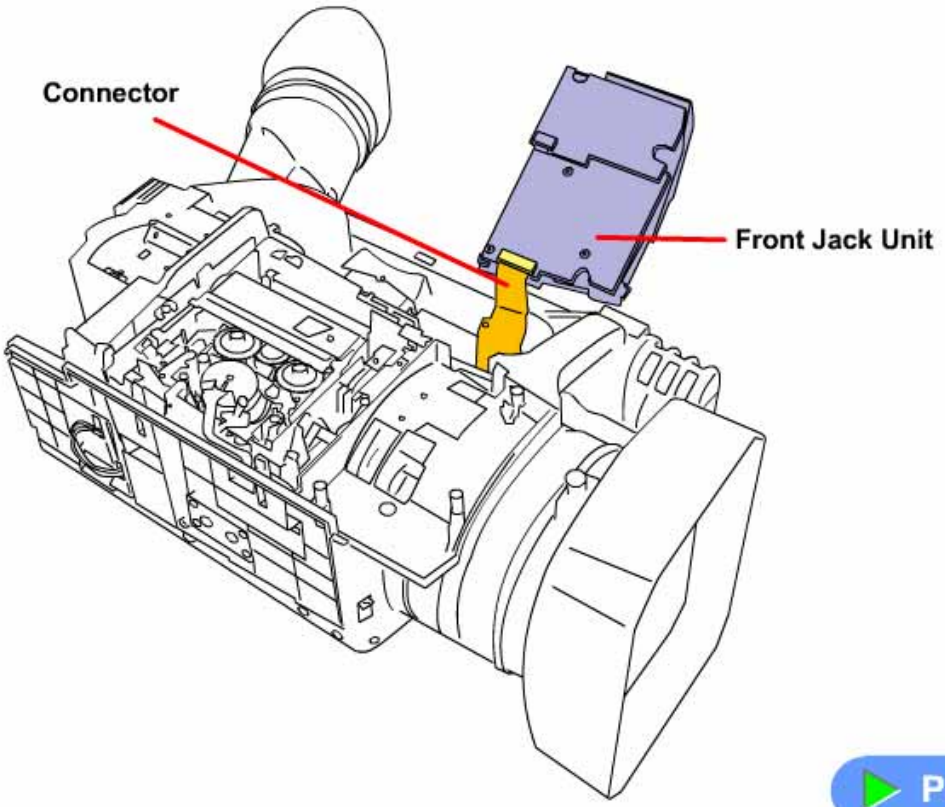
1 Remove the 5 screws.

2 Pull out the from jack unit.

3 Remove the 1 connector.

Auto Play ON OFF

4 Front Jack Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

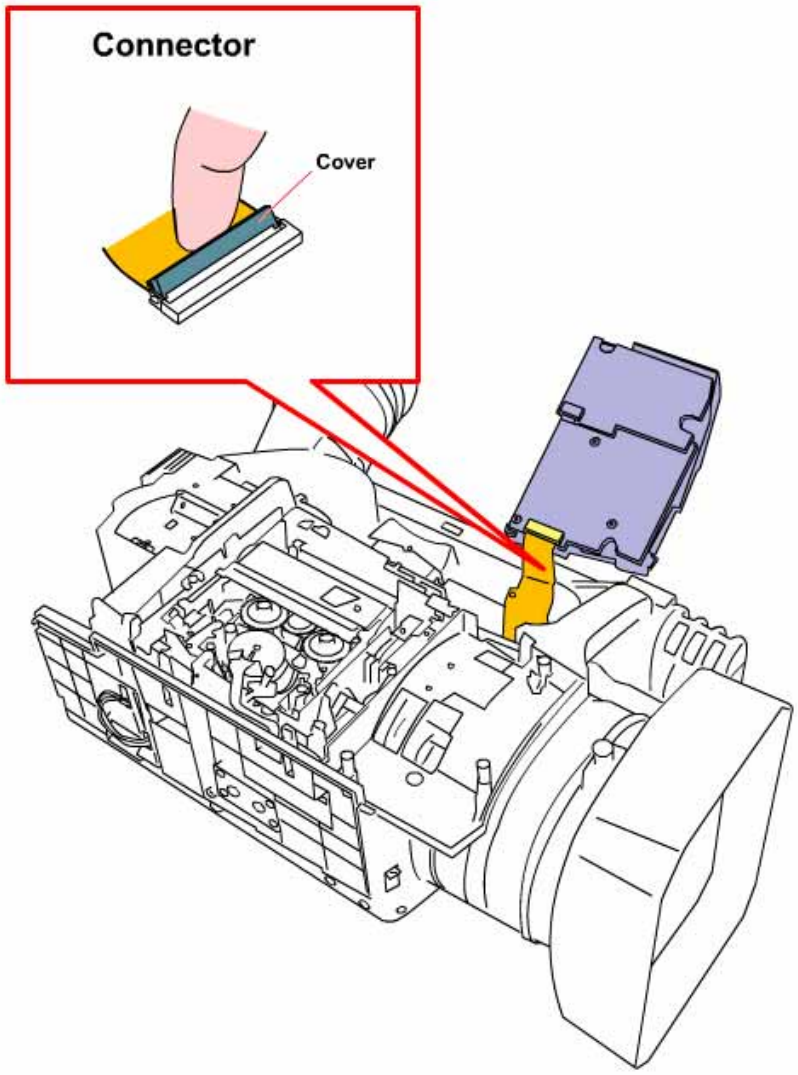
1 Remove the 5 screws.

2 Pull out the from jack unit.

3 Remove the 1 connector.

Auto Play ON OFF

4 Front Jack Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

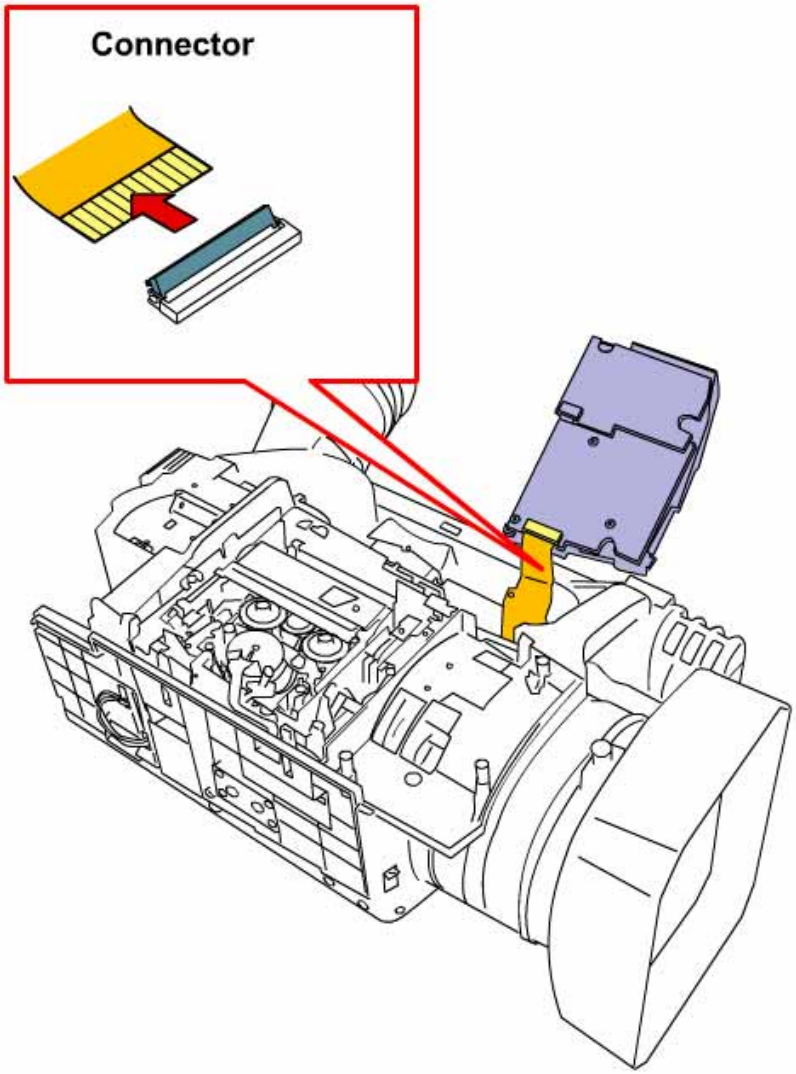
1 Remove the 5 screws.

2 Pull out the from jack unit.

3 Remove the 1 connector.

Auto Play ON OFF

4 Front Jack Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

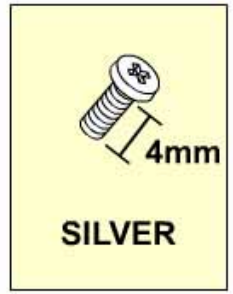
Close

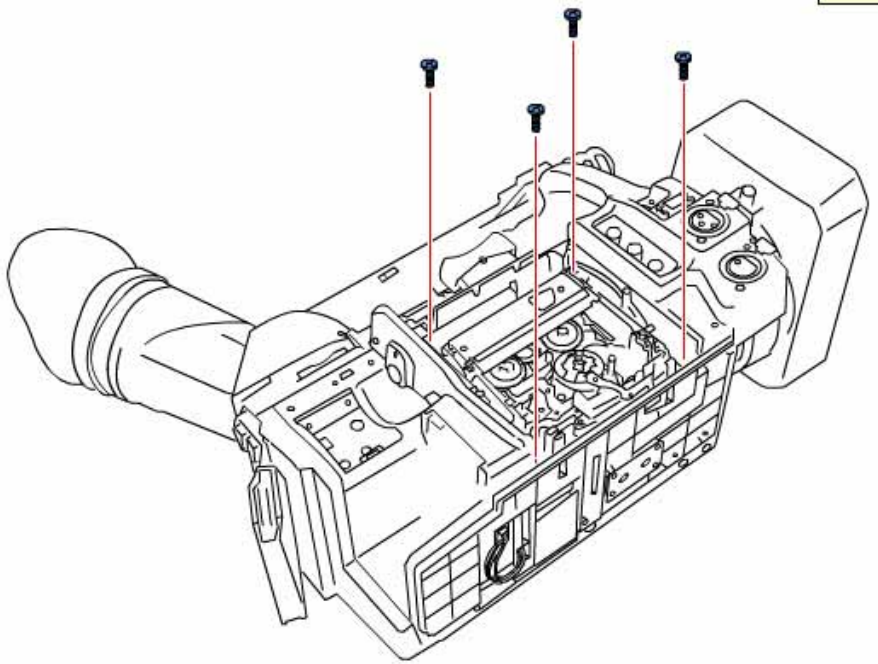
Disassembly | Assembly

1 Remove the 4 screws.
2 Pull out the mecha chassis.
3 Peel the tape.
4 Remove the connector.

Auto Play ON OFF

5 Mecha Chassis





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

1 Remove the 4 screws.

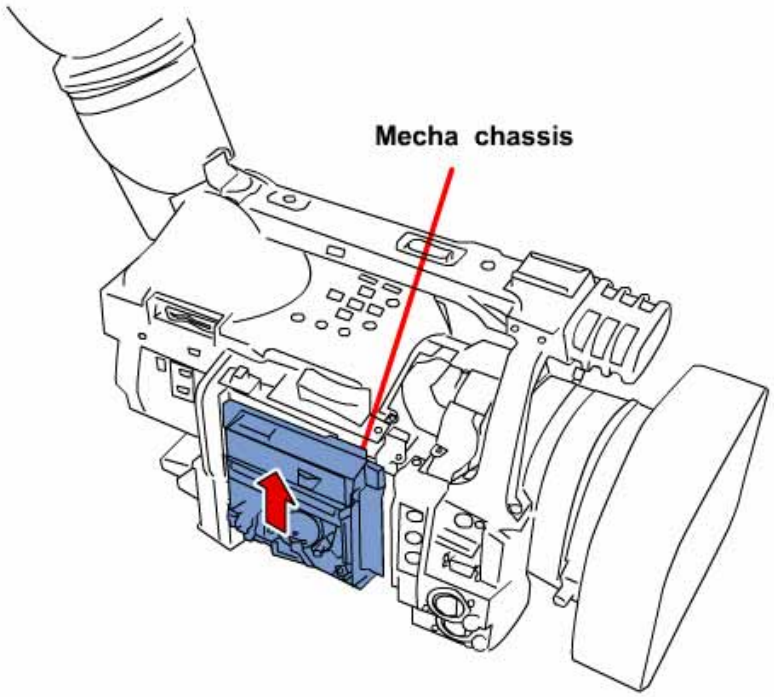
2 Pull out the mecha chassis.

3 Peel the tape.

4 Remove the connector.

Auto Play ON OFF

5 Mecha Chassis



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

1 Remove the 4 screws.

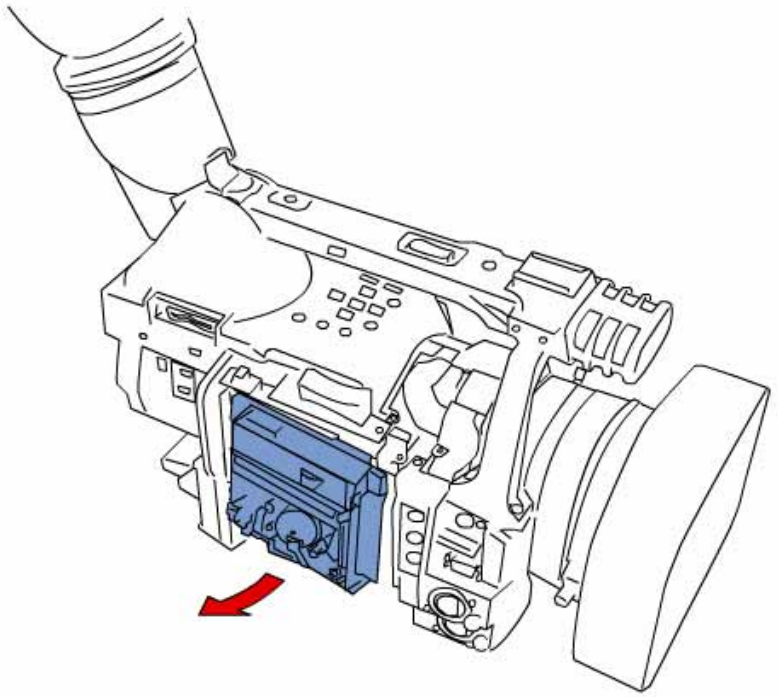
2 Pull out the mecha chassis.

3 Peel the tape.

4 Remove the connector.

Auto Play ON OFF

5 Mecha Chassis



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

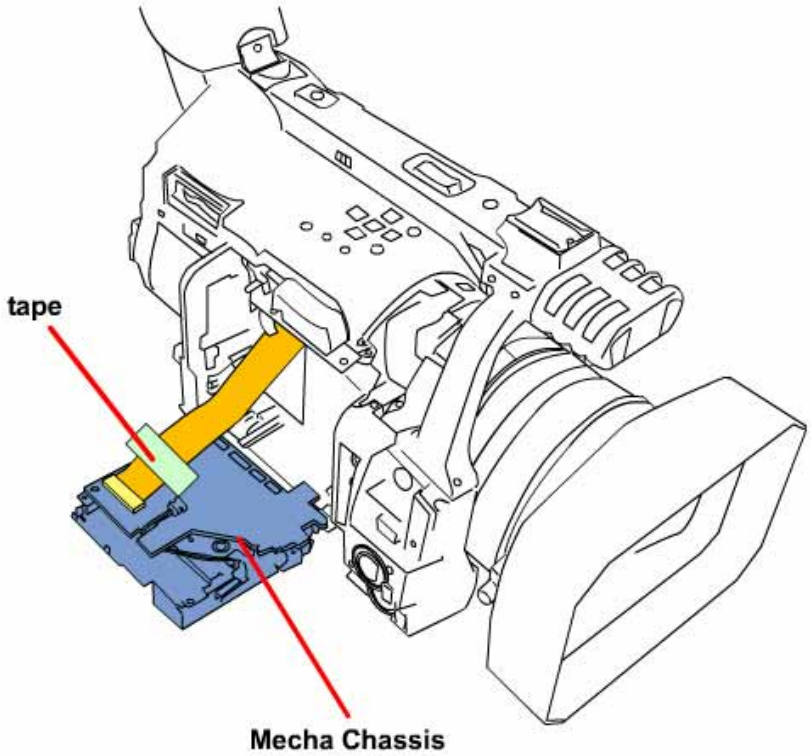
Close

Disassembly | Assembly

1. Remove the 4 screws.
2. Pull out the mecha chassis.
3. Peel the tape.
4. Remove the connector.

Auto Play ON OFF

5 Mecha Chassis



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

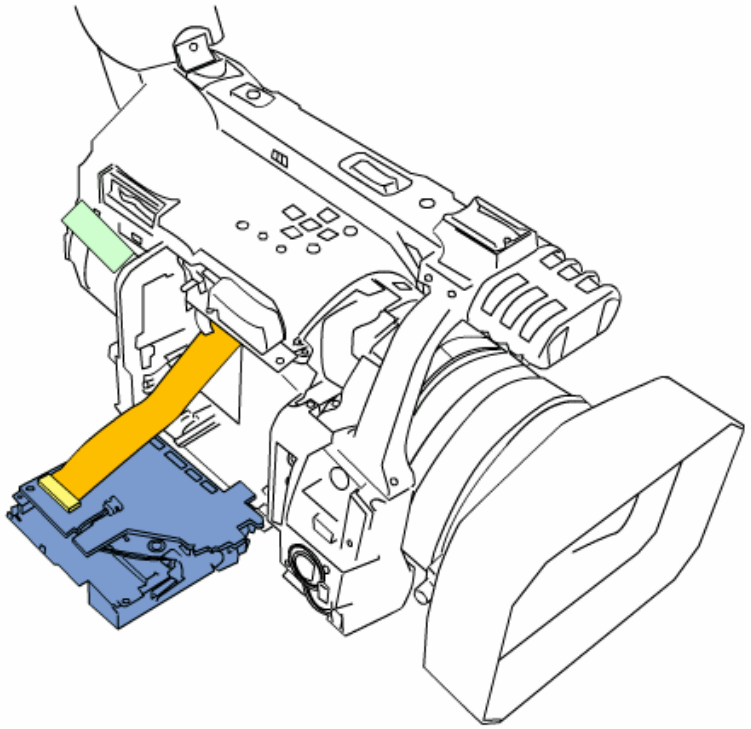
Close

Disassembly | Assembly

1. Remove the 4 screws.
2. Pull out the mecha chassis.
3. Peel the tape.
4. Remove the connector.

Auto Play ON OFF

5 Mecha Chassis



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

1 Remove the 4 screws.

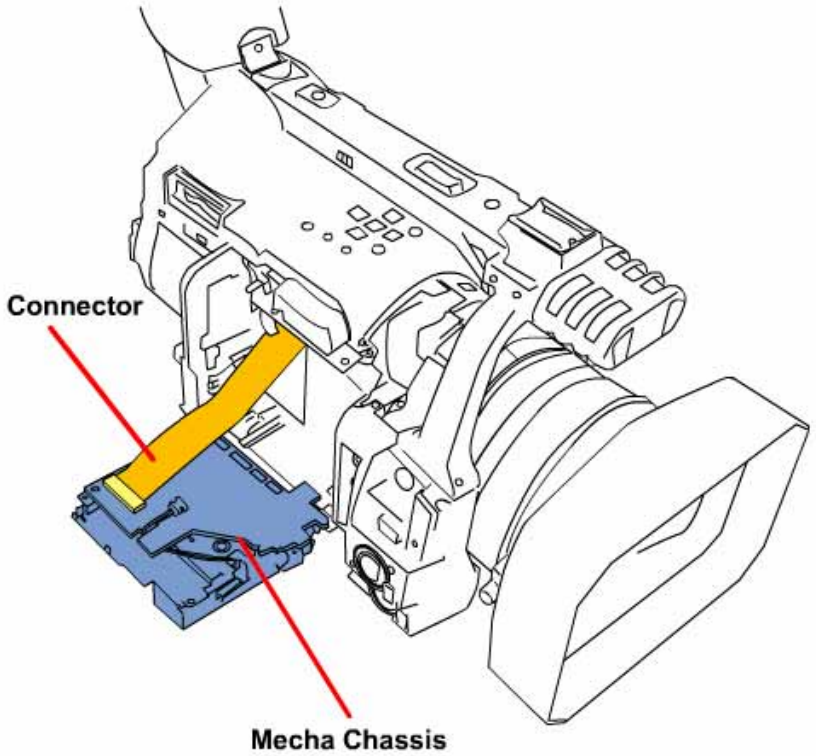
2 Pull out the mecha chassis.

3 Peel the tape.

4 Remove the connector.

Auto Play ON OFF

5 Mecha Chassis



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

1 Remove the 4 screws.

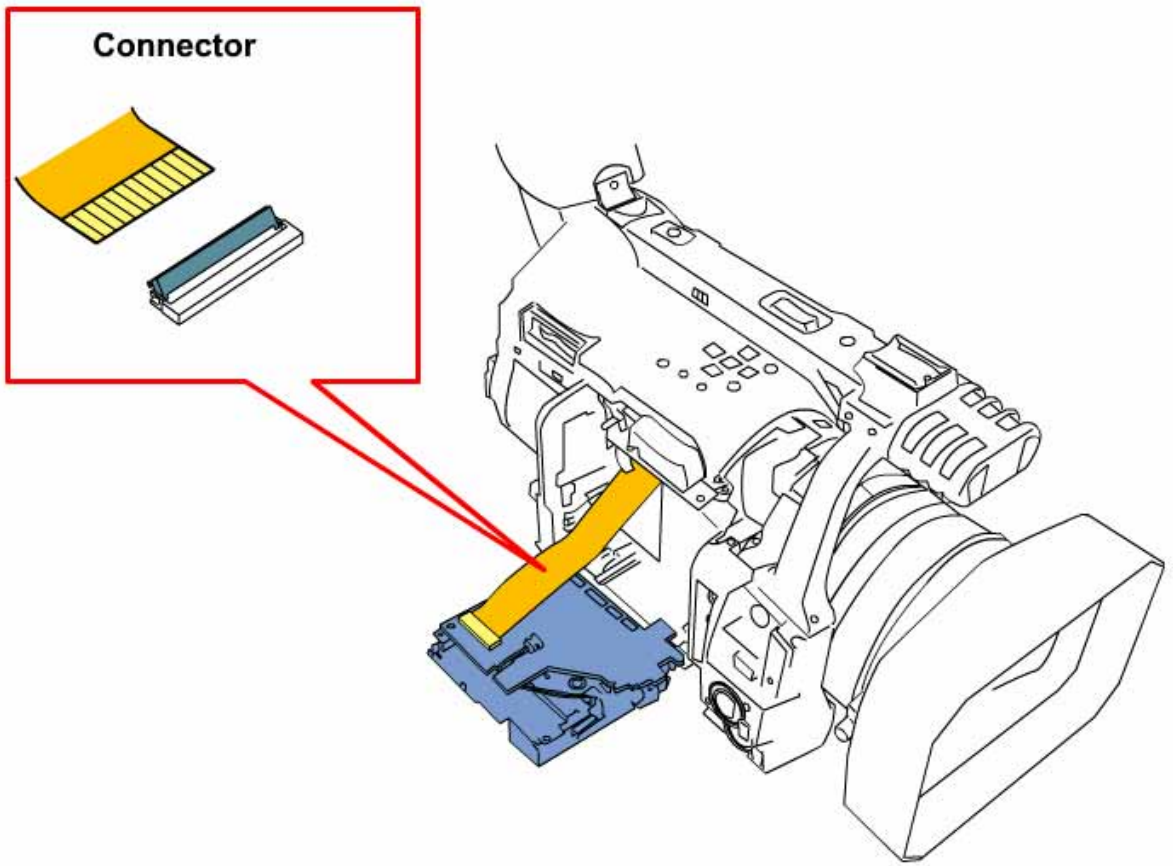
2 Pull out the mecha chassis.

3 Peel the tape.

4 Remove the connector.

Auto Play ON OFF

5 Mecha Chassis



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

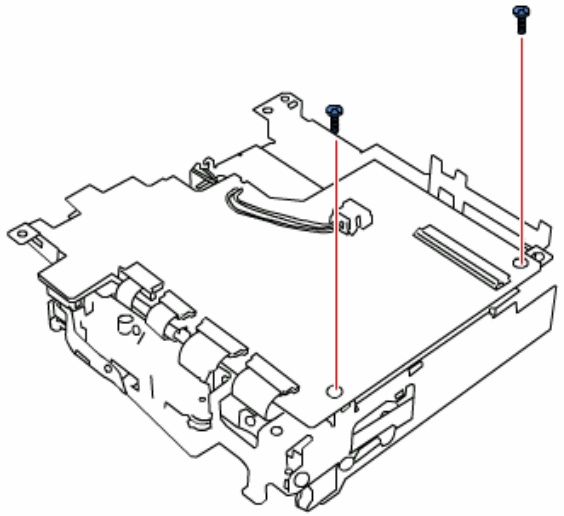
Close

Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the 5 connectors.
3. Remove the FPC P.C.B.

Auto Play ON OFF

6 IF P.C.B.





SILVER

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

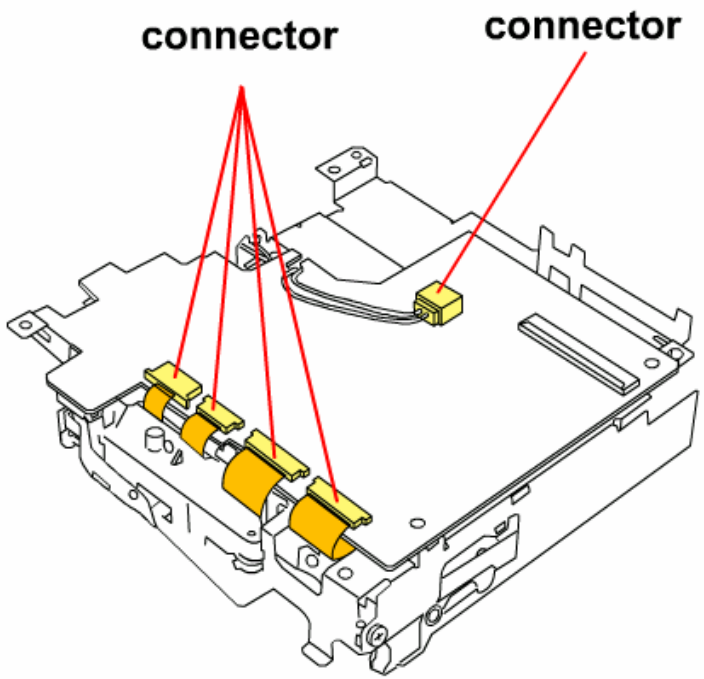
Close

Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the 5 connectors.
3. Remove the FPC P.C.B.

Auto Play ON OFF

6 IF P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

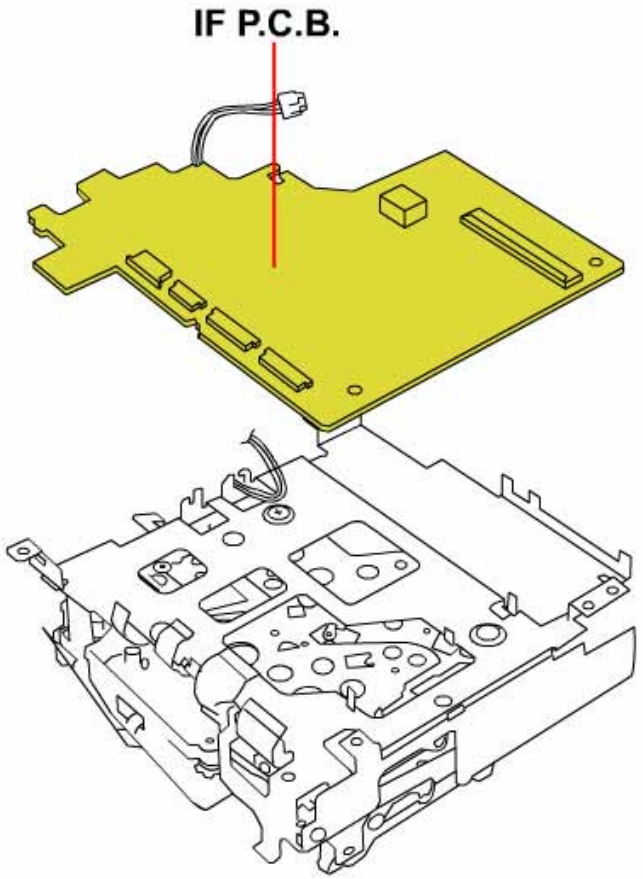
1 Remove the 2 screws.

2 Remove the 5 connectors.

3 Remove the FPC P.C.B.

Auto Play ON OFF

6 IF P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

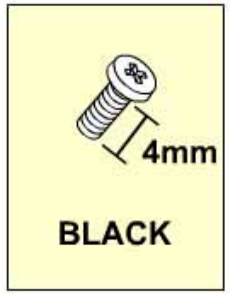
Close

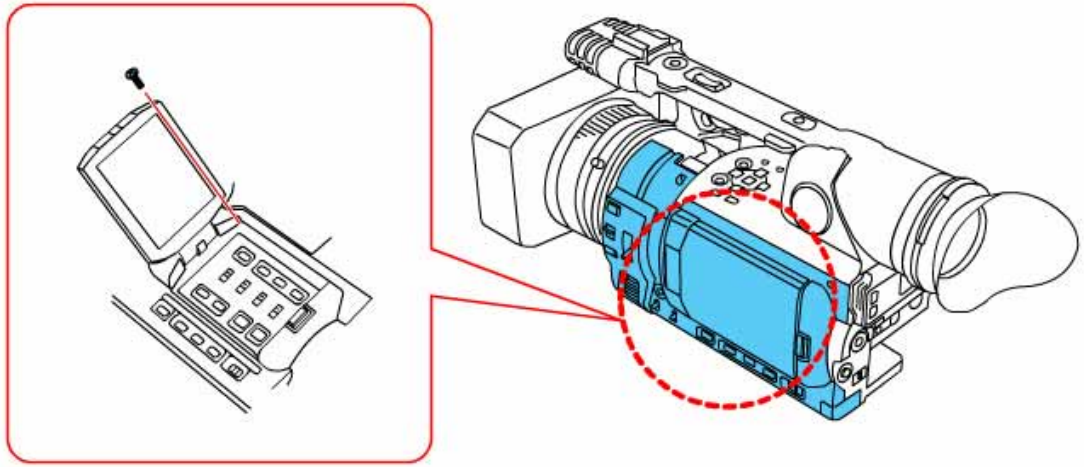
Disassembly | Assembly

1. Open the LCD unit and remove the 1 screw.
2. Remove the 6 screws.
3. Remove the side case R unit to the indicated by arrow.
4. Remove the connector and remove the side case R unit.

Auto Play ON OFF

7 Side Case R Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

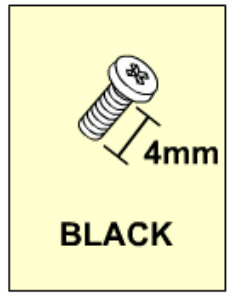
Close

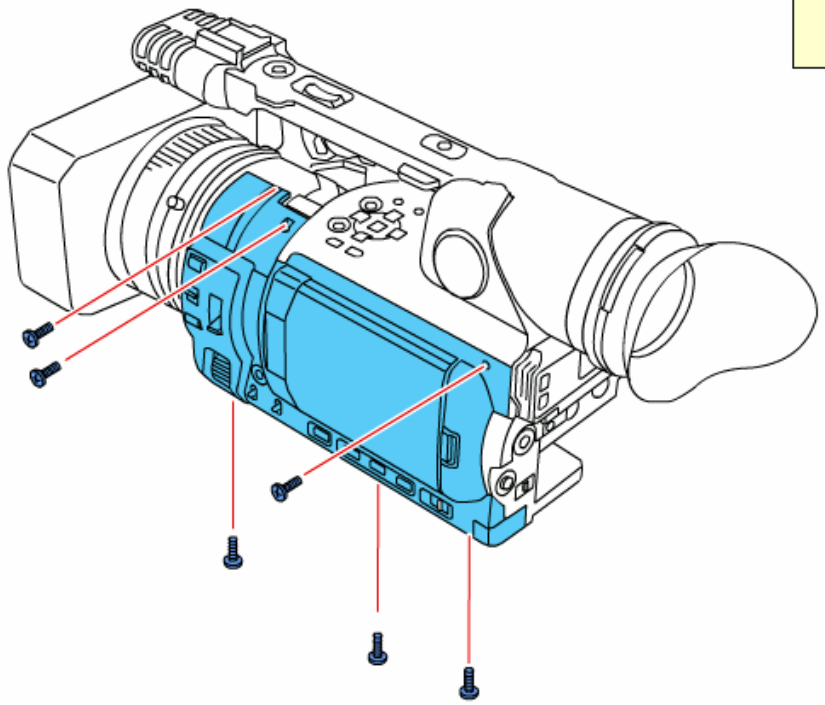
Disassembly | Assembly

1. Open the LCD unit and remove the 1 screw.
2. Remove the 6 screws.
3. Remove the side case R unit to the indicated by arrow.
4. Remove the connector and remove the side case R unit.

Auto Play ON OFF

7 Side Case R Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

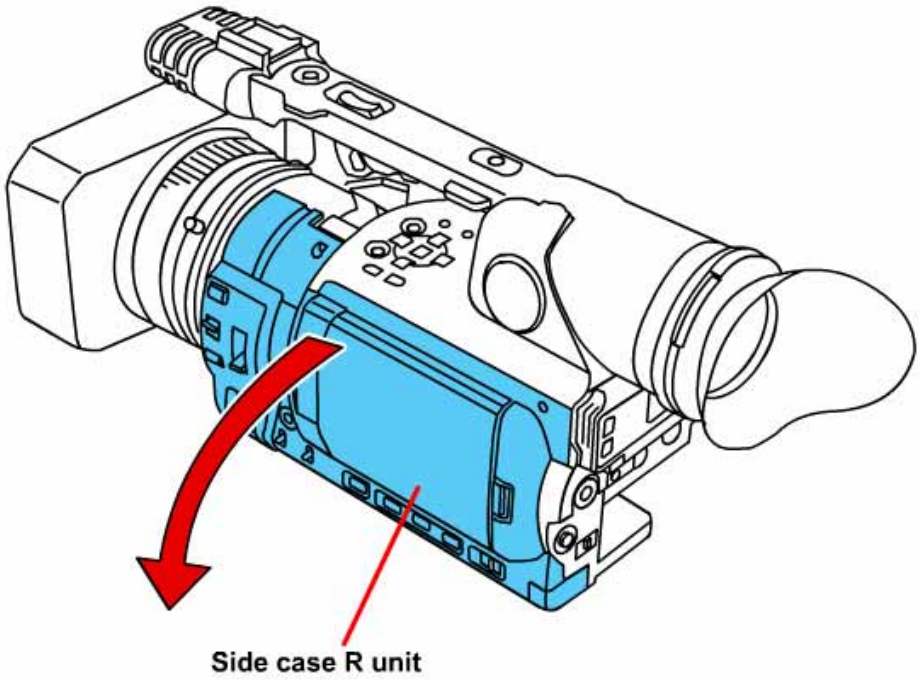
Close

Disassembly | Assembly

1. Open the LCD unit and remove the 1 screw.
2. Remove the 6 screws.
3. Remove the side case R unit to the indicated by arrow.
4. Remove the connector and remove the side case R unit.

Auto Play ON OFF

7 Side Case R Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

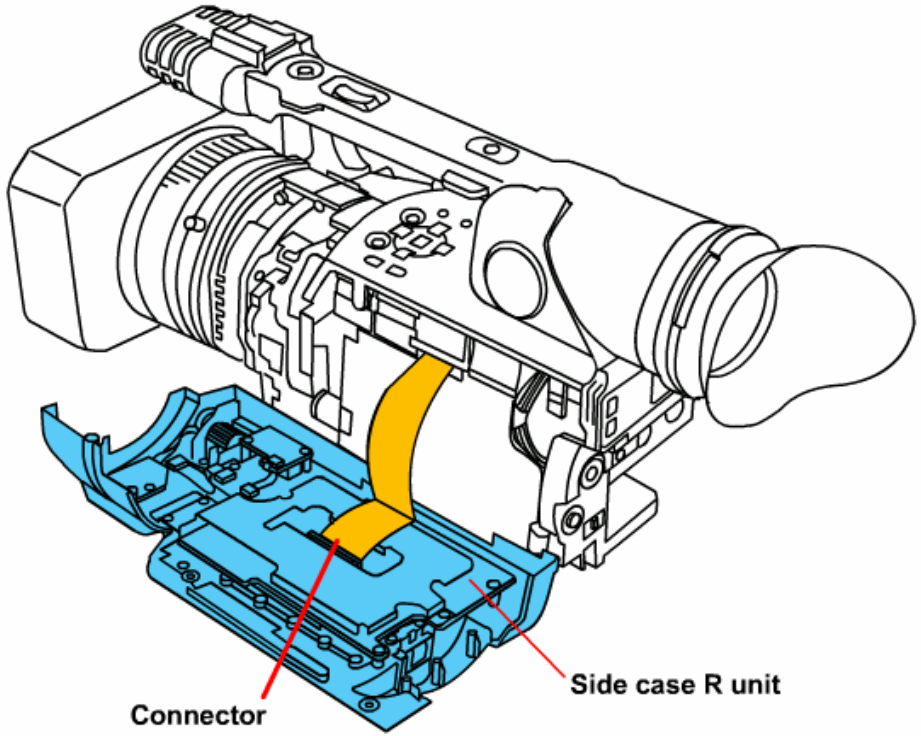
Close

Disassembly | Assembly

1. Open the LCD unit and remove the 1 screw.
2. Remove the 6 screws.
3. Remove the side case R unit to the indicated by arrow.
4. Remove the connector and remove the side case R unit.

Auto Play ON OFF

7 Side Case R Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

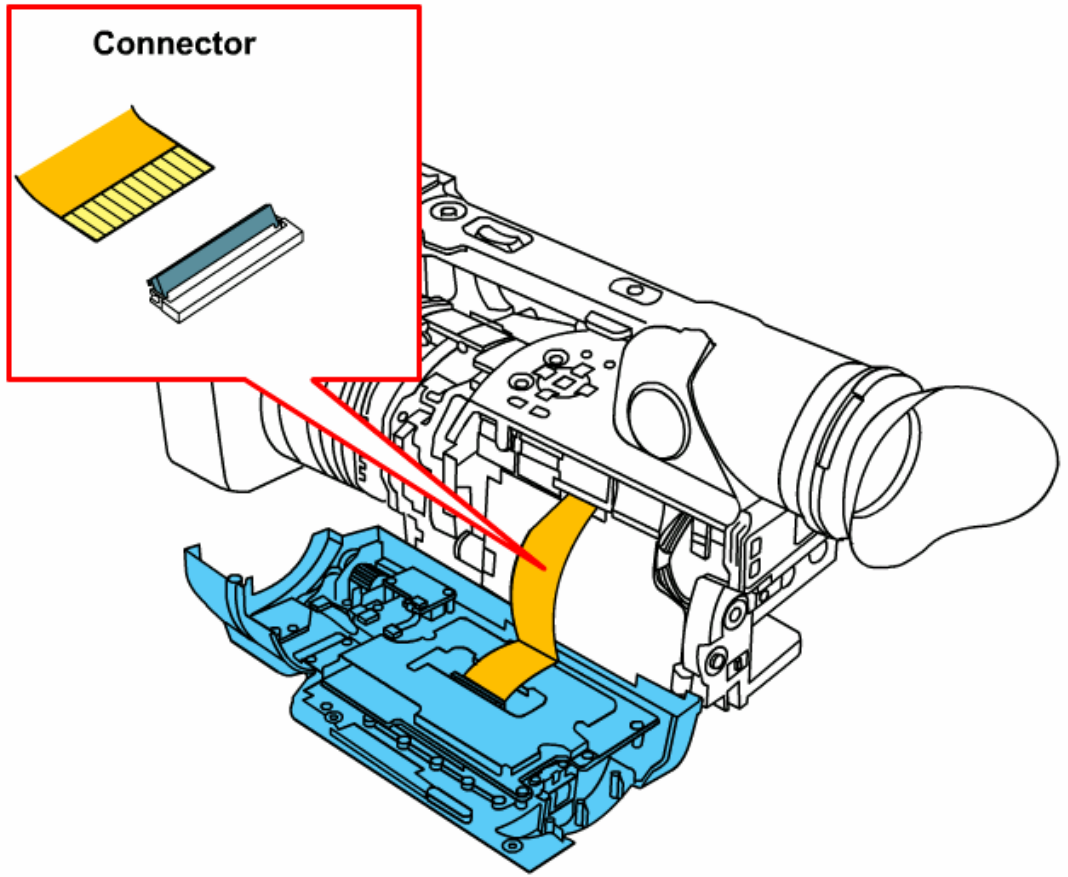
Close

Disassembly | Assembly

1. Open the LCD unit and remove the 1 screw.
2. Remove the 6 screws.
3. Remove the side case R unit to the indicated by arrow.
4. Remove the connector and remove the side case R unit.

Auto Play ON OFF

7 Side Case R Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

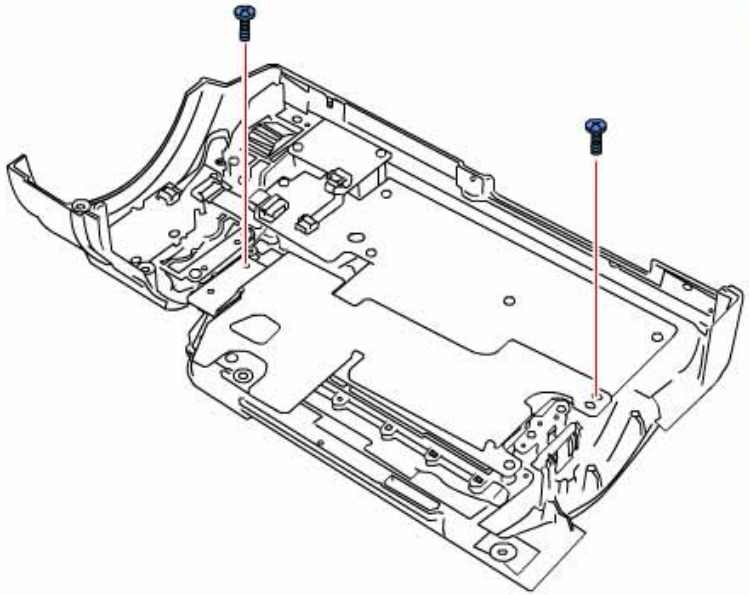
Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the heat sink.
3. Remove the 3 connectors.
4. Remove the 8 screws.
5. Remove the R side P.C.B.
6. Peel the insulation sheet.
7. Remove the 2 screws.
8. Install the R side P.C.B. and them tighten the 8 screws.
9. Remove the LCD hinge cover.
10. Remove the 2 screws.

Auto Play ON OFF

8 LCD Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

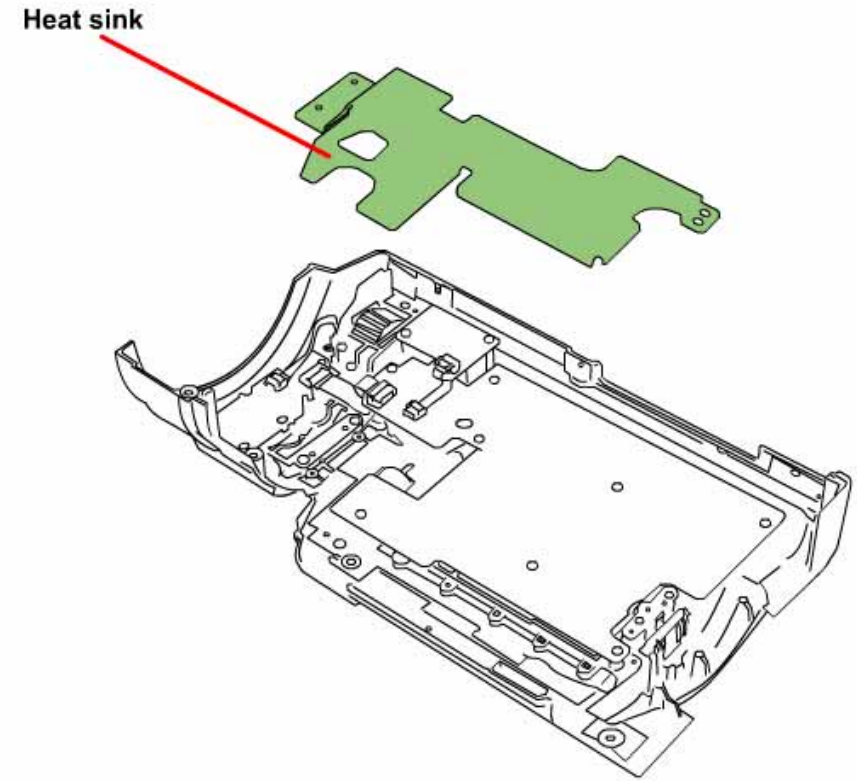
Close

Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the heat sink.
3. Remove the 3 connectors.
4. Remove the 8 screws.
5. Remove the R side P.C.B.
6. Peel the insulation sheet.
7. Remove the 2 screws.
8. Install the R side P.C.B. and them tighten the 8 screws.
9. Remove the LCD hinge cover.
10. Remove the 2 screws.

Auto Play ON OFF

8 LCD Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

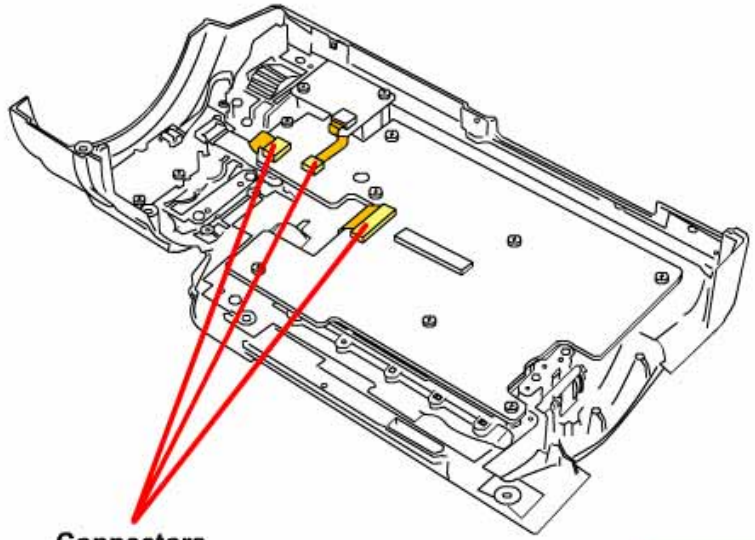
Close

Disassembly | Assembly

1 Remove the 2 screws.
2 Remove the heat sink.
3 Remove the 3 connectors.
4 Remove the 8 screws.
5 Remove the R side P.C.B.
6 Peel the insulation sheet.
7 Remove the 2 screws.
8 Install the R side P.C.B. and them tighten the 8 screws.
9 Remove the LCD hinge cover.
10 Remove the 2 screws.

Auto Play ON OFF

8 LCD Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

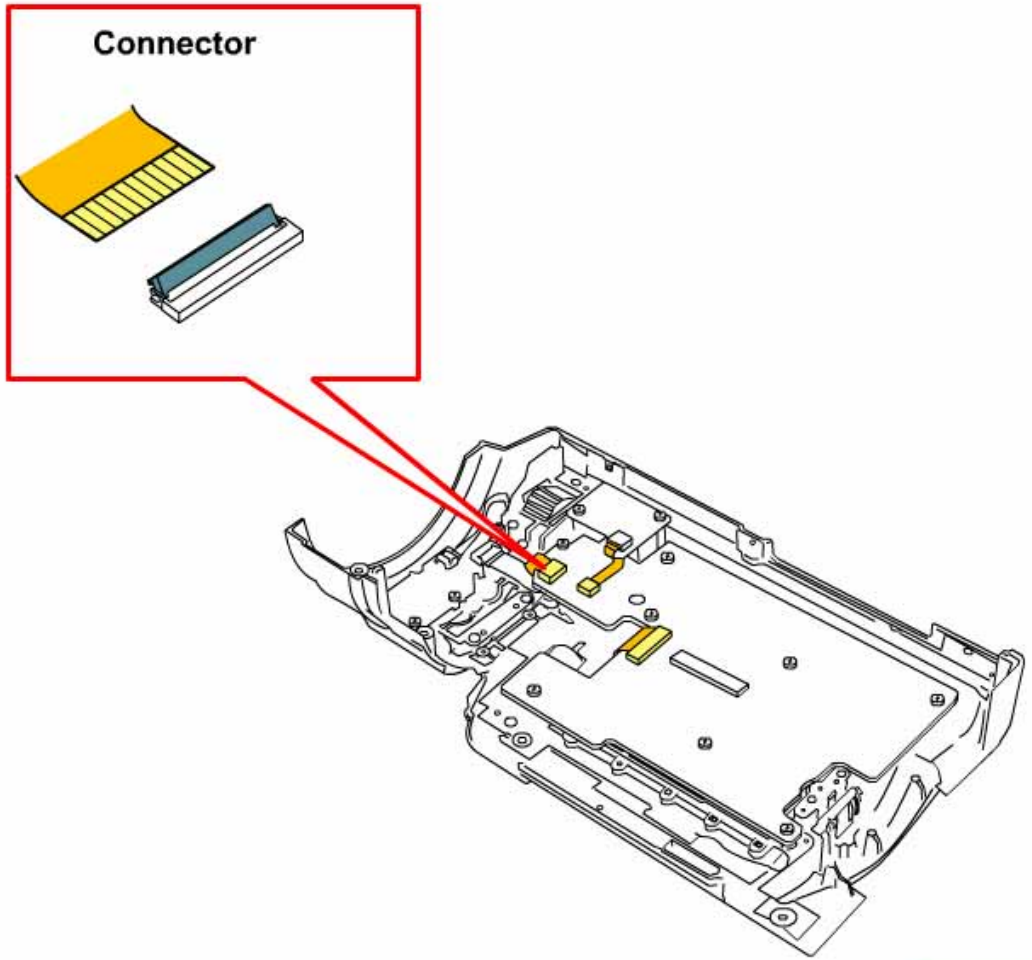
Close

Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the heat sink.
3. Remove the 3 connectors.
4. Remove the 8 screws.
5. Remove the R side P.C.B.
6. Peel the insulation sheet.
7. Remove the 2 screws.
8. Install the R side P.C.B. and them tighten the 8 screws.
9. Remove the LCD hinge cover.
10. Remove the 2 screws.

Auto Play ON OFF

8 LCD Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

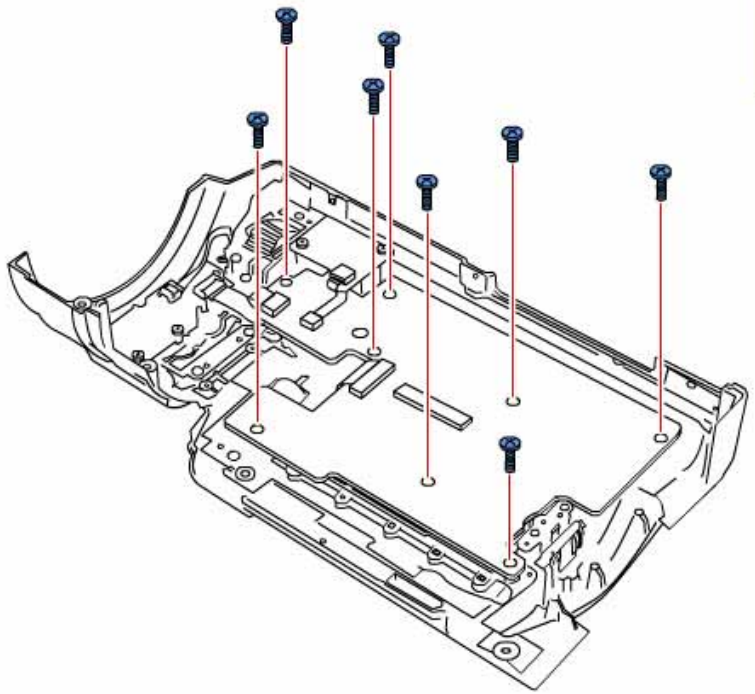
Close

Disassembly | Assembly

1 Remove the 2 screws.
2 Remove the heat sink.
3 Remove the 3 connectors.
4 Remove the 8 screws.
5 Remove the R side P.C.B.
6 Peel the insulation sheet.
7 Remove the 2 screws.
8 Install the R side P.C.B. and them tighten the 8 screws.
9 Remove the LCD hinge cover.
10 Remove the 2 screws.

Auto Play ON OFF

8 LCD Unit





SILVER

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

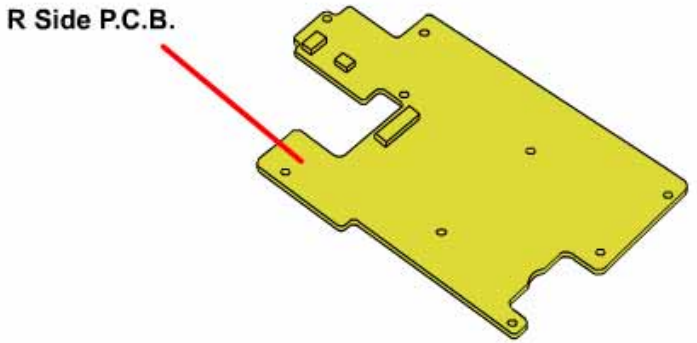
Close

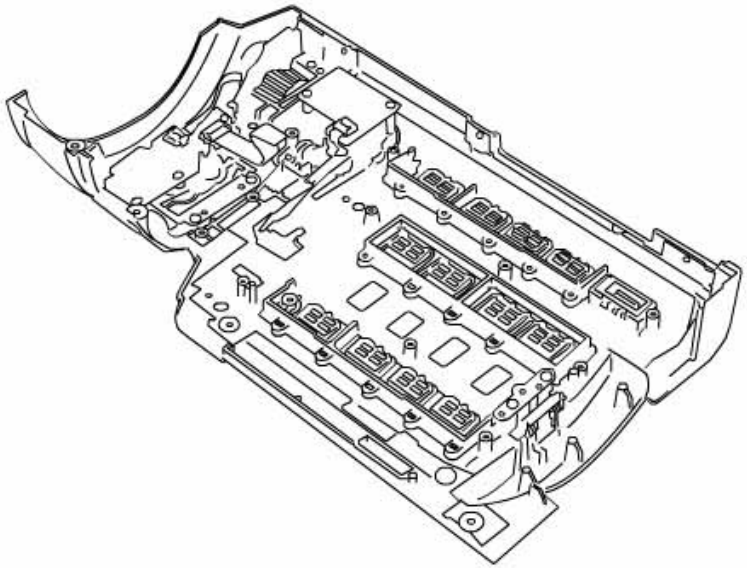
Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the heat sink.
3. Remove the 3 connectors.
4. Remove the 8 screws.
5. Remove the R side P.C.B.
6. Peel the insulation sheet.
7. Remove the 2 screws.
8. Install the R side P.C.B. and them tighten the 8 screws.
9. Remove the LCD hinge cover.
10. Remove the 2 screws.

Auto Play ON OFF

8 LCD Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

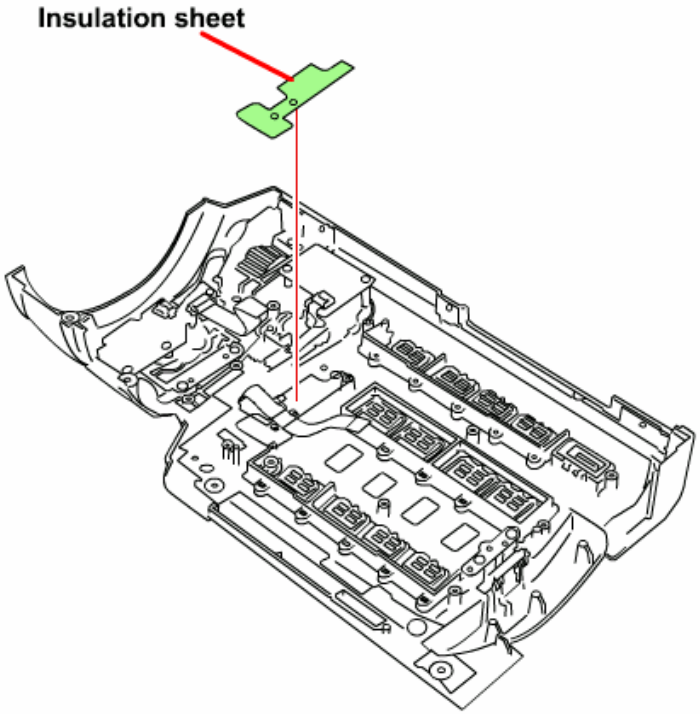
Close

Disassembly | Assembly

1 Remove the 2 screws.
2 Remove the heat sink.
3 Remove the 3 connectors.
4 Remove the 8 screws.
5 Remove the R side P.C.B.
6 Peel the insulation sheet.
7 Remove the 2 screws.
8 Install the R side P.C.B. and them tighten the 8 screws.
9 Remove the LCD hinge cover.
10 Remove the 2 screws.

Auto Play ON OFF

8 LCD Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

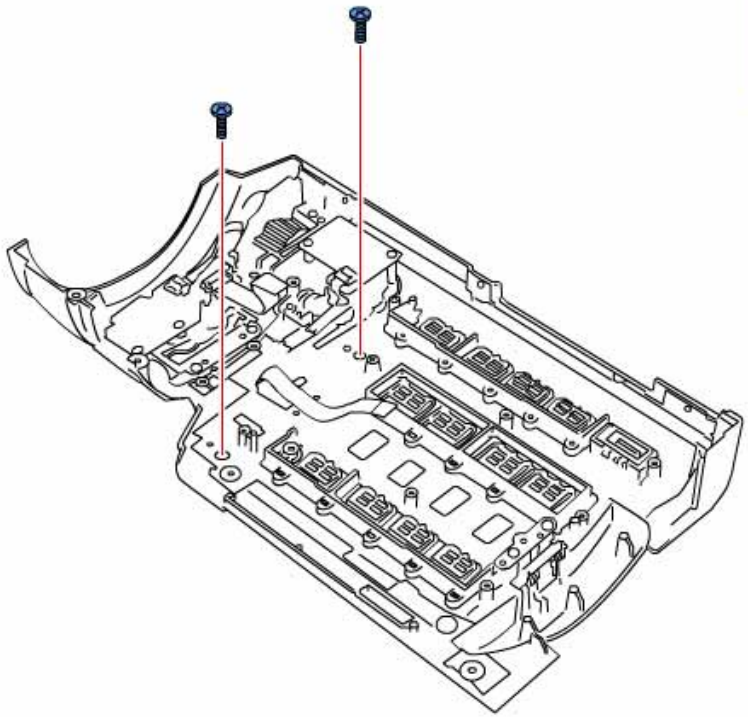
1 Remove the 2 screws.
2 Remove the heat sink.
3 Remove the 3 connectors.
4 Remove the 8 screws.
5 Remove the R side P.C.B.
6 Peel the insulation sheet.
7 Remove the 2 screws.
8 Install the R side P.C.B. and them tighten the 8 screws.
9 Remove the LCD hinge cover.
10 Remove the 2 screws.

Auto Play ON OFF

8 LCD Unit



SILVER



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

2 Remove the heat sink.

3 Remove the 3 connectors.

4 Remove the 8 screws.

5 Remove the R side P.C.B.

6 Peel the insulation sheet.

7 Remove the 2 screws.

8 Install the R side P.C.B. and them tighten the 8 screws.

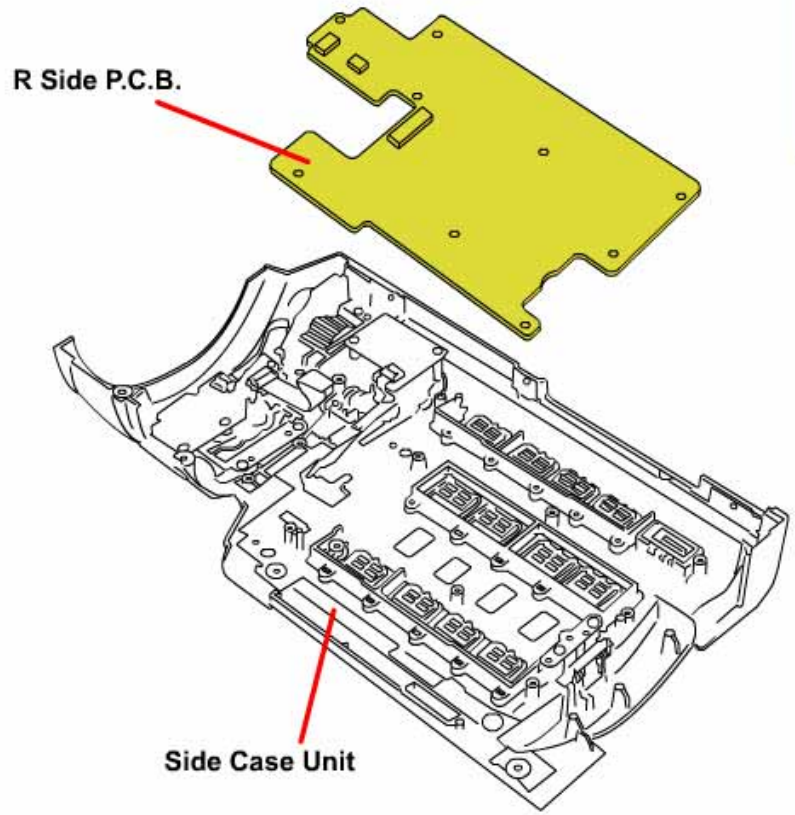
9 Remove the LCD hinge cover.

10 Remove the 2 screws.

11 Remove the LCD unit.

Auto Play ON OFF

8 LCD Unit





SILVER

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

2 Remove the heat sink.

3 Remove the 3 connectors.

4 Remove the 8 screws.

5 Remove the R side P.C.B.

6 Peel the insulation sheet.

7 Remove the 2 screws.

8 Install the R side P.C.B. and them tighten the 8 screws.

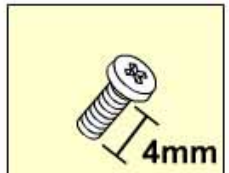
9 Remove the LCD hinge cover.

10 Remove the 2 screws.

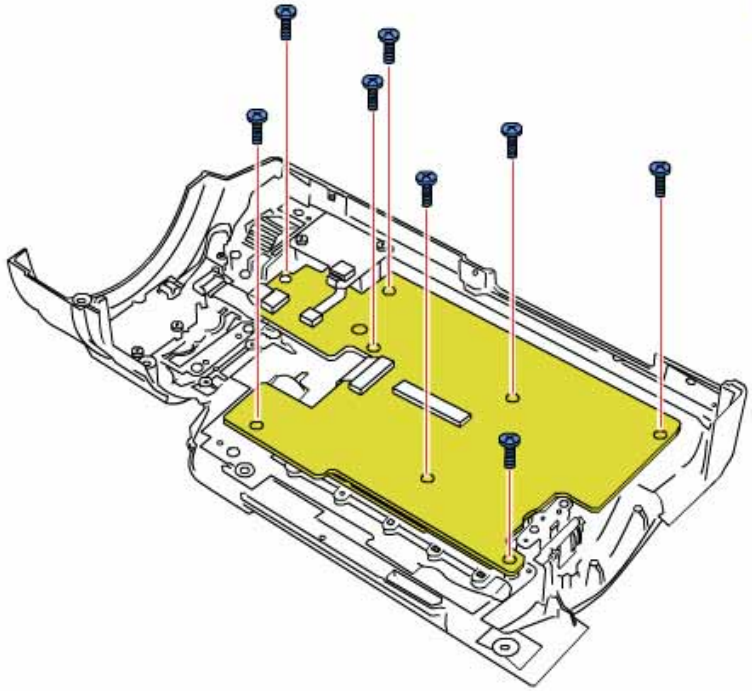
11 Remove the LCD unit.

Auto Play ON OFF

8 LCD Unit



SILVER



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

2 Remove the heat sink.

3 Remove the 3 connectors.

4 Remove the 8 screws.

5 Remove the R side P.C.B.

6 Peel the insulation sheet.

7 Remove the 2 screws.

8 Install the R side P.C.B. and them tighten the 8 screws.

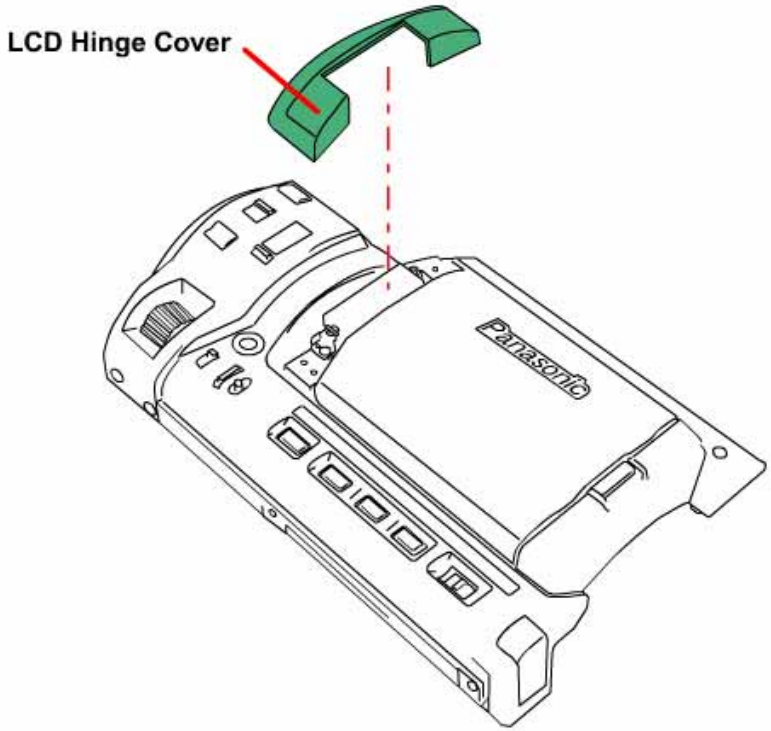
9 Remove the LCD hinge cover.

10 Remove the 2 screws.

11 Remove the LCD unit.

Auto Play ON OFF

8 LCD Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

2 Remove the heat sink.

3 Remove the 3 connectors.

4 Remove the 8 screws.

5 Remove the R side P.C.B.

6 Peel the insulation sheet.

7 Remove the 2 screws.

8 Install the R side P.C.B. and them tighten the 8 screws.

9 Remove the LCD hinge cover.

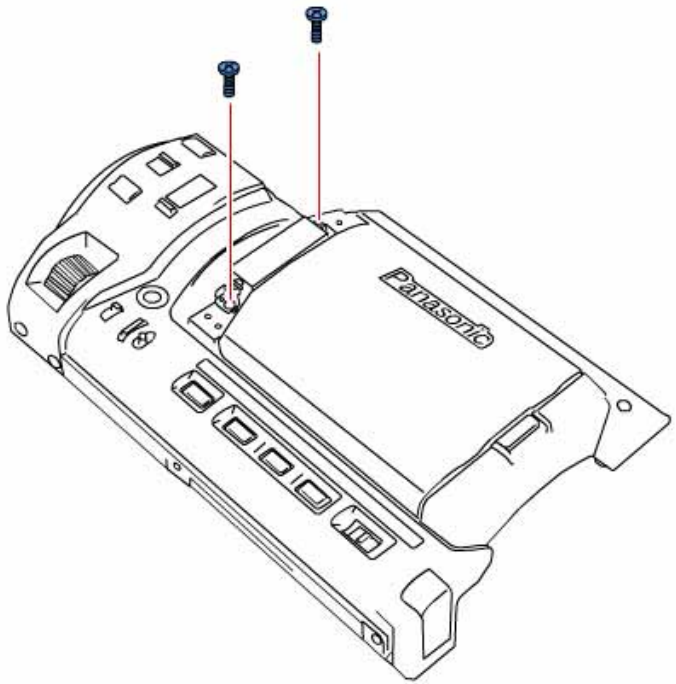
10 Remove the 2 screws.

11 Remove the LCD unit.

Auto Play ON OFF

8 LCD Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

2 Remove the heat sink.

3 Remove the 3 connectors.

4 Remove the 8 screws.

5 Remove the R side P.C.B.

6 Peel the insulation sheet.

7 Remove the 2 screws.

8 Install the R side P.C.B. and them tighten the 8 screws.

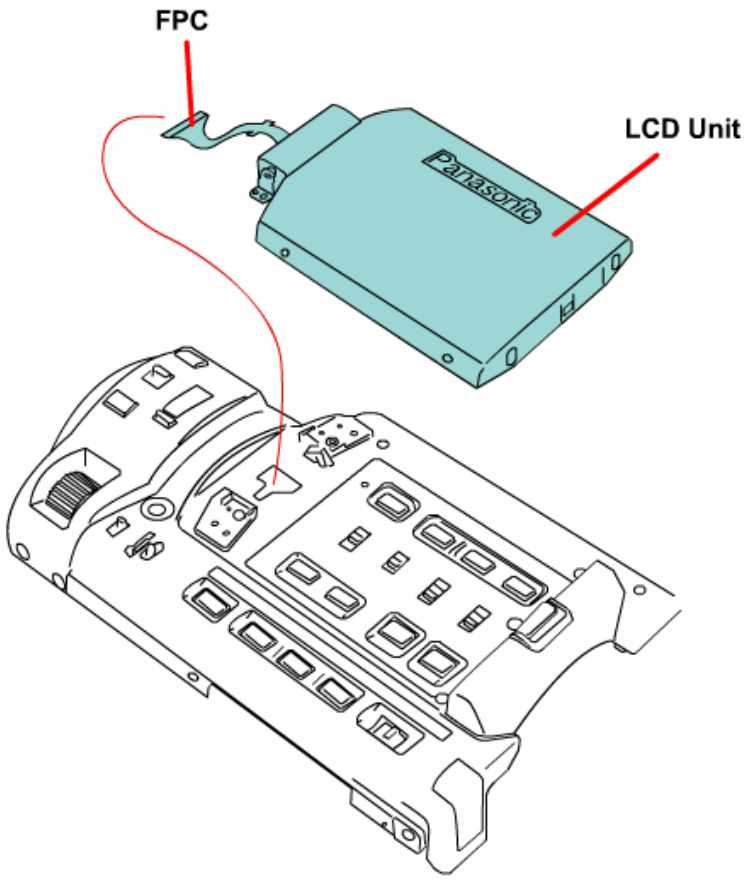
9 Remove the LCD hinge cover.

10 Remove the 2 screws.

11 Remove the LCD unit.

Auto Play ON OFF

8 LCD Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

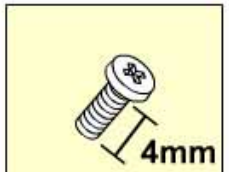
Close

Disassembly | Assembly

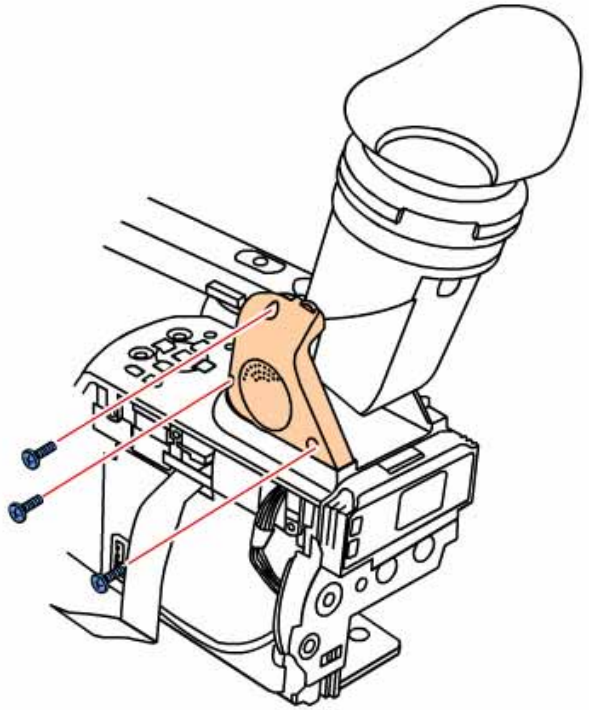
1. Remove the 3 screws.
2. Remove the 1 connector.
3. Remove the VF case R unit.
4. Remove the 3 screws.
5. Remove the VF case L.
6. Remove the 6 screws.
7. Remove the 1 connector.
8. Remove the handle unit.

Auto Play ON OFF

9 Handle Unit



BLACK



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

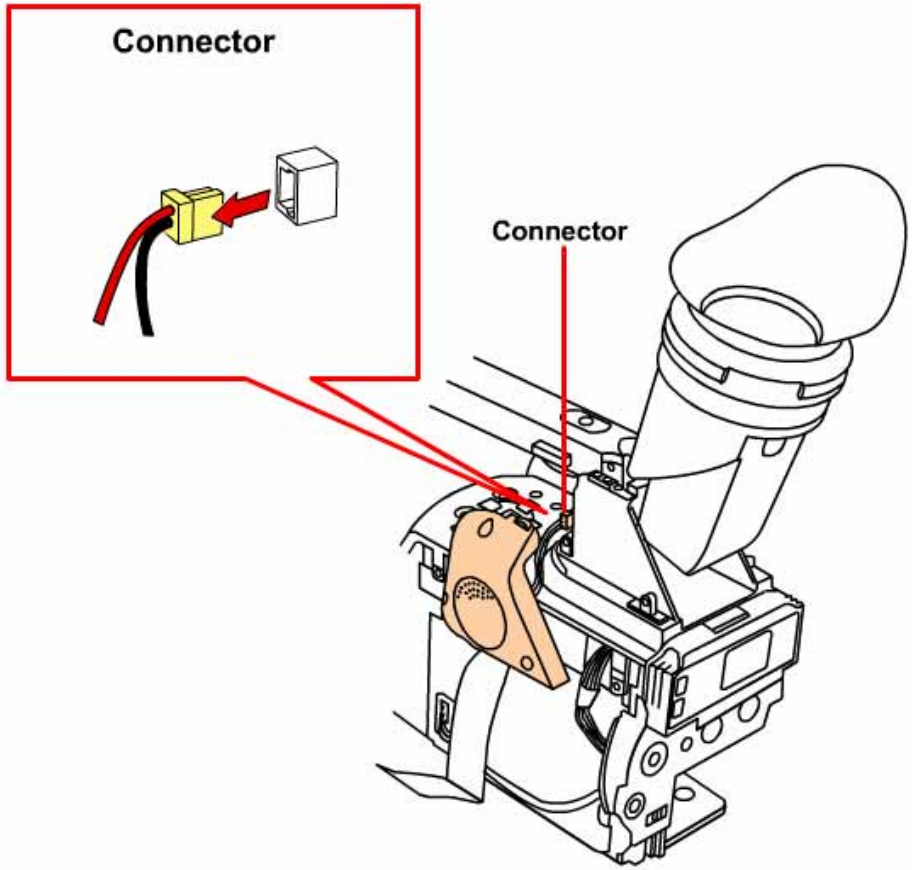
Close

Disassembly | Assembly

1. Remove the 3 screws.
2. Remove the 1 connector.
3. Remove the VF case R unit.
4. Remove the 3 screws.
5. Remove the VF case L.
6. Remove the 6 screws.
7. Remove the 1 connector.
8. Remove the handle unit.

Auto Play ON OFF

9 Handle Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

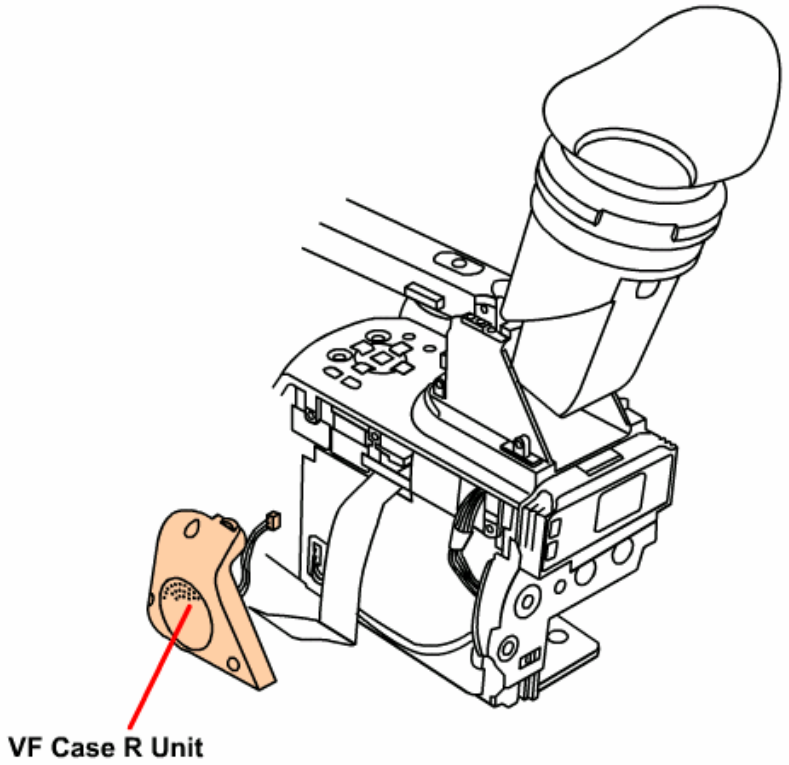
Close

Disassembly | Assembly

1. Remove the 3 screws.
2. Remove the 1 connector.
3. Remove the VF case R unit.
4. Remove the 3 screws.
5. Remove the VF case L.
6. Remove the 6 screws.
7. Remove the 1 connector.
8. Remove the handle unit.

Auto Play ON OFF

9 Handle Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

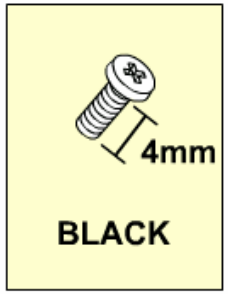
Close

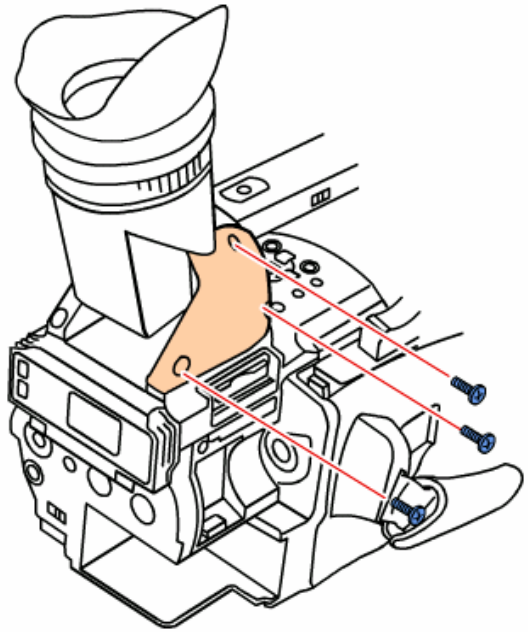
Disassembly | Assembly

1 Remove the 3 screws.
2 Remove the 1 connector.
3 Remove the VF case R unit.
4 Remove the 3 screws.
5 Remove the VF case L.
6 Remove the 6 screws.
7 Remove the 1 connector.
8 Remove the handle unit.

Auto Play ON OFF

9 Handle Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

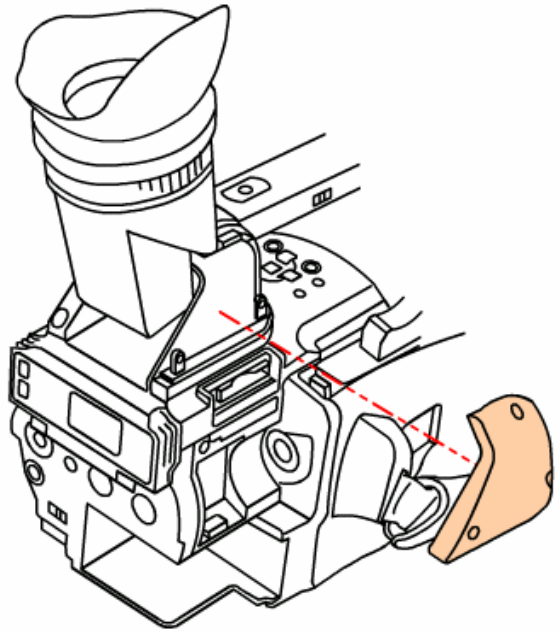
Close

Disassembly | Assembly

1 Remove the 3 screws.
2 Remove the 1 connector.
3 Remove the VF case R unit.
4 Remove the 3 screws.
5 Remove the VF case L.
6 Remove the 6 screws.
7 Remove the 1 connector.
8 Remove the handle unit.

Auto Play ON OFF

9 Handle Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

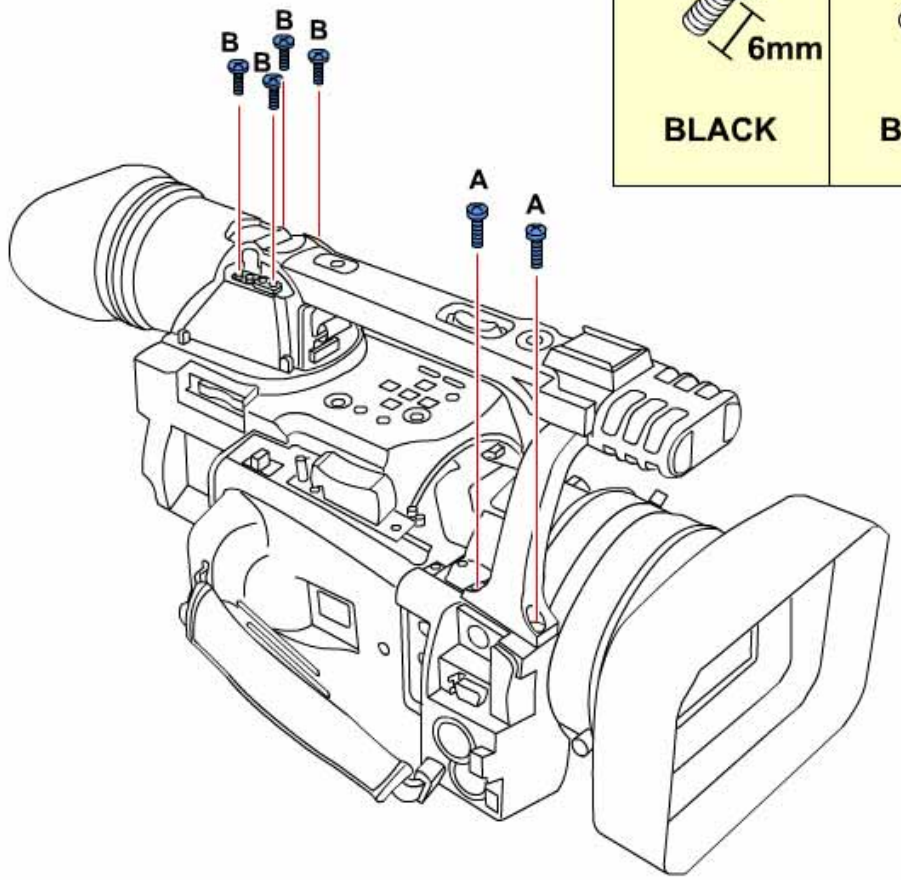
Close

Disassembly | Assembly

1. Remove the 3 screws.
2. Remove the 1 connector.
3. Remove the VF case R unit.
4. Remove the 3 screws.
5. Remove the VF case L.
6. Remove the 6 screws.
7. Remove the 1 connector.
8. Remove the handle unit.

Auto Play ON OFF

9 Handle Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

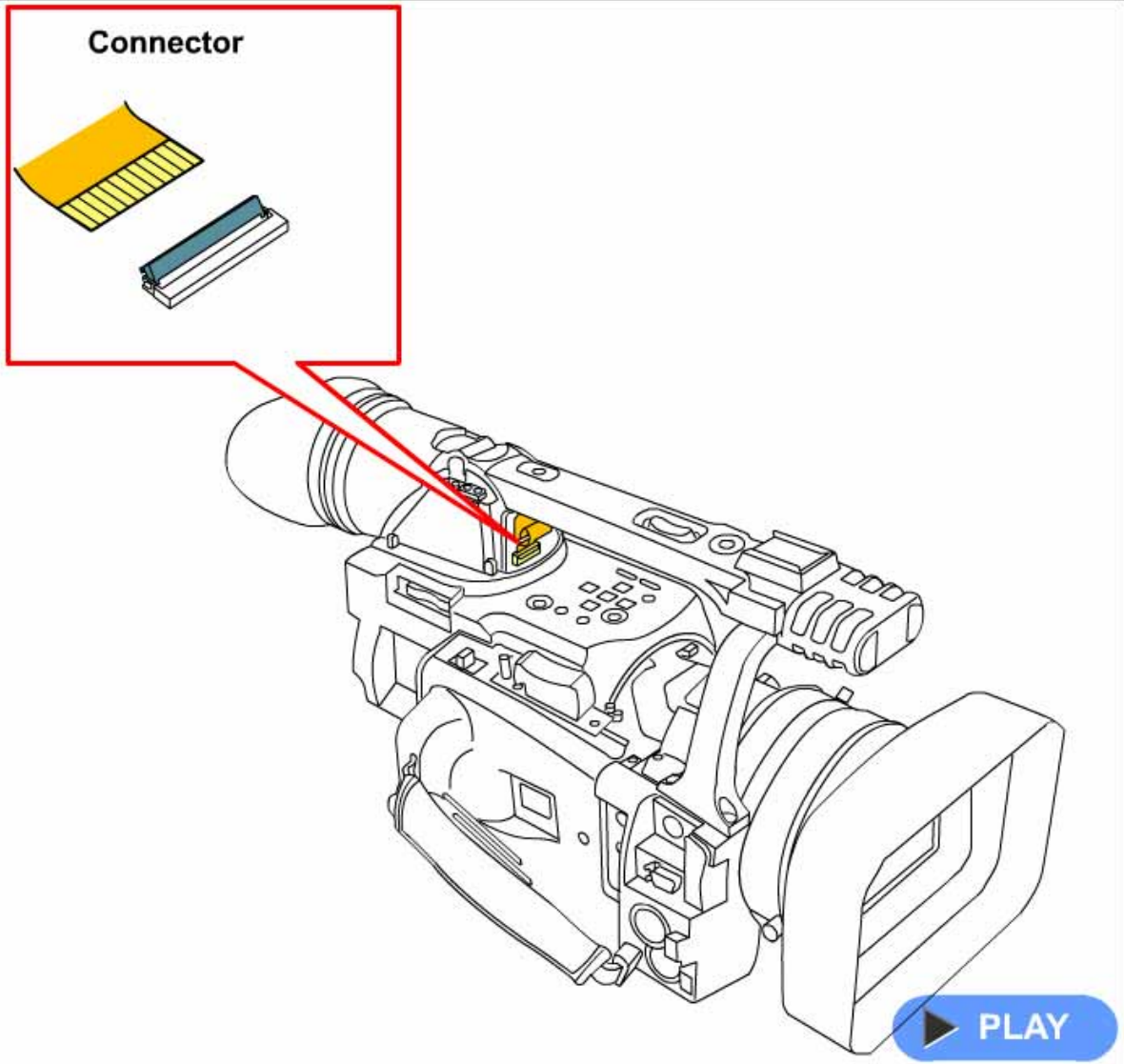
Close

Disassembly | Assembly

1. Remove the 3 screws.
2. Remove the 1 connector.
3. Remove the VF case R unit.
4. Remove the 3 screws.
5. Remove the VF case L.
6. Remove the 6 screws.
7. Remove the 1 connector.
8. Remove the handle unit.

Auto Play ON OFF

9 Handle Unit



Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

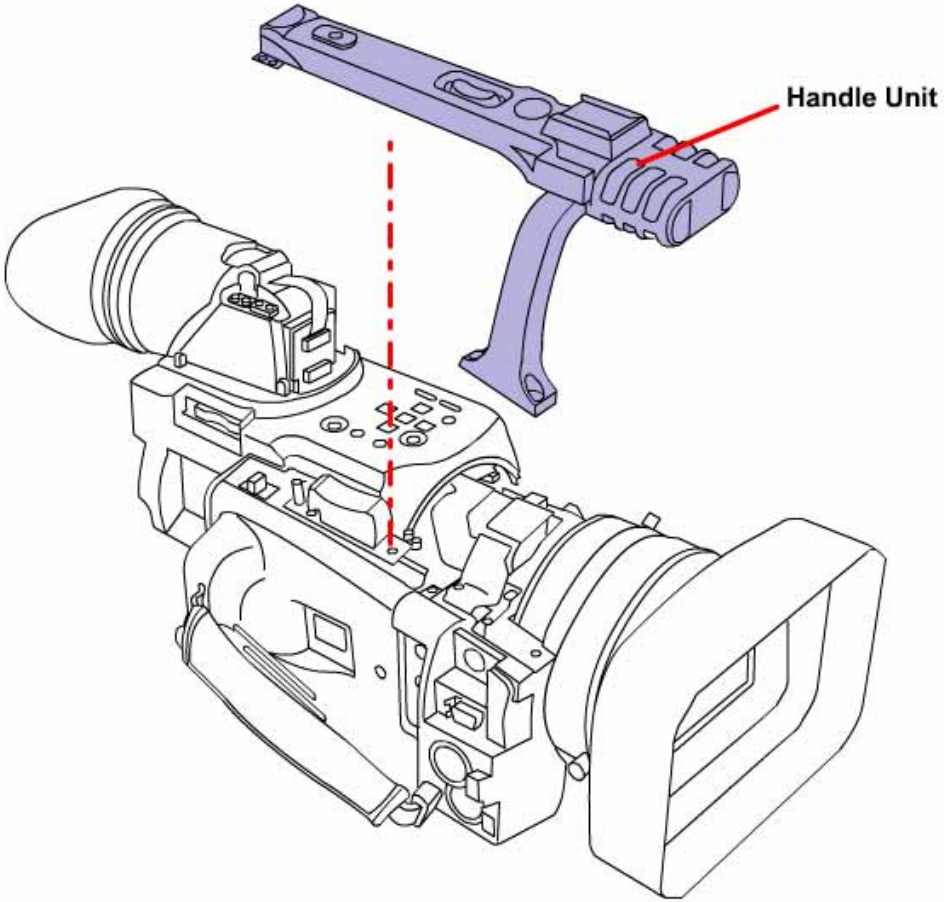
Close

Disassembly | Assembly

1. Remove the 3 screws.
2. Remove the 1 connector.
3. Remove the VF case R unit.
4. Remove the 3 screws.
5. Remove the VF case L.
6. Remove the 6 screws.
7. Remove the 1 connector.
8. Remove the handle unit.

Auto Play ON OFF

9 Handle Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

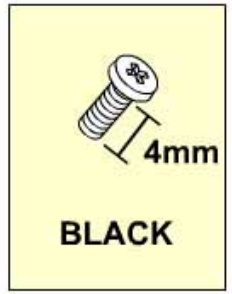
Close

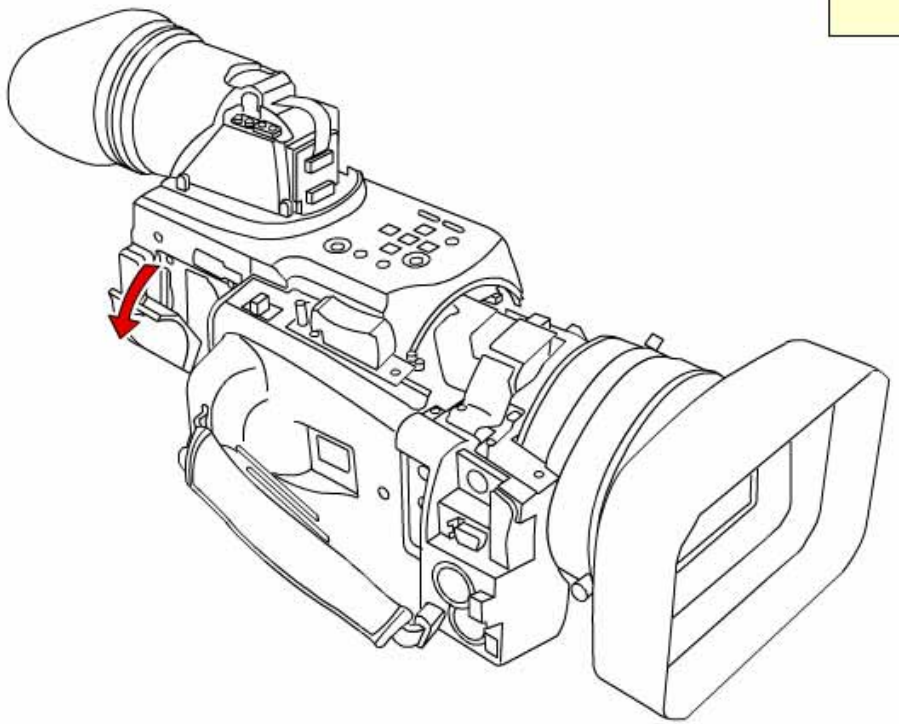
Disassembly | Assembly

1. Remove the 4 screws and remove side cover LU.
2. Remove the 1 screw.
3. Remove the 1 connector.
4. Remove the 3 screws.
5. Remove the top pannel & EVF unit.

Auto Play ON OFF

10 Top Pannel & EVF Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

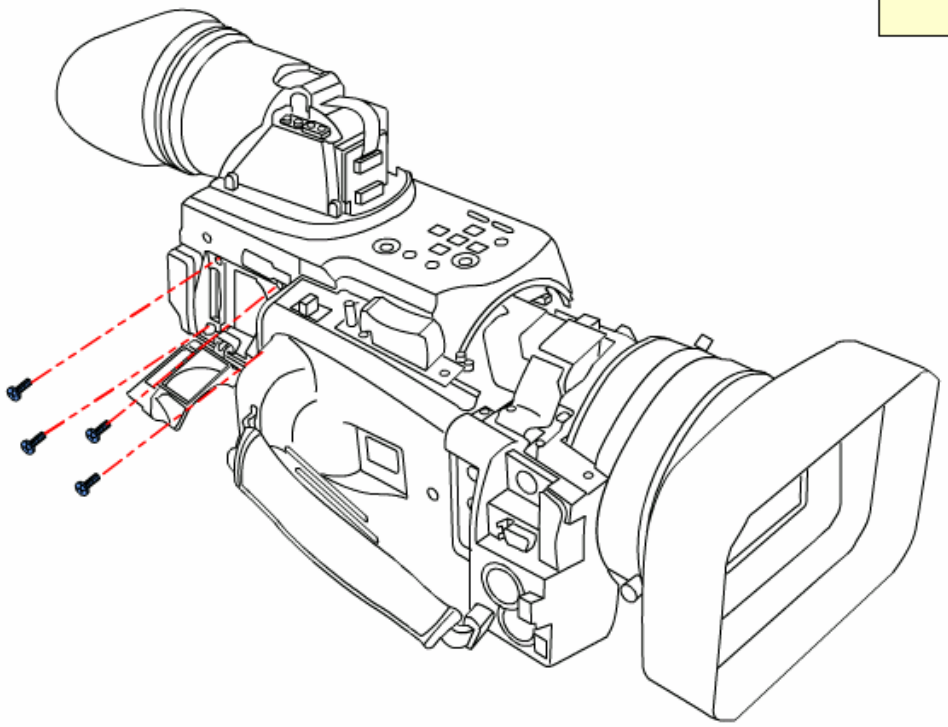
Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

10 Top Pannel & EVF Unit

1. Remove the 4 screws and remove side cover LU.
2. Remove the 1 screw.
3. Remove the 1 connector.
4. Remove the 3 screws.
5. Remove the top pannel & EVF unit.





BLACK

PLAY

Auto Play ON OFF

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

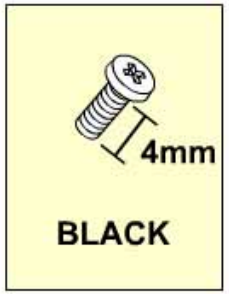
Close

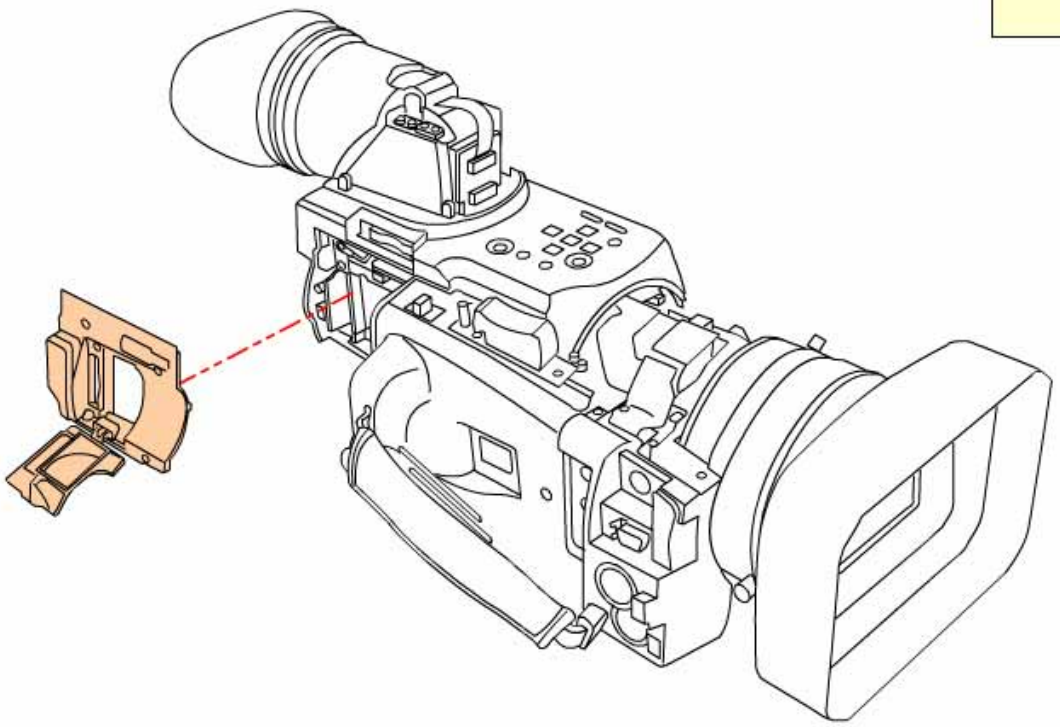
Disassembly | Assembly

1. Remove the 4 screws and remove side cover LU.
2. Remove the 1 screw.
3. Remove the 1 connector.
4. Remove the 3 screws.
5. Remove the top pannel & EVF unit.

Auto Play ON OFF

10 Top Pannel & EVF Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

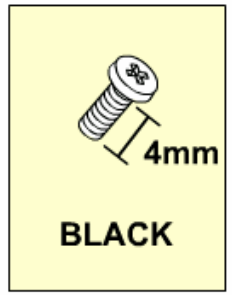
Close

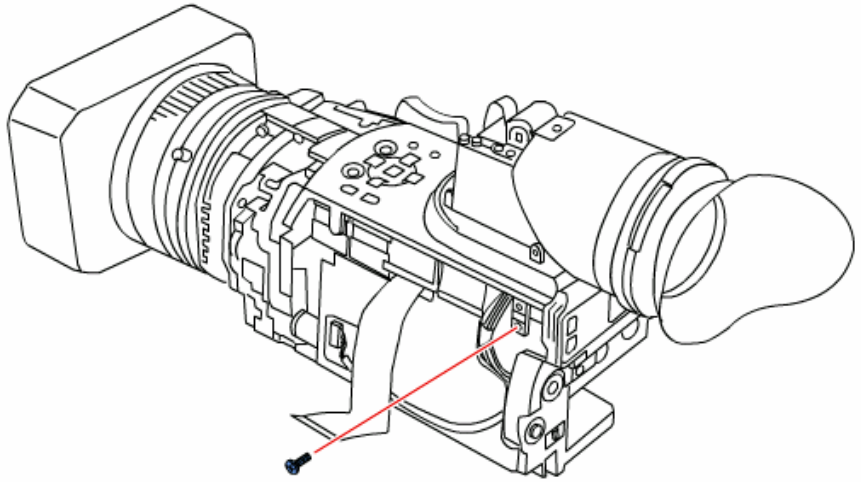
Disassembly | Assembly

1. Remove the 4 screws and remove side cover LU.
2. Remove the 1 screw.
3. Remove the 1 connector.
4. Remove the 3 screws.
5. Remove the top pannel & EVF unit.

Auto Play ON OFF

10 Top Pannel & EVF Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

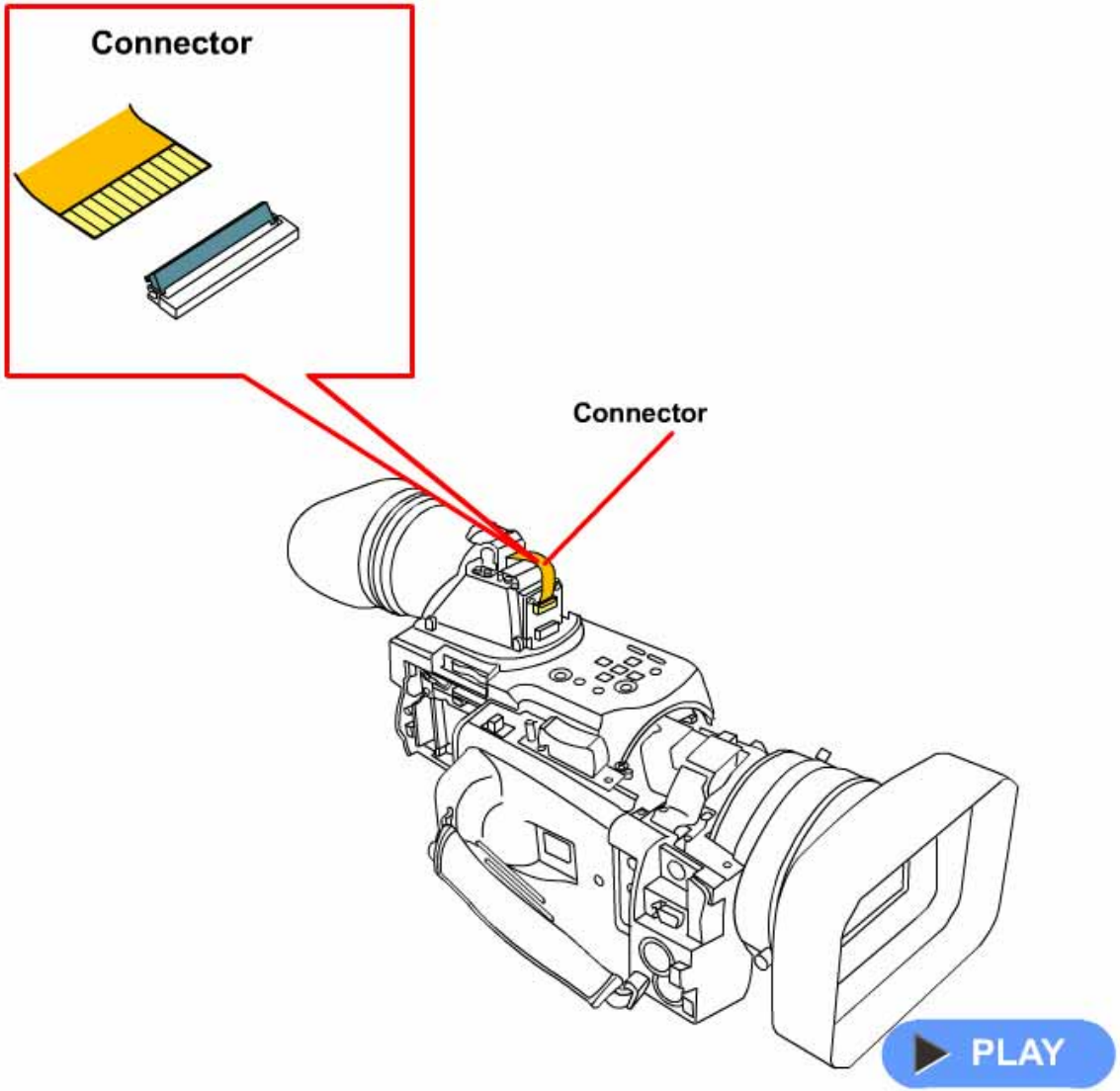
Close

Disassembly | Assembly

1. Remove the 4 screws and remove side cover LU.
2. Remove the 1 screw.
3. Remove the 1 connector.
4. Remove the 3 screws.
5. Remove the top pannel & EVF unit.

Auto Play ON OFF

10 Top Pannel & EVF Unit



Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

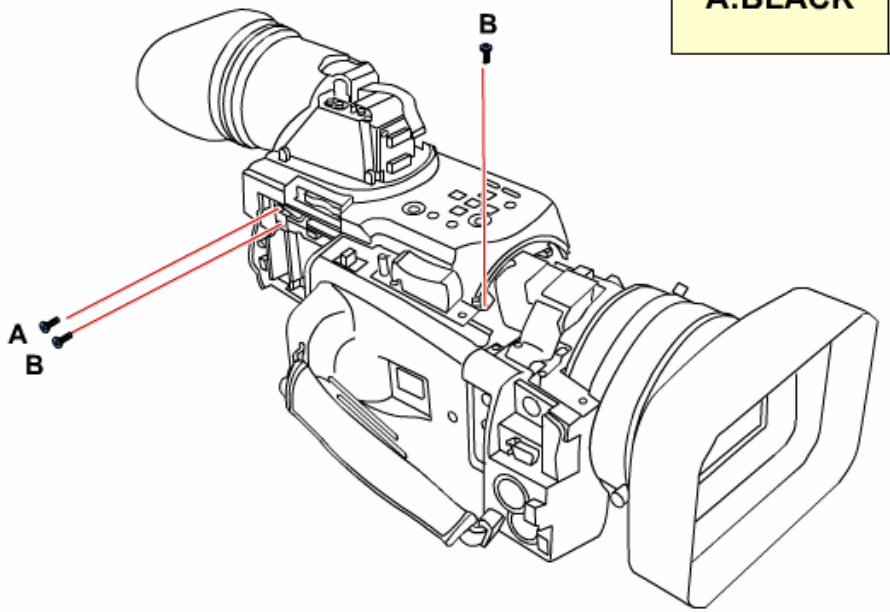
Close

Disassembly | Assembly

1. Remove the 4 screws and remove side cover LU.
2. Remove the 1 screw.
3. Remove the 1 connector.
4. Remove the 3 screws.
5. Remove the top pannel & EVF unit.

Auto Play ON OFF

10 Top Pannel & EVF Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

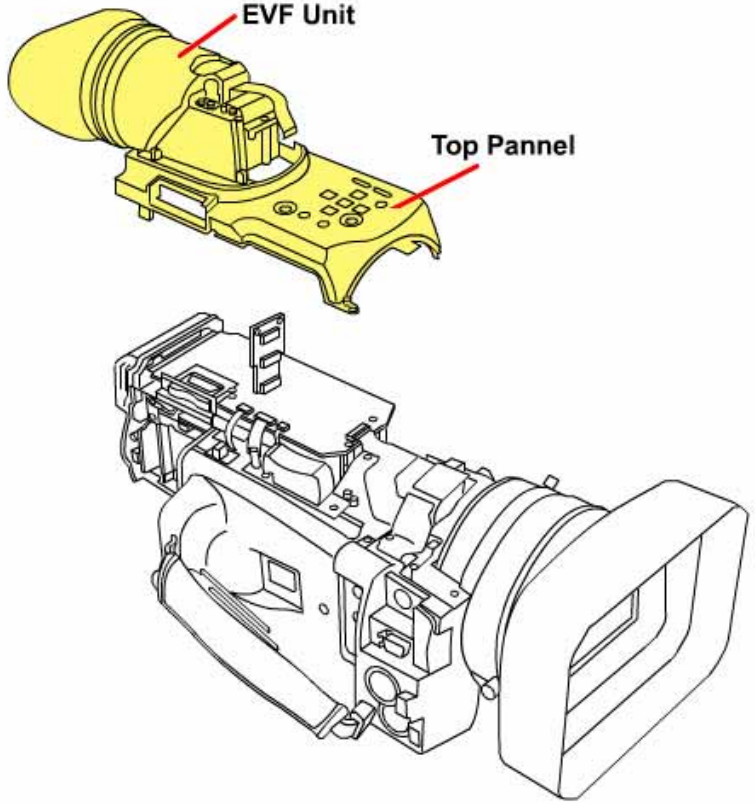
Close

Disassembly | Assembly

1. Remove the 4 screws and remove side cover LU.
2. Remove the 1 screw.
3. Remove the 1 connector.
4. Remove the 3 screws.
5. Remove the top pannel & EVF unit.

Auto Play ON OFF

10 Top Pannel & EVF Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

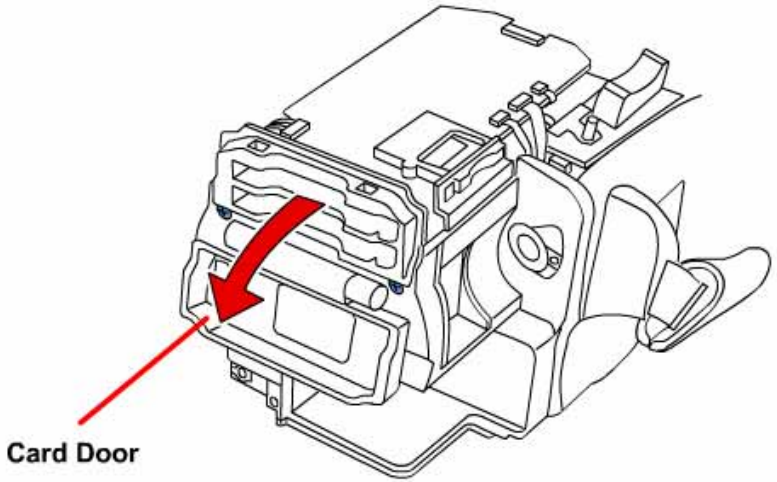
Close

Disassembly | Assembly

1 Open the card door.
2 Remove the 2 screws.
3 Close the card door.
4 Remove the 2 screws.
5 Remove the 3 connectors.
6 Remove the back pannel.

Auto Play ON OFF

11 Back Panel



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

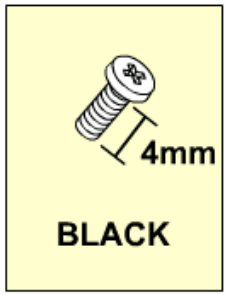
Close

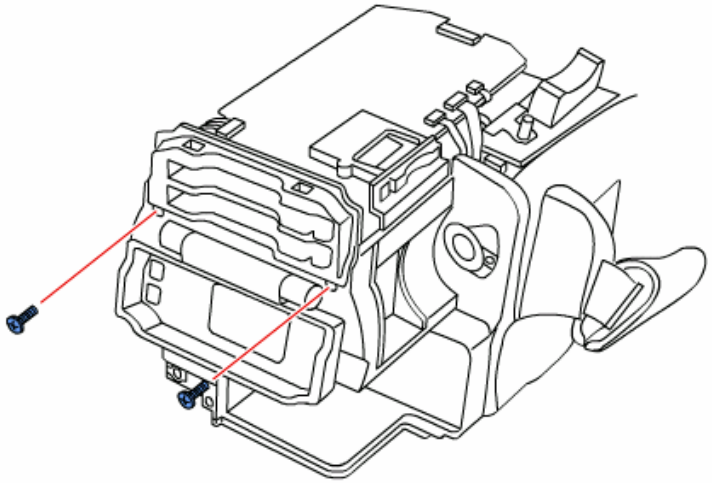
Disassembly | Assembly

1. Open the card door.
2. Remove the 2 screws.
3. Close the card door.
4. Remove the 2 screws.
5. Remove the 3 connectors.
6. Remove the back pannel.

Auto Play ON OFF

11 Back Panel





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

1 Open the card door.

2 Remove the 2 screws.

3 Close the card door.

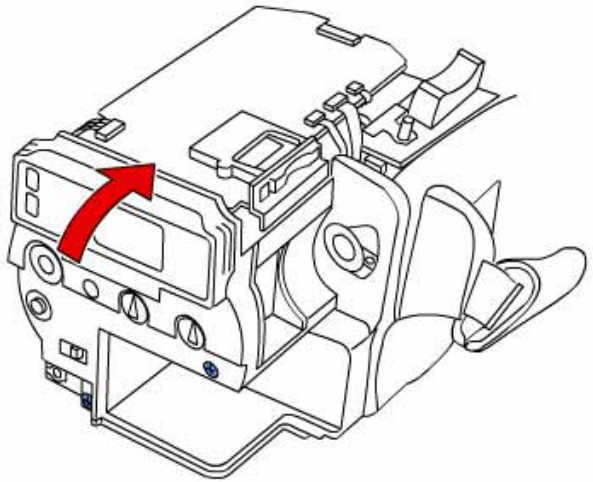
4 Remove the 2 screws.

5 Remove the 3 connectors.

6 Remove the back pannel.

Auto Play ON OFF

11 Back Panel



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

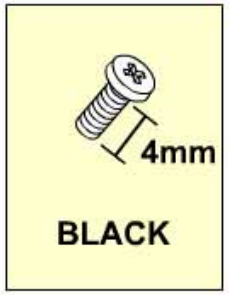
Close

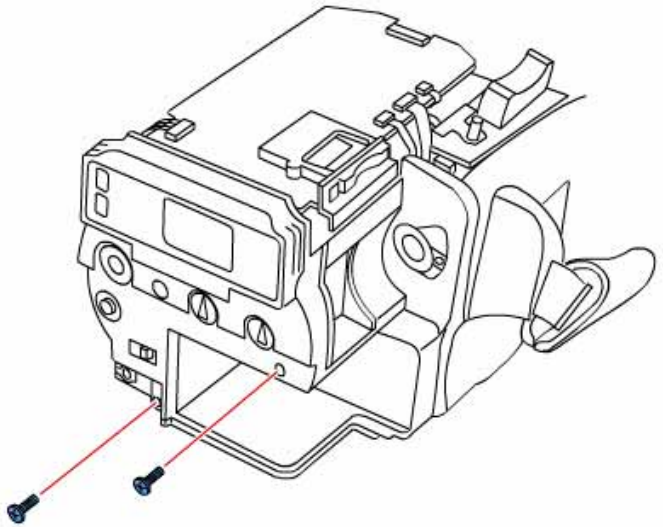
Disassembly | Assembly

1. Open the card door.
2. Remove the 2 screws.
3. Close the card door.
4. Remove the 2 screws.
5. Remove the 3 connectors.
6. Remove the back pannel.

Auto Play ON OFF

11 Back Panel





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

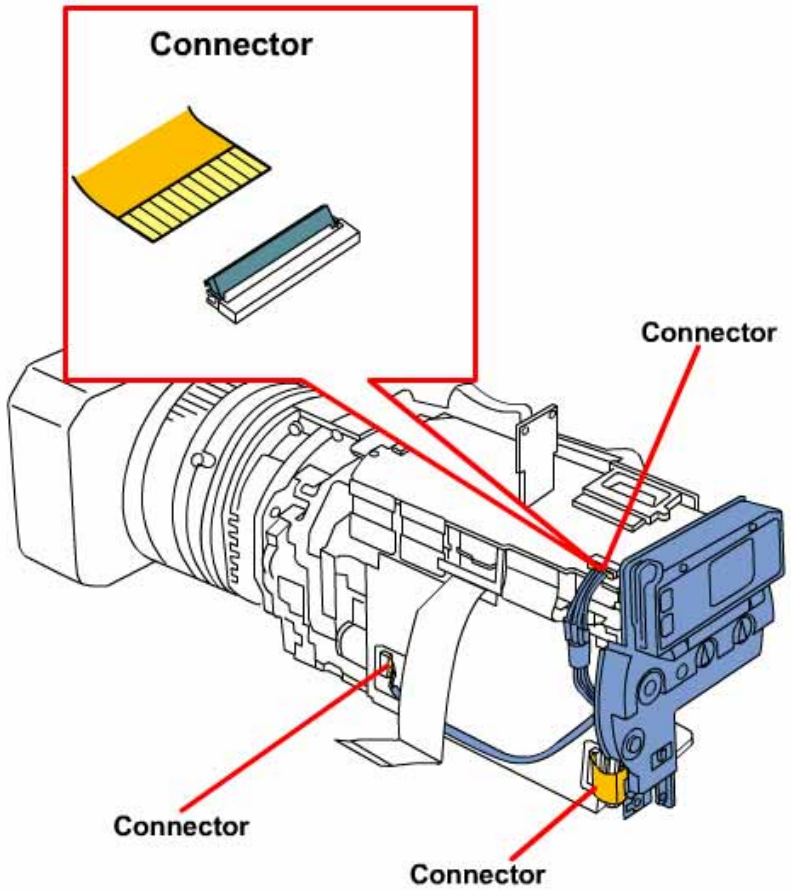
Close

Disassembly | Assembly

1. Open the card door.
2. Remove the 2 screws.
3. Close the card door.
4. Remove the 2 screws.
5. Remove the 3 connectors.
6. Remove the back pannel.

Auto Play ON OFF

11 Back Panel



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

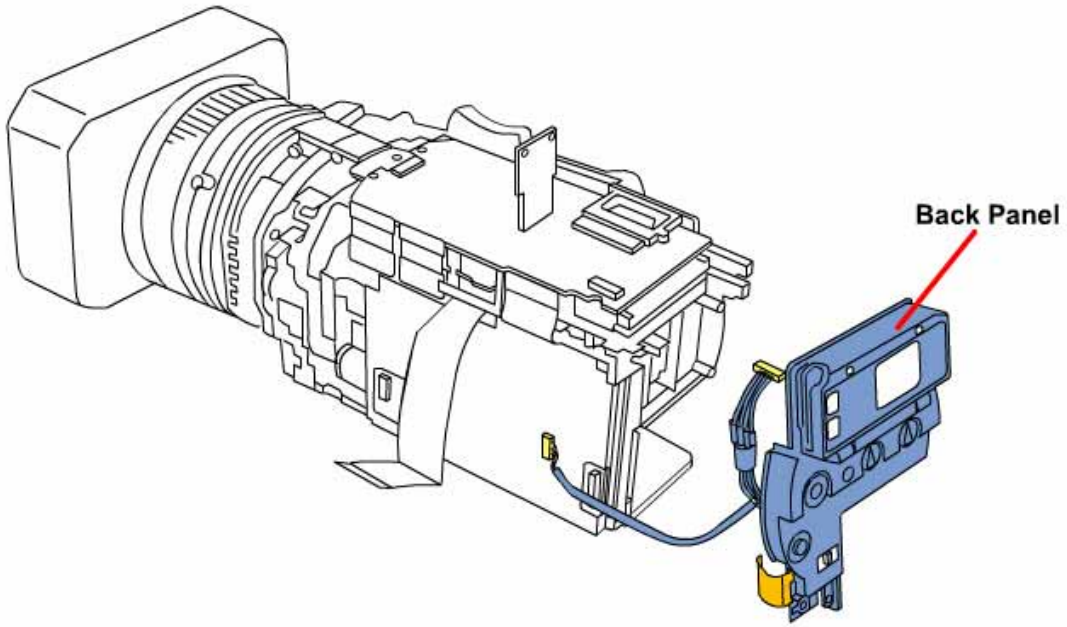
Close

Disassembly | Assembly

1. Open the card door.
2. Remove the 2 screws.
3. Close the card door.
4. Remove the 2 screws.
5. Remove the 3 connectors.
6. Remove the back pannel.

Auto Play ON OFF

11 Back Panel



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

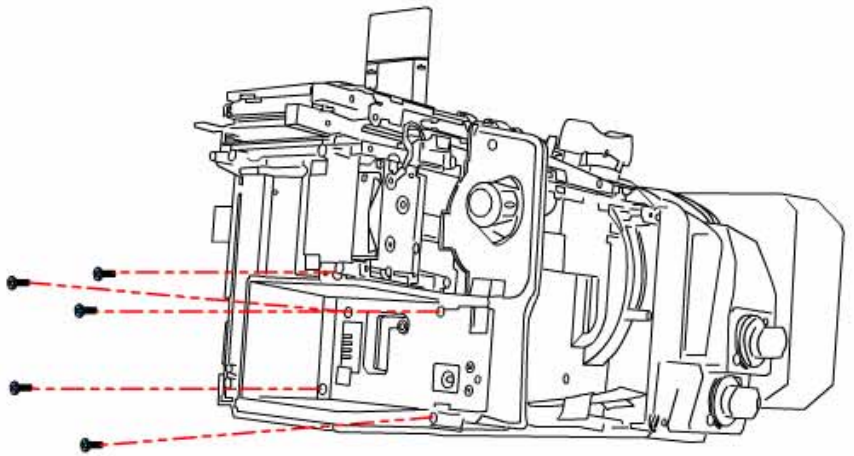
Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

12 Battery Case Unit

1. Remove the 5 screws.
2. Remove the 2 connectors.
3. Remove the battery P.C.B.



PLAY

Auto Play ON OFF

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

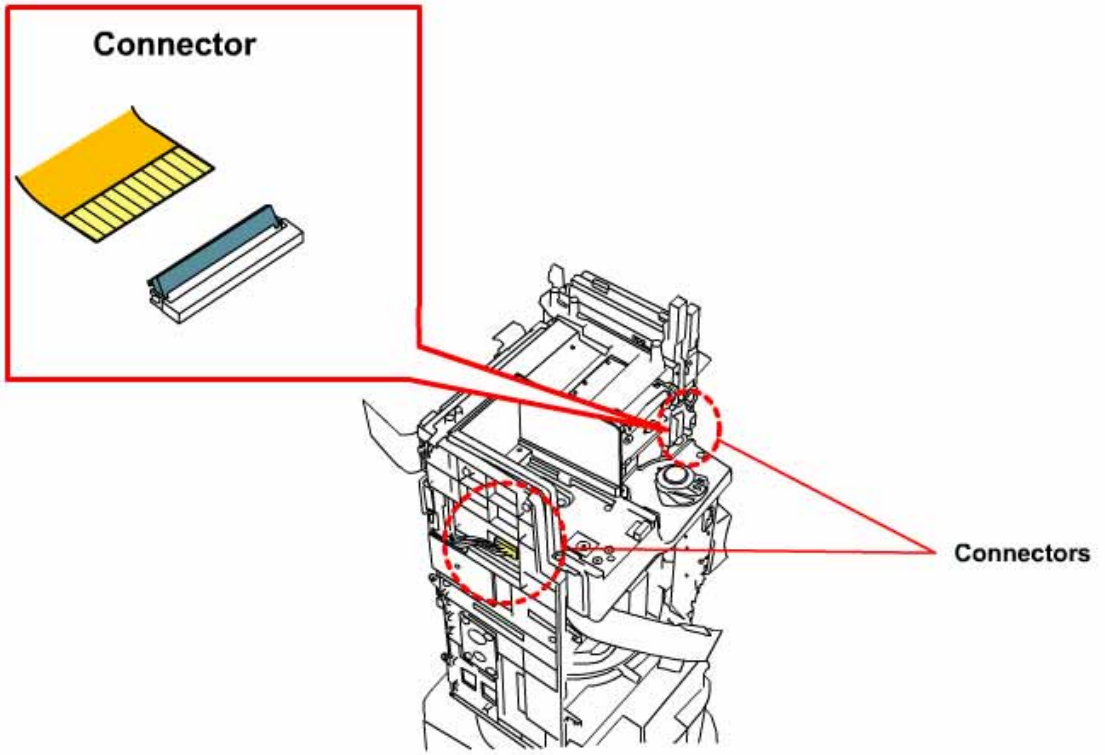
1 Remove the 5 screws.

2 Remove the 2 connectors.

3 Remove the battery P.C.B.

Auto Play ON OFF

12 Battery Case Unit



PLAY

Tool

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

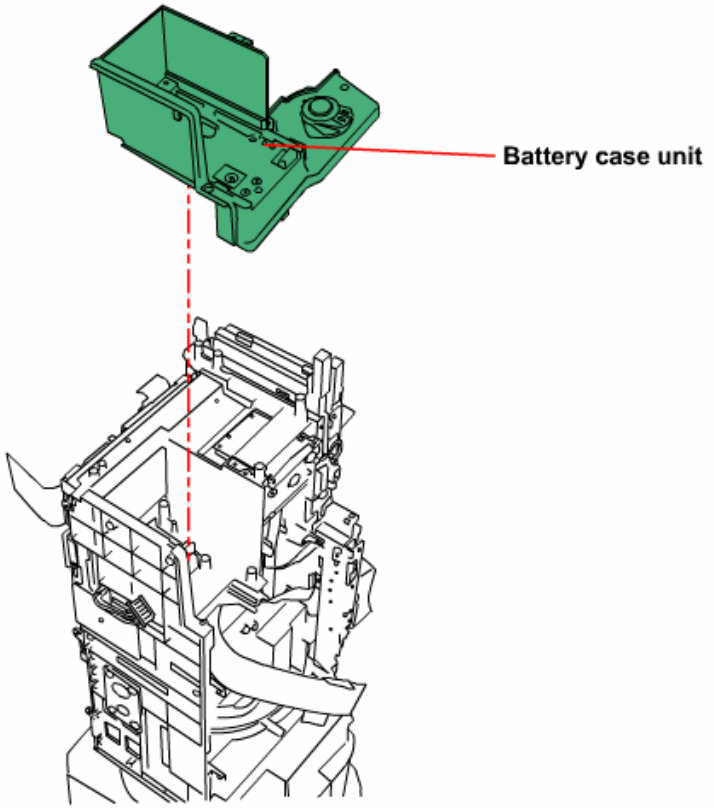
Close

Disassembly | Assembly

1. Remove the 5 screws.
2. Remove the 2 connectors.
3. Remove the battery P.C.B.

Auto Play ON OFF

12 Battery Case Unit



PLAY

Tool

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

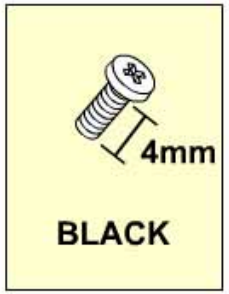
Close

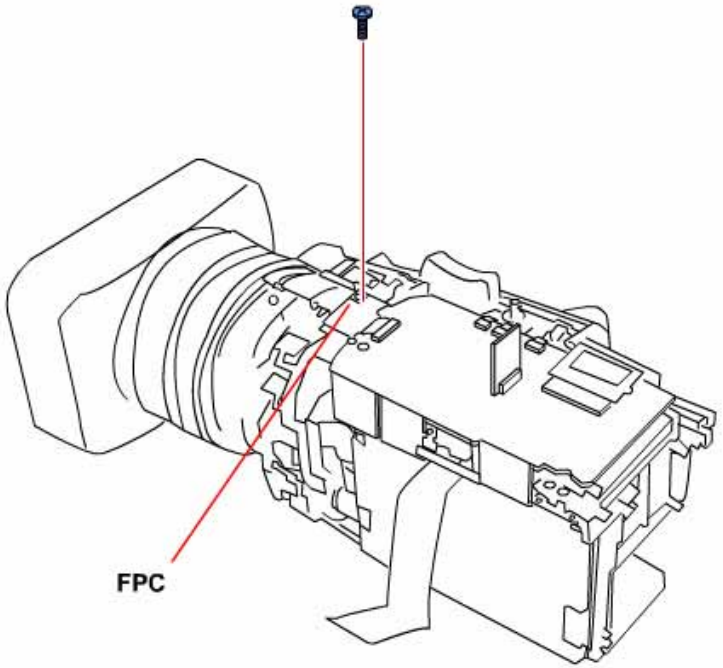
Disassembly | Assembly

1. 1 Remove the 1 screw.
2. Remove the 4 connectors.
3. Pull out the CAM-TOP FPC.
4. Remove the 3 screws.
5. Remove the TOP P.C.B.

Auto Play ON OFF

13 TOP P.C.B.





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

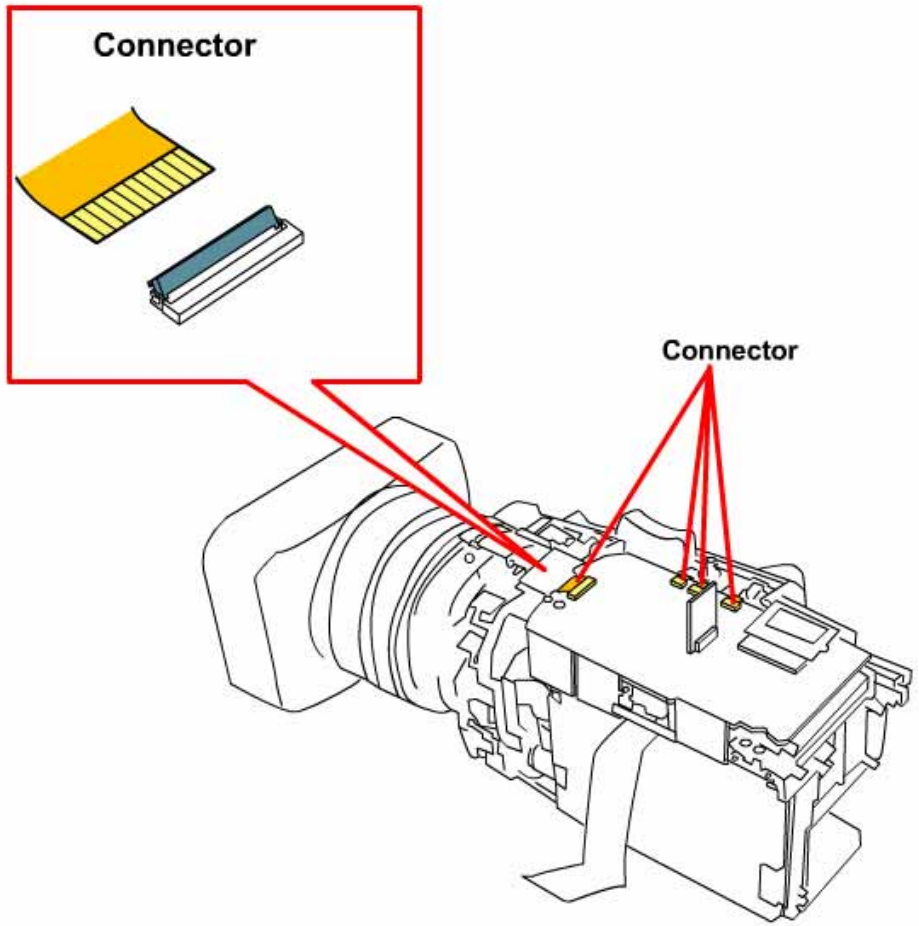
Close

Disassembly | Assembly

1. 1 Remove the 1 screw.
2. Remove the 4 connectors.
3. Pull out the CAM-TOP FPC.
4. Remove the 3 screws.
5. Remove the TOP P.C.B.

Auto Play ON OFF

13 TOP P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

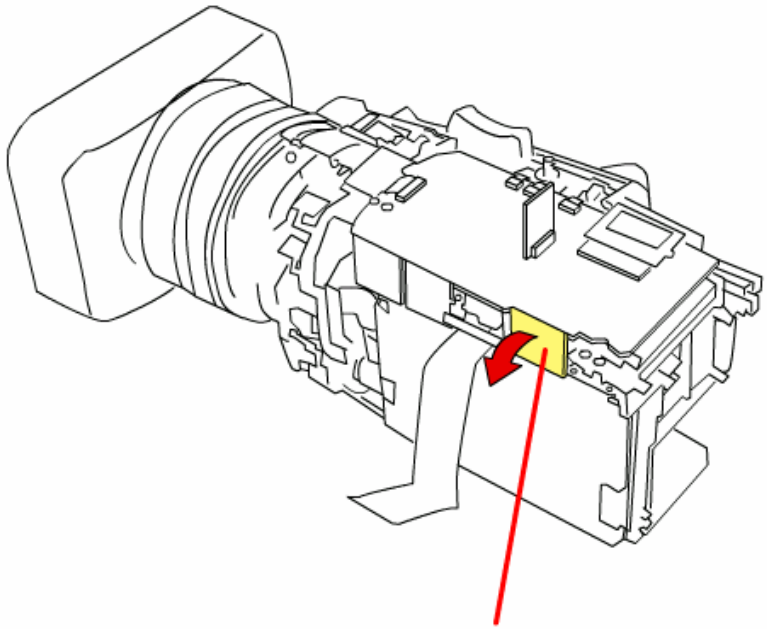
Close

Disassembly | Assembly

1. 1 Remove the 1 screw.
2. Remove the 4 connectors.
3. Pull out the CAM-TOP FPC.
4. Remove the 3 screws.
5. Remove the TOP P.C.B.

Auto Play ON OFF

13 TOP P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

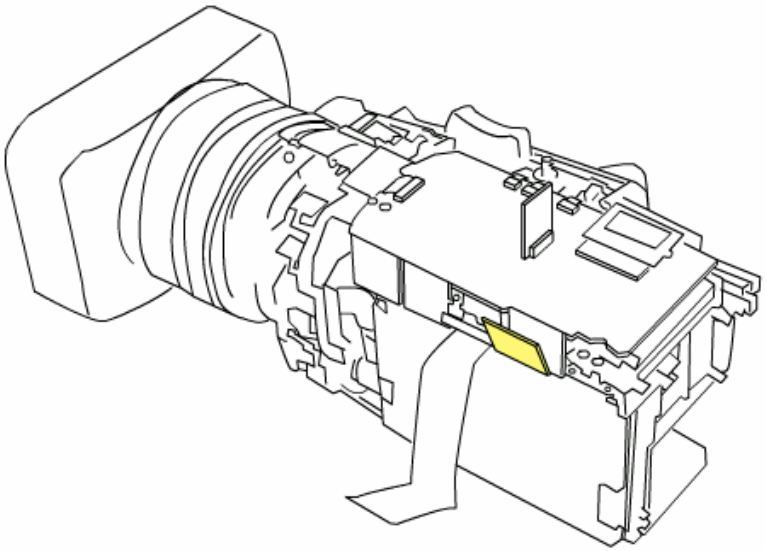
Close

Disassembly | Assembly

1. 1 Remove the 1 screw.
2. Remove the 4 connectors.
3. Pull out the CAM-TOP FPC.
4. Remove the 3 screws.
5. Remove the TOP P.C.B.

Auto Play ON OFF

13 TOP P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

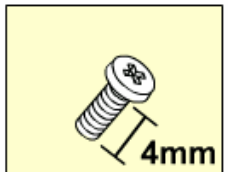
Close

Disassembly | Assembly

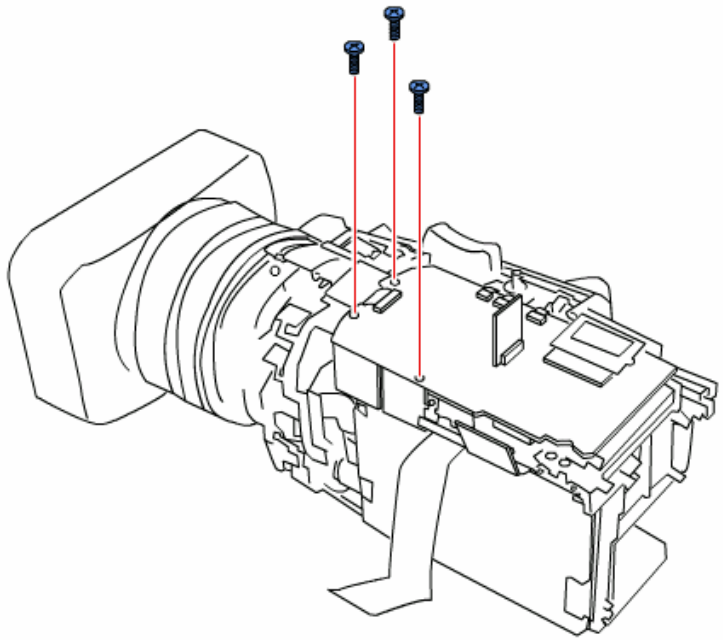
1. 1 Remove the 1 screw.
2. Remove the 4 connectors.
3. Pull out the CAM-TOP FPC.
4. Remove the 3 screws.
5. Remove the TOP P.C.B.

Auto Play ON OFF

13 TOP P.C.B.



SILVER



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

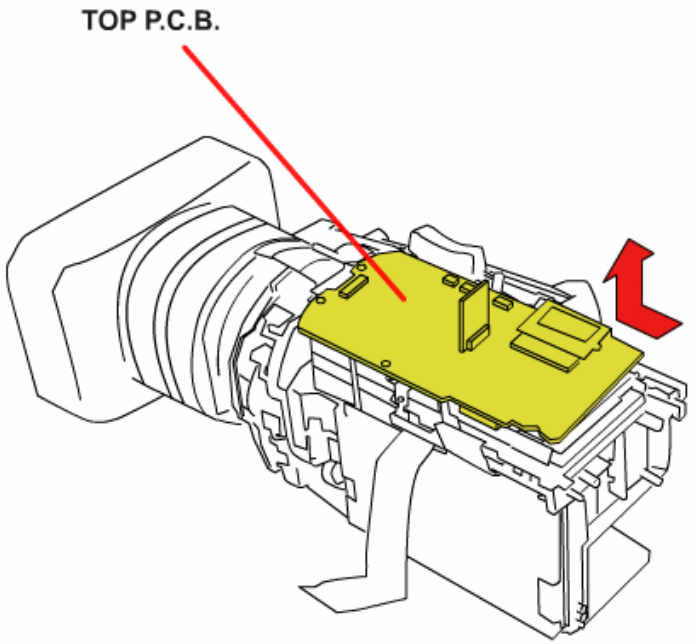
Close

Disassembly | Assembly

1 1 Remove the 1 screw.
2 Remove the 4 connectors.
3 Pull out the CAM-TOP FPC.
4 Remove the 3 screws.
5 Remove the TOP P.C.B.

Auto Play ON OFF

13 TOP P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

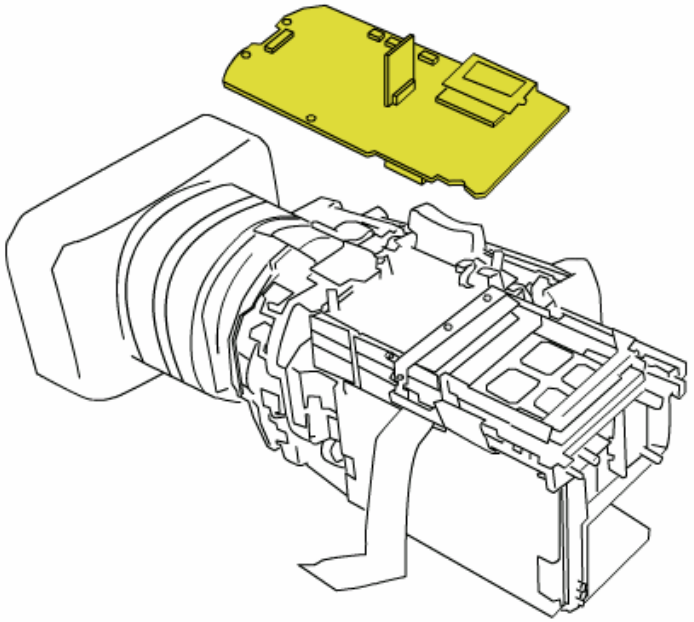
Close

Disassembly | Assembly

1. 1 Remove the 1 screw.
2. Remove the 4 connectors.
3. Pull out the CAM-TOP FPC.
4. Remove the 3 screws.
5. Remove the TOP P.C.B.

Auto Play ON OFF

13 TOP P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

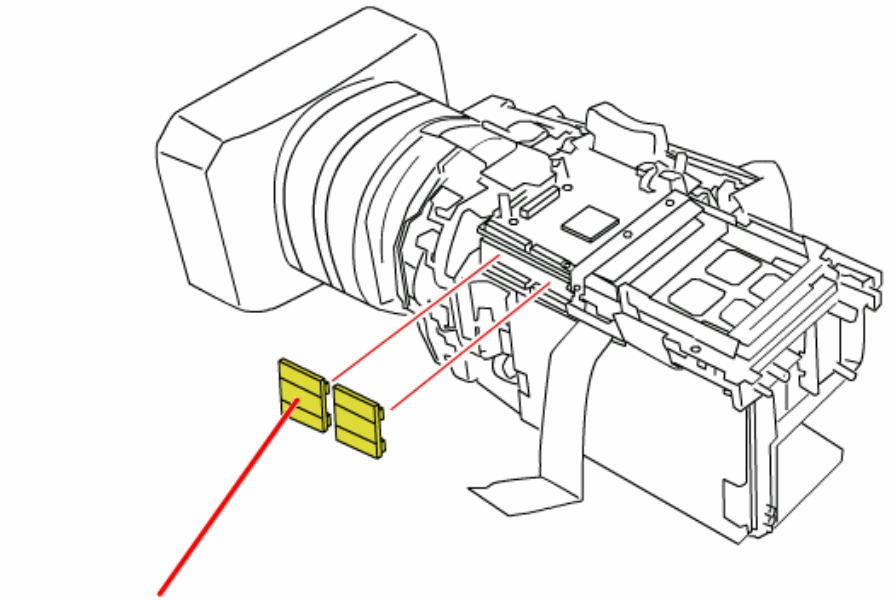
Close

Disassembly | Assembly

1. Pull out the 2 codec-P2 FPCs
2. Remove the 1 connector.
3. Remove the 4 screws.
4. Remove the P2 Card P.C.B.

Auto Play ON OFF

14 P2 Card P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

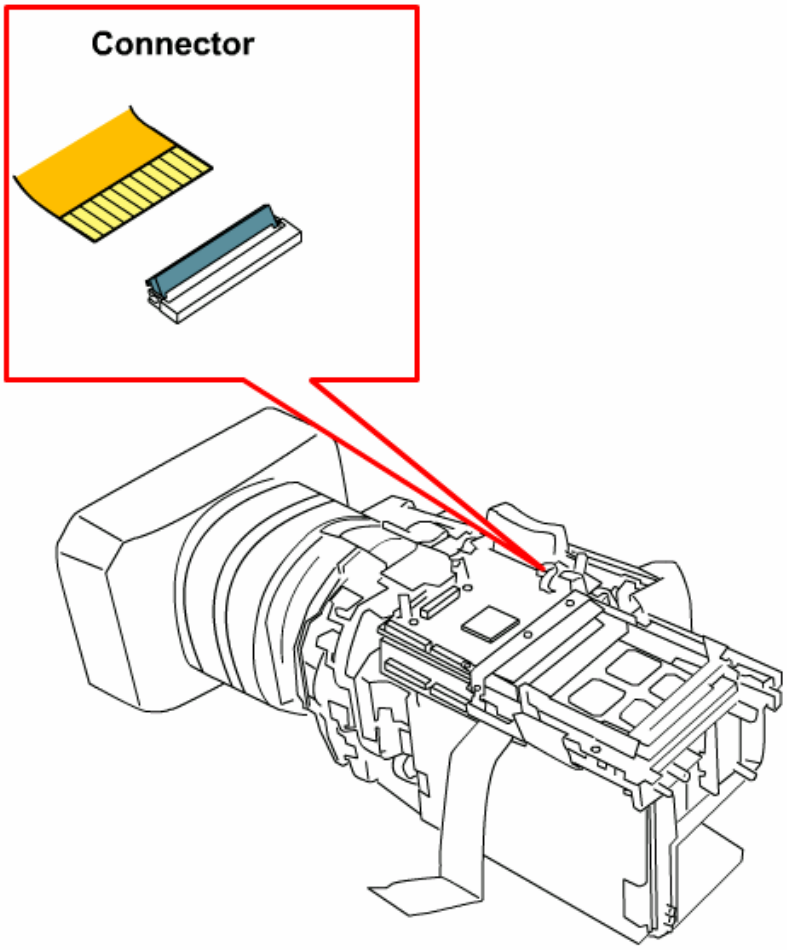
Close

Disassembly | Assembly

1. Pull out the 2 codec-P2 FPCs
2. Remove the 1 connector.
3. Remove the 4 screws.
4. Remove the P2 Card P.C.B.

Auto Play ON OFF

14 P2 Card P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

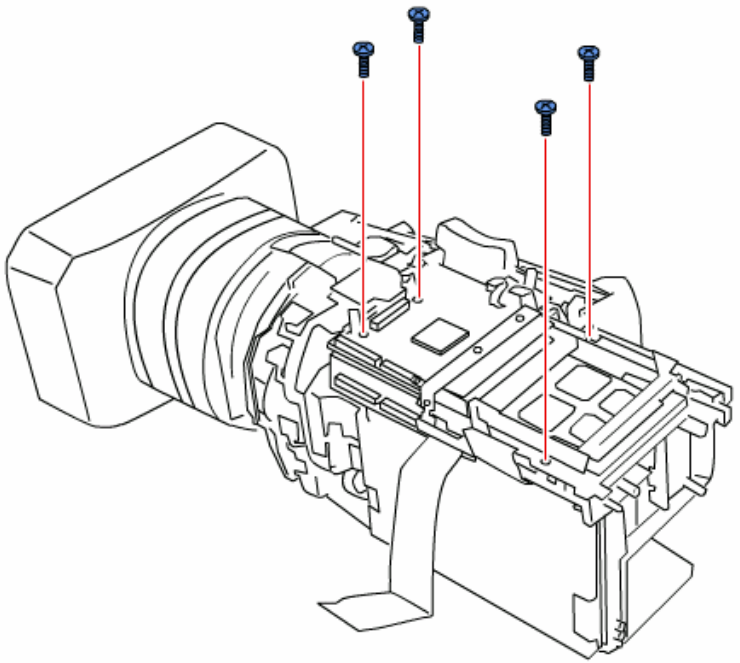
Close

Disassembly | Assembly

1. Pull out the 2 codec-P2 FPCs
2. Remove the 1 connector.
3. Remove the 4 screws.
4. Remove the P2 Card P.C.B.

Auto Play ON OFF

14 P2 Card P.C.B.





SILVER

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

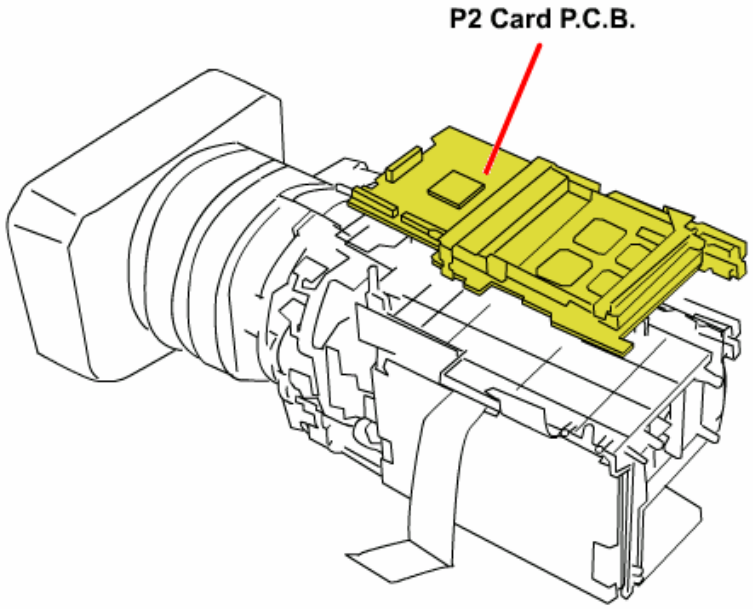
Close

Disassembly | Assembly

1. Pull out the 2 codec-P2 FPCs
2. Remove the 1 connector.
3. Remove the 4 screws.
4. Remove the P2 Card P.C.B.

Auto Play ON OFF

14 P2 Card P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

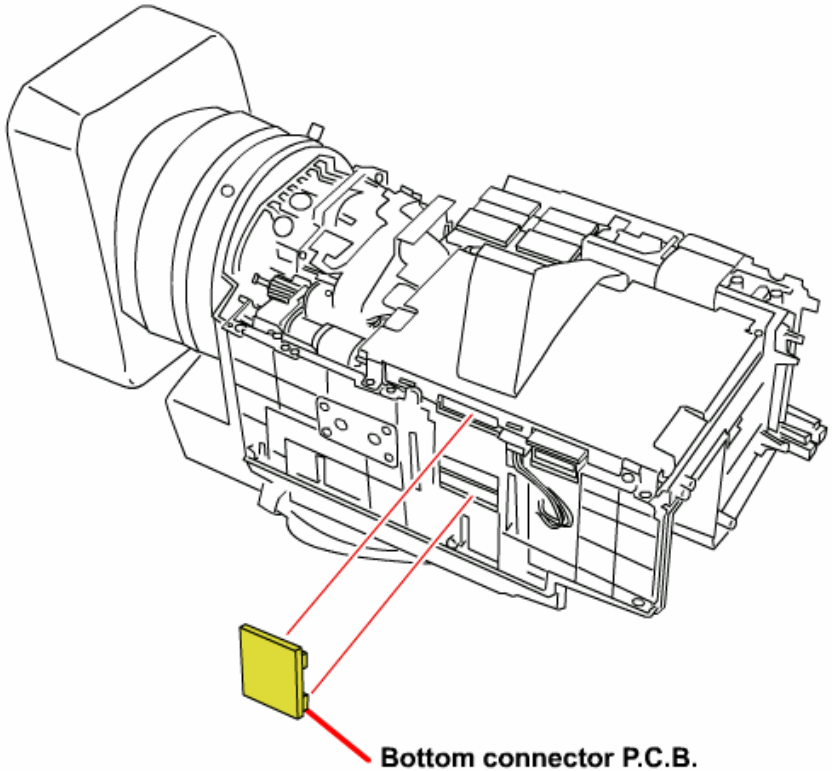
Close

Disassembly | Assembly

1. Pull out the bottom connector P.C.B.
2. Pull out the 2 codec-P2 FPCs.
3. Remove the 4 screws.
4. Remove the codec P.C.B.

Auto Play ON OFF

15 CODEC P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

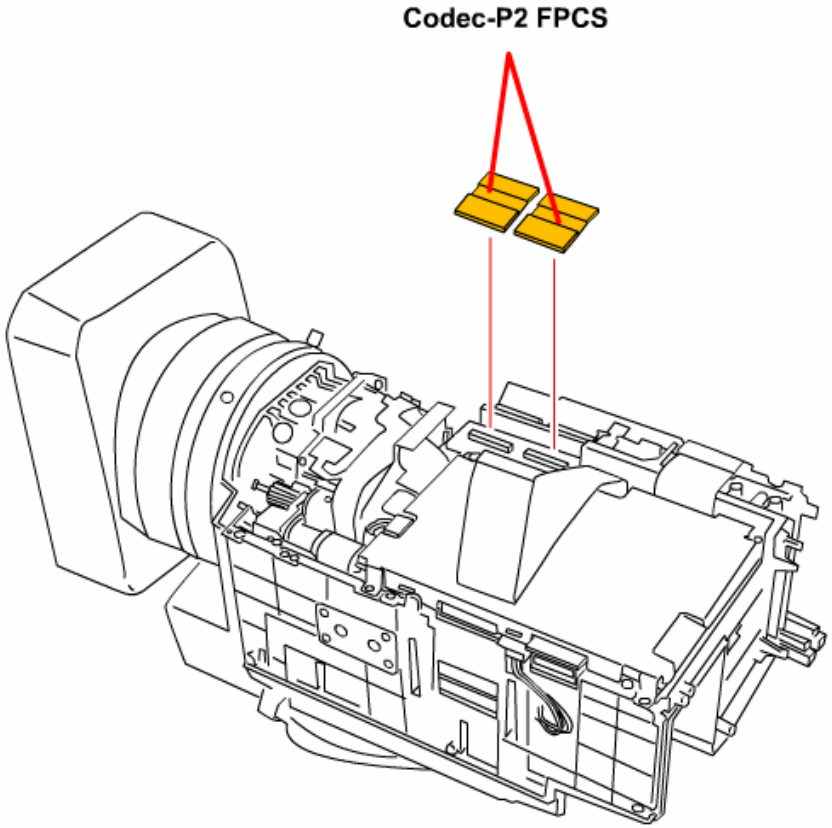
Close

Disassembly | Assembly

1. Pull out the bottom connector P.C.B.
2. Pull out the 2 codec-P2 FPCs.
3. Remove the 4 screws.
4. Remove the codec P.C.B.

Auto Play ON OFF

15 CODEC P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

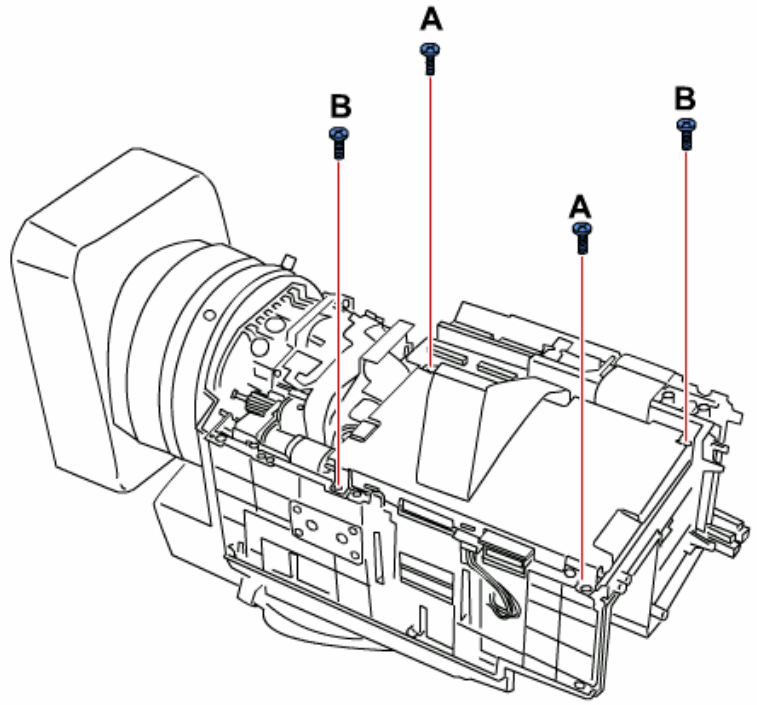
Close

Disassembly | Assembly

1. Pull out the bottom connector P.C.B.
2. Pull out the 2 codec-P2 FPCs.
3. Remove the 4 screws.
4. Remove the codec P.C.B.

Auto Play ON OFF

15 CODEC P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

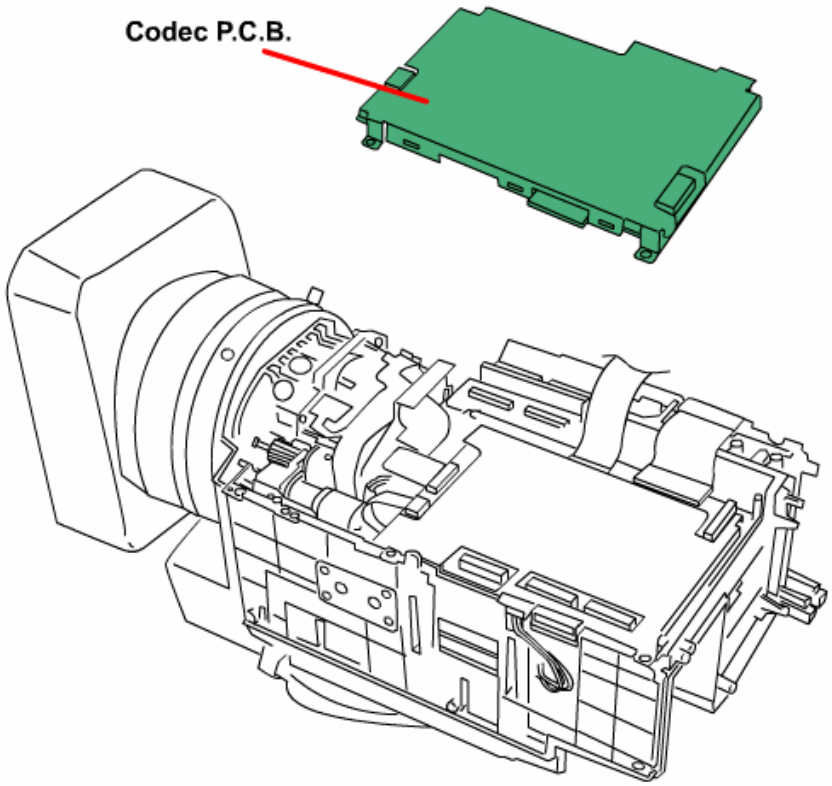
Close

Disassembly | Assembly

1. Pull out the bottom connector P.C.B.
2. Pull out the 2 codec-P2 FPCs.
3. Remove the 4 screws.
4. Remove the codec P.C.B.

Auto Play ON OFF

15 CODEC P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

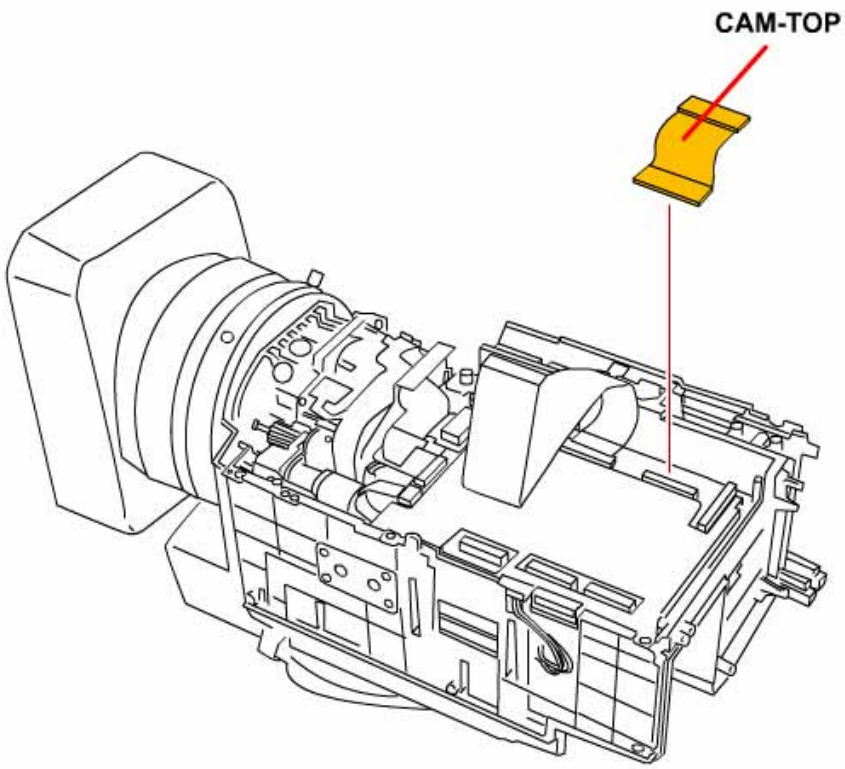
Close

Disassembly | Assembly

1. Remove the CAM-TOP FPC
2. Remove the 3 connectors.
3. Remove the 4 screws.
4. Remove the camera P.C.B.

Auto Play ON OFF

16 Camera P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

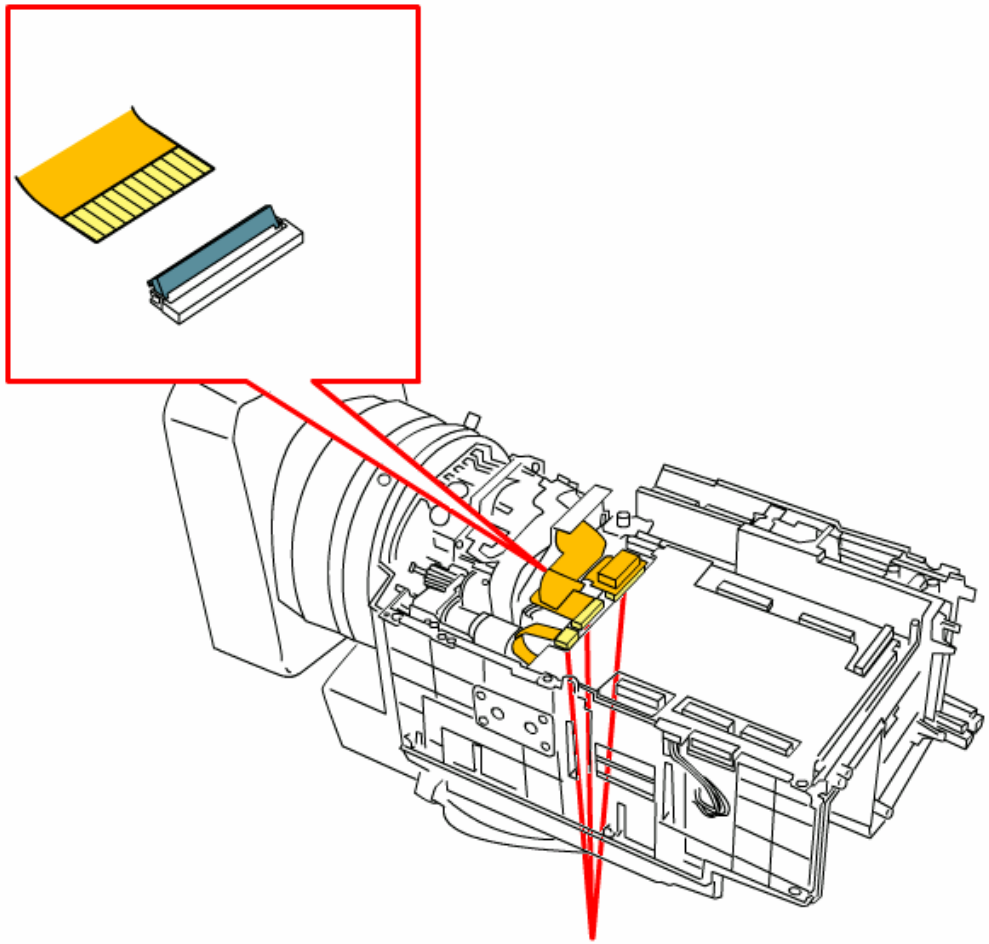
Close

Disassembly | Assembly

1. Remove the CAM-TOP FPC
2. Remove the 3 connectors.
3. Remove the 4 screws.
4. Remove the camera P.C.B.

Auto Play ON OFF

16 Camera P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

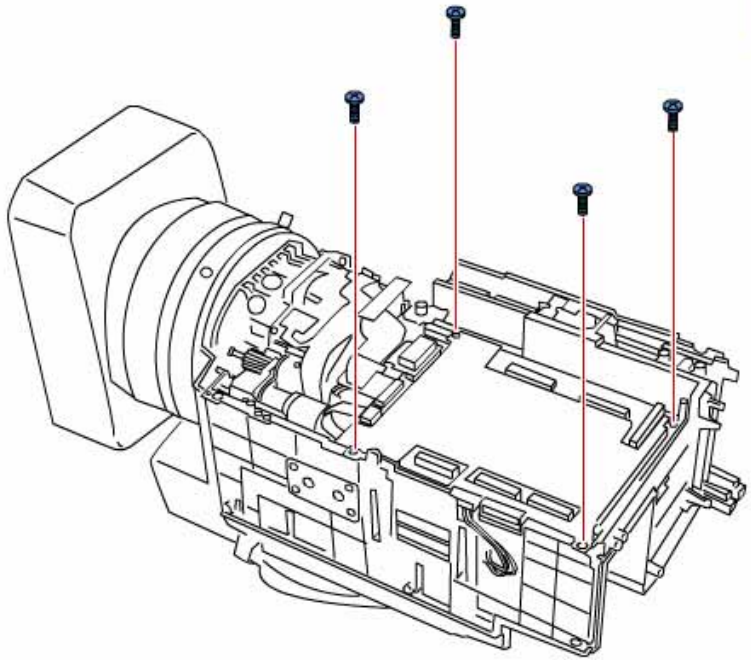
Close

Disassembly | Assembly

1. Remove the CAM-TOP FPC
2. Remove the 3 connectors.
3. Remove the 4 screws.
4. Remove the camera P.C.B.

Auto Play ON OFF

16 Camera P.C.B.





SILVER

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

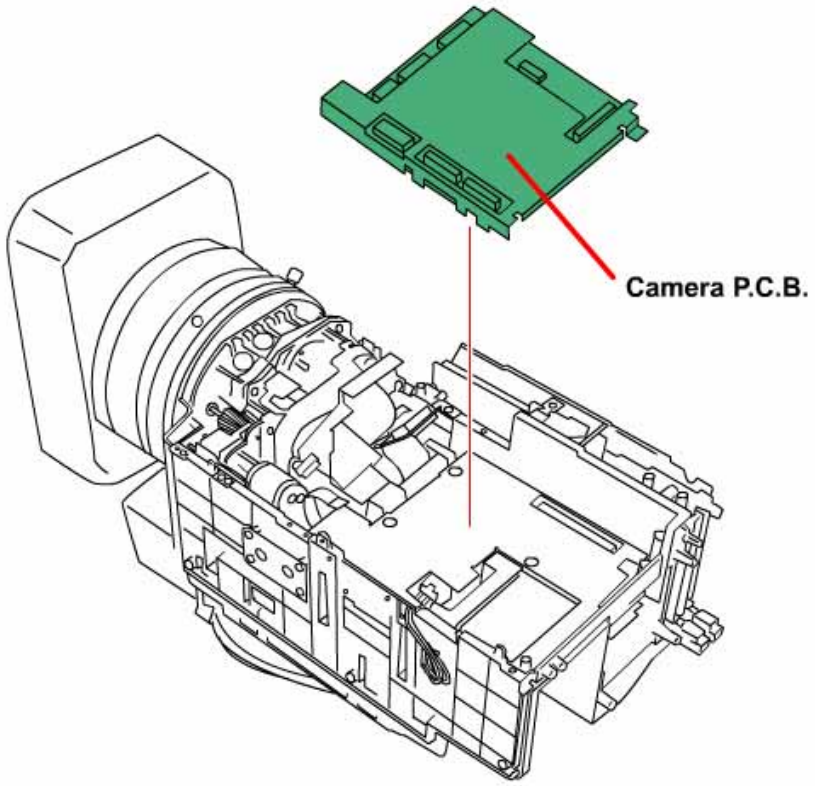
Close

Disassembly | Assembly

1. Remove the CAM-TOP FPC
2. Remove the 3 connectors.
3. Remove the 4 screws.
4. Remove the camera P.C.B.

Auto Play ON OFF

16 Camera P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

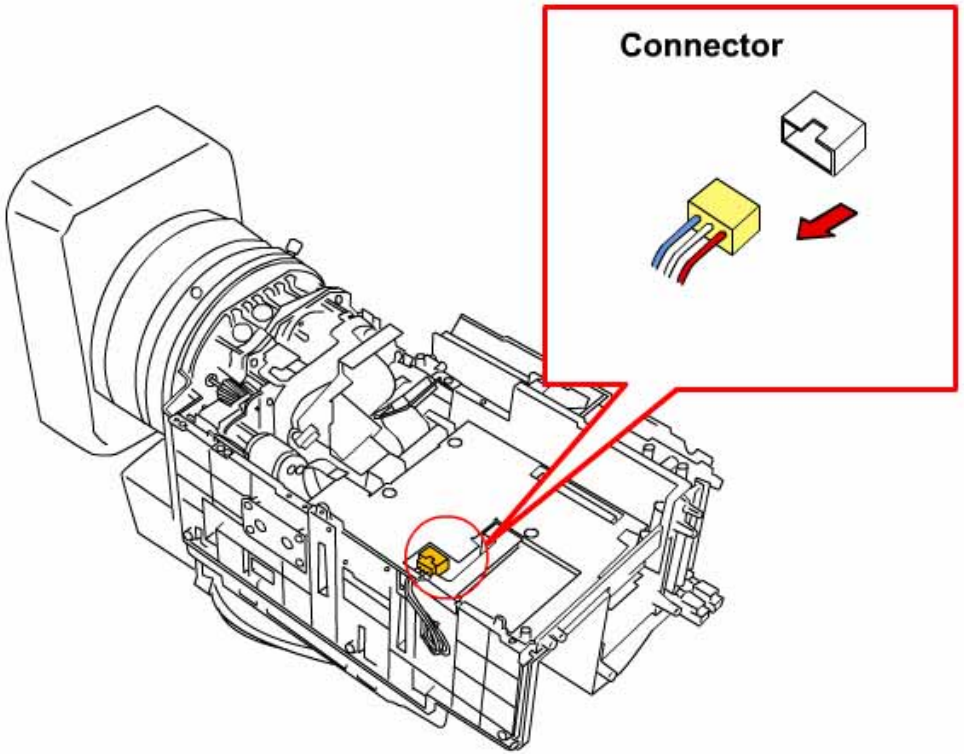
1 Remove the 1 connector.

2 Remove the 4 screws.

3 Lift up the VTR & POWER P.C.B. and them remove the connector.

Auto Play ON OFF

17 VTR & Power P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

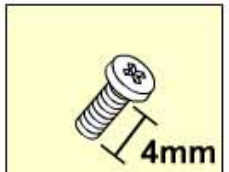
Close

Disassembly | Assembly

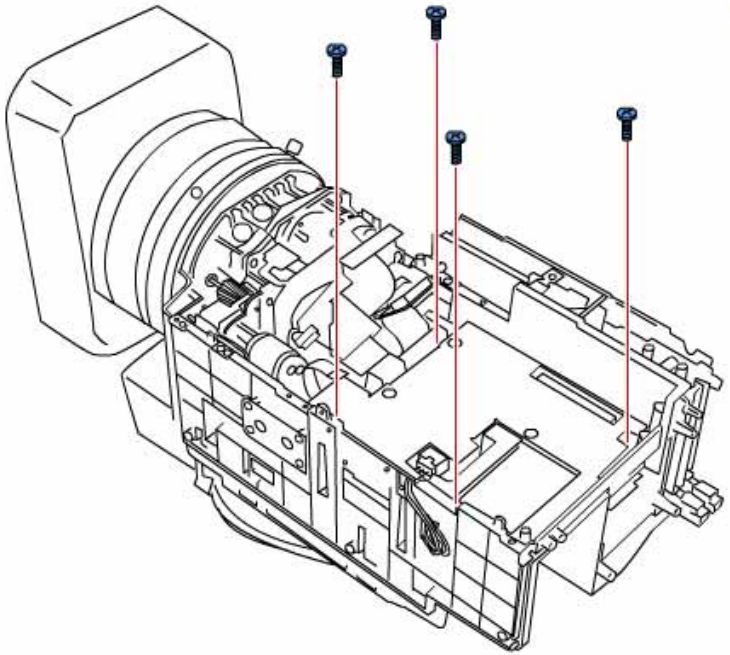
1. Remove the 1 connector.
2. Remove the 4 screws.
3. Lift up the VTR & POWER P.C.B. and them remove the connector.

Auto Play ON OFF

17 VTR & Power P.C.B.



SILVER



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

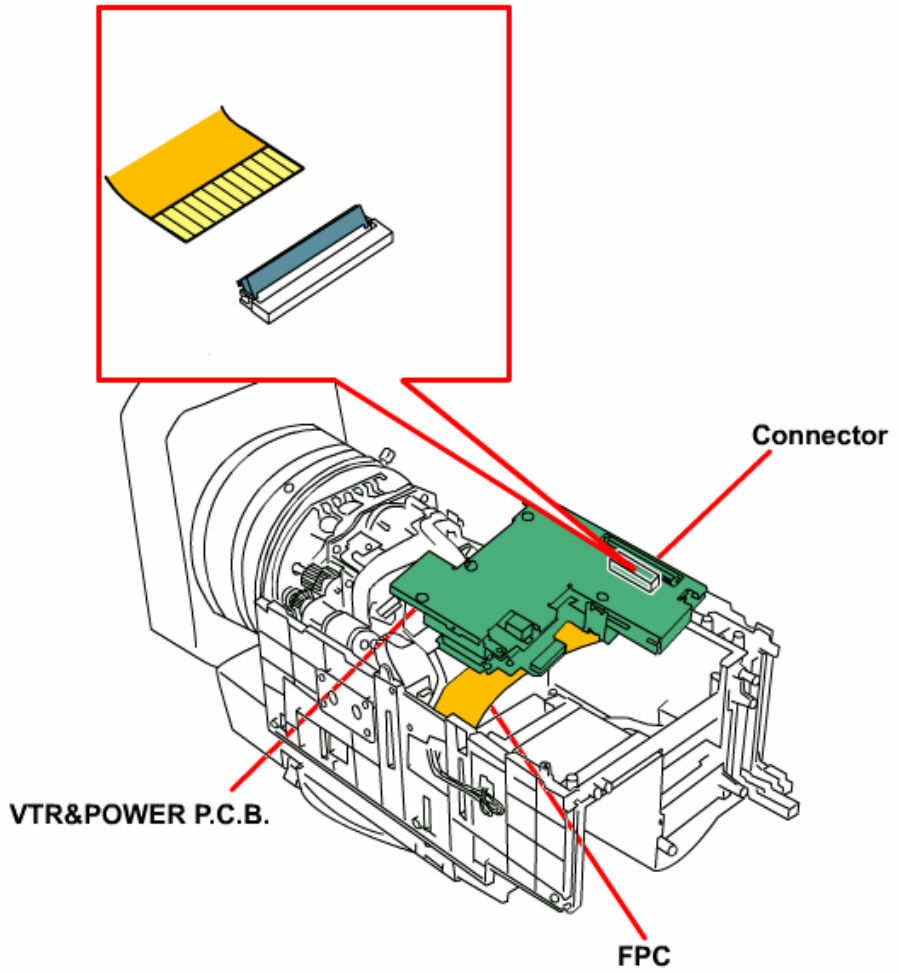
1 Remove the 1 connector.

2 Remove the 4 screws.

3 Lift up the VTR & POWER P.C.B. and them remove the connector.

Auto Play ON OFF

17 VTR & Power P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

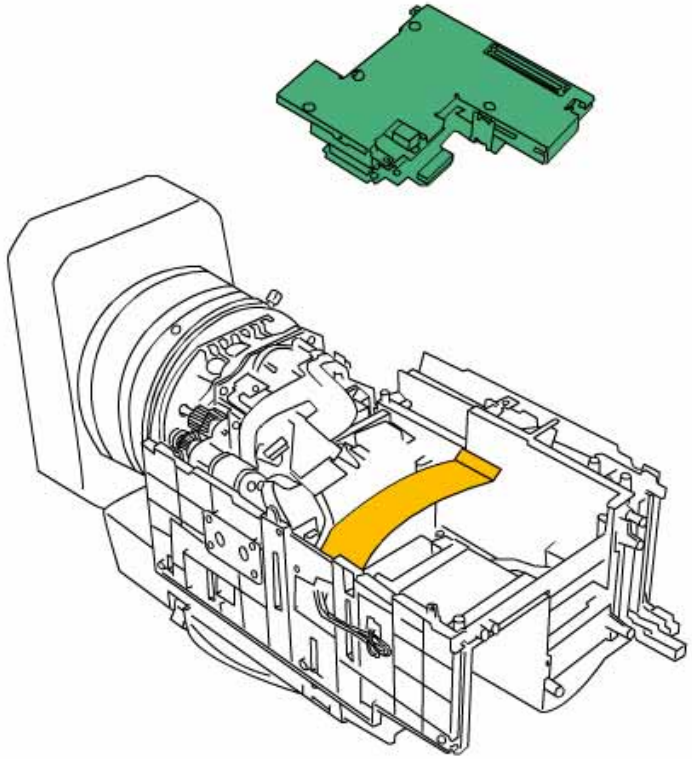
1 Remove the 1 connector.

2 Remove the 4 screws.

3 Lift up the VTR & POWER P.C.B. and them remove the connector.

Auto Play ON OFF

17 VTR & Power P.C.B.



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

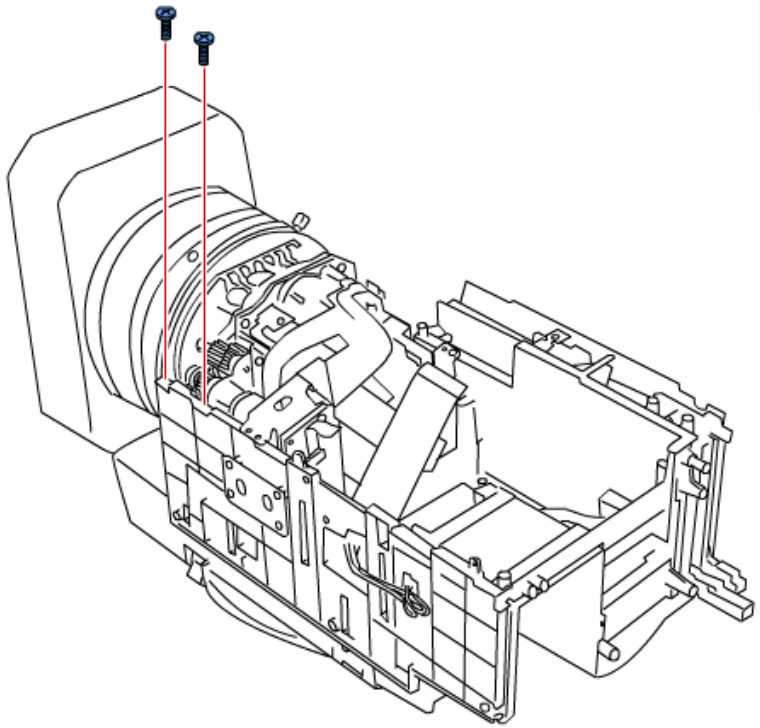
Close

Disassembly | Assembly

1 Remove the 2 screws.
2 Remove the clutch unit.
3 Remover the 2 screws.
4 Remove the JYRO unit.
5 Remove the 2 screws.
6 Remove the lens unit.

Auto Play ON OFF

18 Lens Unit





SILVER

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

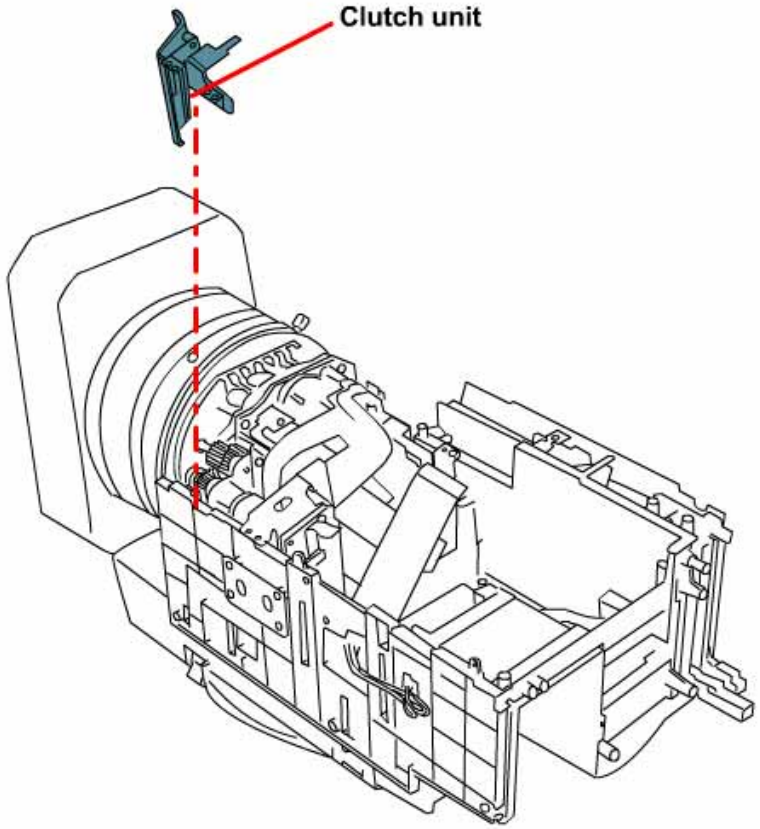
Close

Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the clutch unit.
3. Remover the 2 screws.
4. Remove the JYRO unit.
5. Remove the 2 screws.
6. Remove the lens unit.

Auto Play ON OFF

18 Lens Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

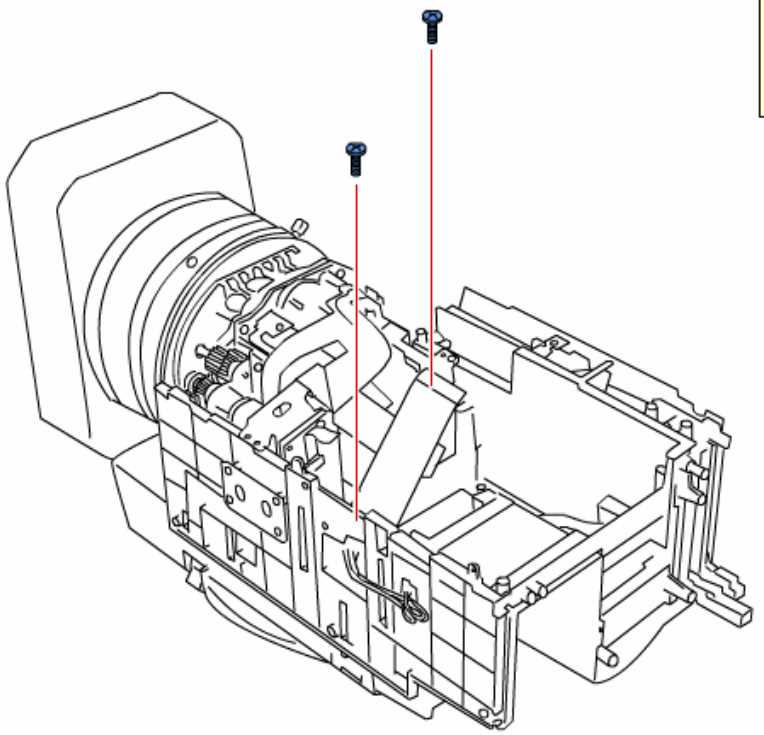
Close

Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the clutch unit.
3. Remover the 2 screws.
4. Remove the JYRO unit.
5. Remove the 2 screws.
6. Remove the lens unit.

Auto Play ON OFF

18 Lens Unit





SILVER

PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

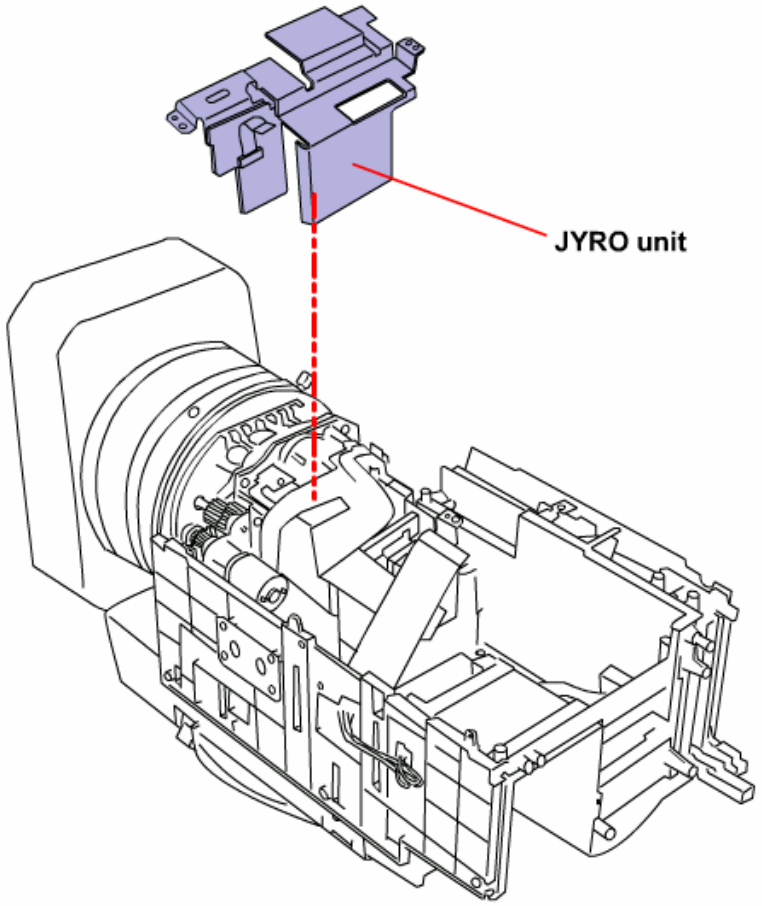
Close

Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the clutch unit.
3. Remover the 2 screws.
4. Remove the JYRO unit.
5. Remove the 2 screws.
6. Remove the lens unit.

Auto Play ON OFF

18 Lens Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

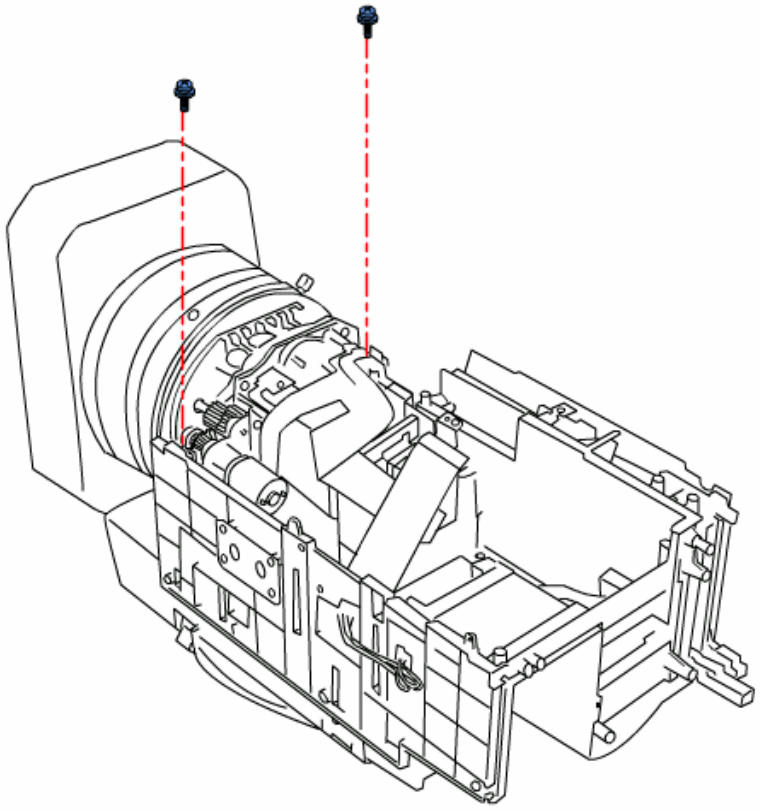
Close

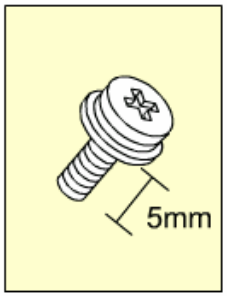
Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the clutch unit.
3. Remover the 2 screws.
4. Remove the JYRO unit.
5. Remove the 2 screws.
6. Remove the lens unit.

Auto Play ON OFF

18 Lens Unit





PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

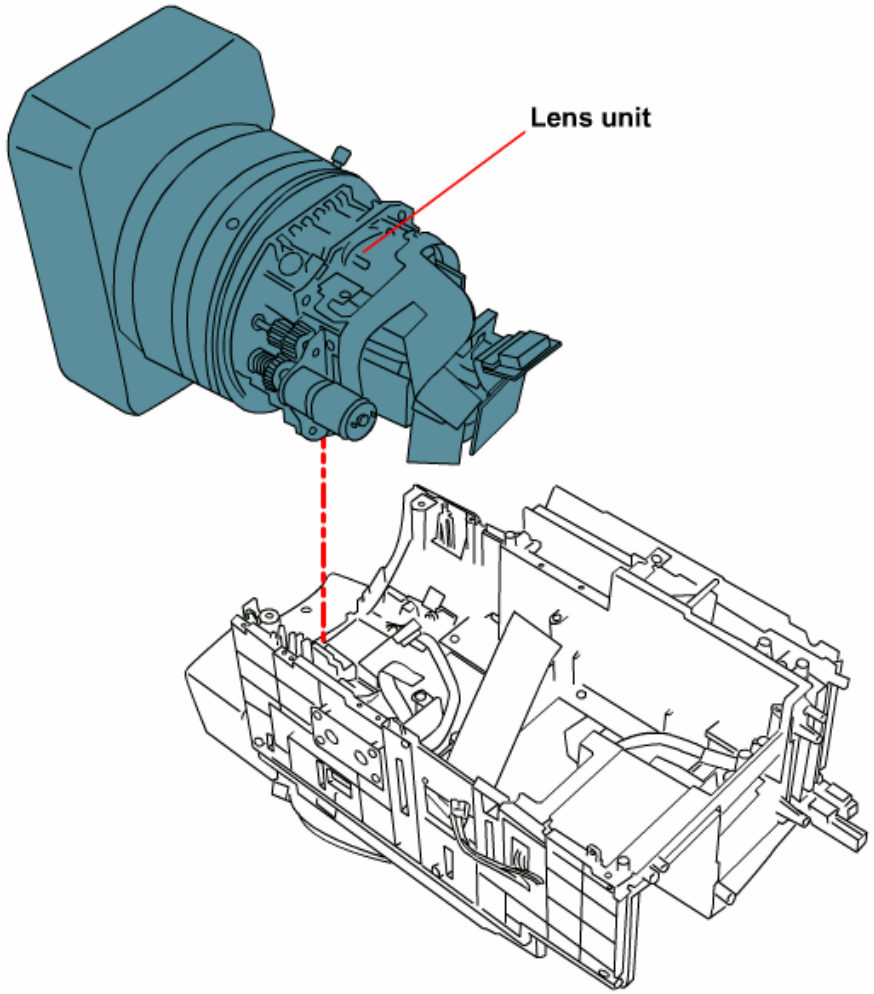
Close

Disassembly | Assembly

1. Remove the 2 screws.
2. Remove the clutch unit.
3. Remover the 2 screws.
4. Remove the JYRO unit.
5. Remove the 2 screws.
6. Remove the lens unit.

Auto Play ON OFF

18 Lens Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

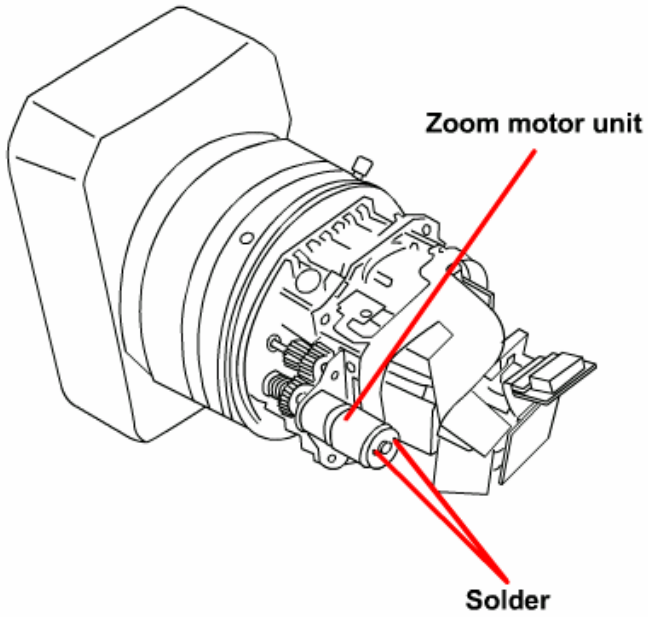
Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

19 Zoom Motor Unit

1. Unsolder the Zoom motor flex (2 points).
2. Remove the 2 screws.
3. Remove the Zoom motor unit.



PLAY

Auto Play ON OFF

Tool

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

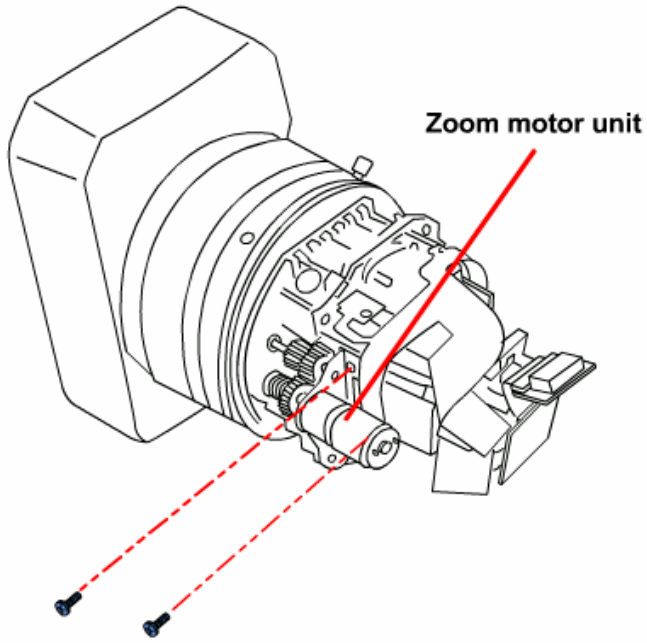
Close

Disassembly | Assembly

1. Unsolder the Zoom motor flex (2 points).
2. Remove the 2 screws.
3. Remove the Zoom motor unit.

Auto Play ON OFF

19 Zoom Motor Unit



PLAY

Tool	Plus Screwdriver

Disassembly Procedure

Press the item button to replay the item repeatedly.
Press ON button for auto play.

Color of the illustration differs from the acture color as it is just for explanation.

Close

Disassembly | Assembly

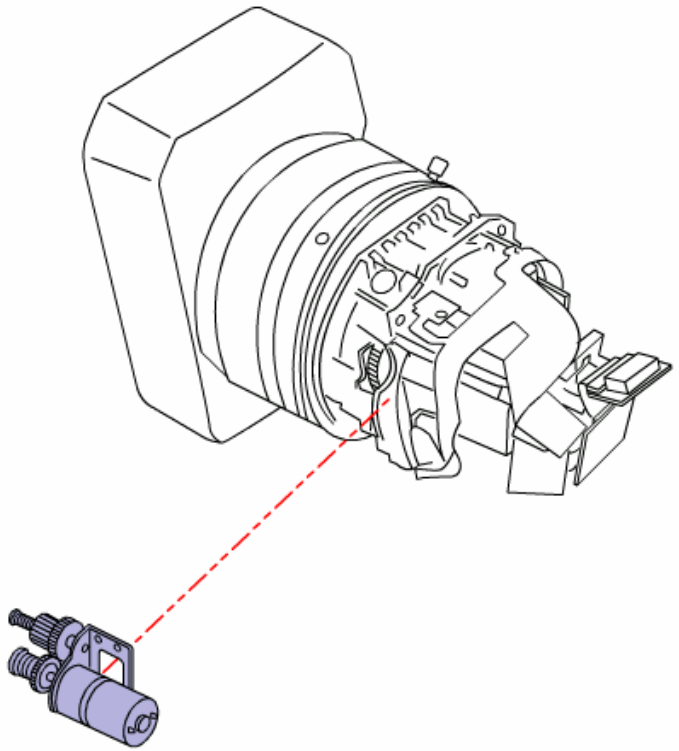
1 Unsolder the Zoom motor flex (2 points).

2 Remove the 2 screws.

3 Remove the Zoom motor unit.

Auto Play ON OFF

19 Zoom Motor Unit



PLAY

Tool	Plus Screwdriver

SECTION 3

MECHANICAL ADJUSTMENT

MODEL: AG-HVX200P/AN/E/MC/HVX202EN

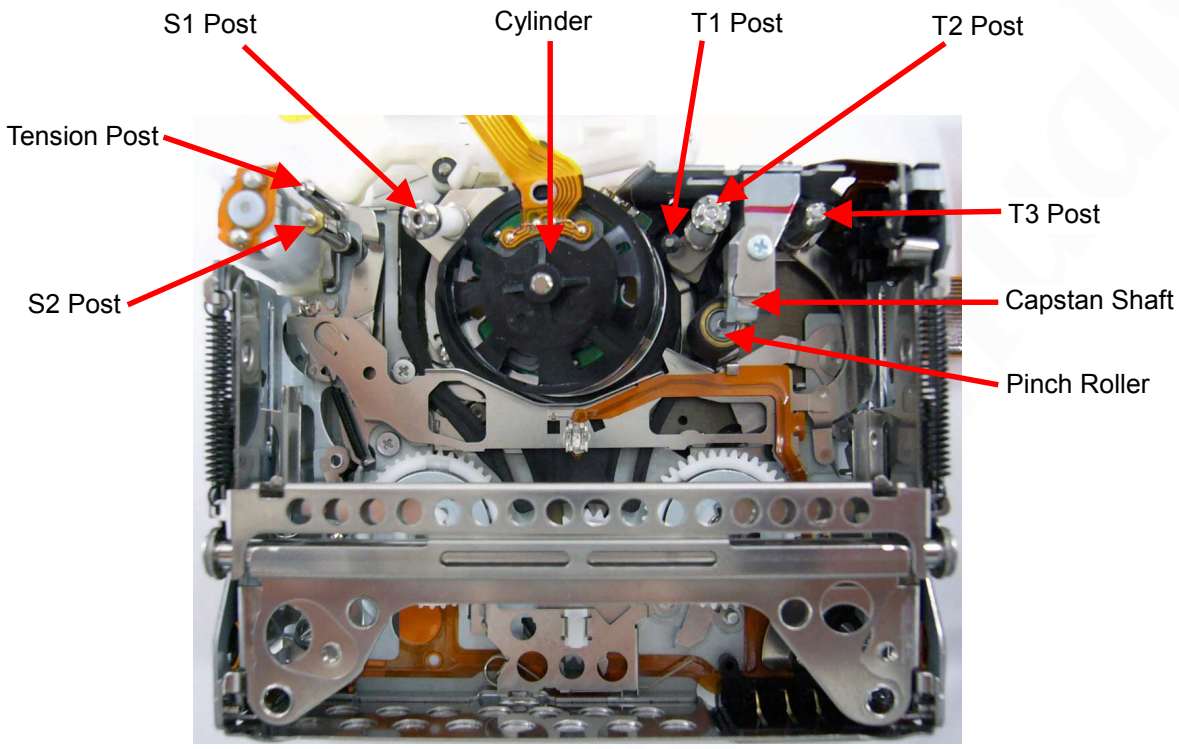
CONTENTS

1. Mechanical adjustment and confirmation MECH-1
   1-1. Name of Tape Transportation MECH-1
   1-2. Tape Path Adjustment Procedure MECH-1
   1-3. Adjustment of S1 and T2 Post MECH-2
   1-4. Connection of Measuring Board MECH-2
   1-5. Connection of LISTA Adjustment System MECH-4
   1-6. Boot up the LISTA Software MECH-5
   1-7. How to Enter the Alignment Tape Data MECH-6
   1-8. LISTA Sensitivity Detection MECH-7
   1-9. LISTA Linearity Adjustment MECH-8
   1-10. Tape Pass Confirmation MECH-10
   1-11. Self-REC/PLAY Envelope Waveform Confirmation MECH-10
2. Mechanical parts replacement procedure MECH-11
   2-1. Cleaning Roller Unit MECH-11

Circuit Diagram

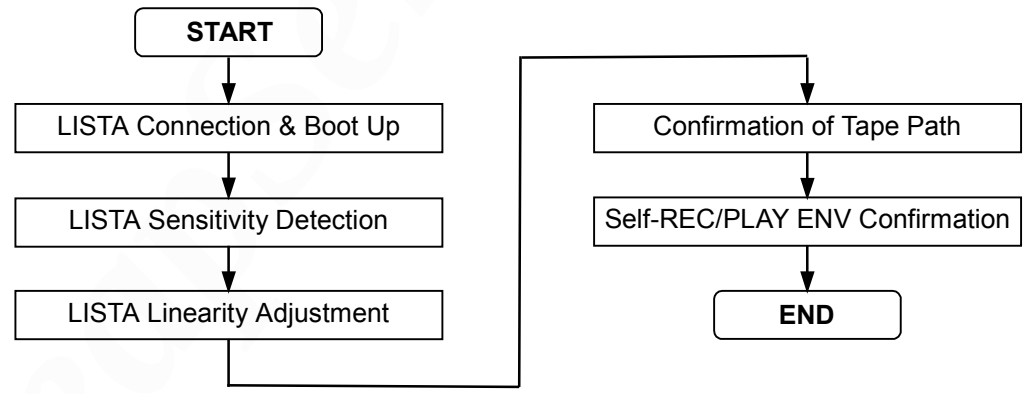
1. Mechanical adjustment and confirmation

1-1. Name of Tape Transportation



LOADING condition

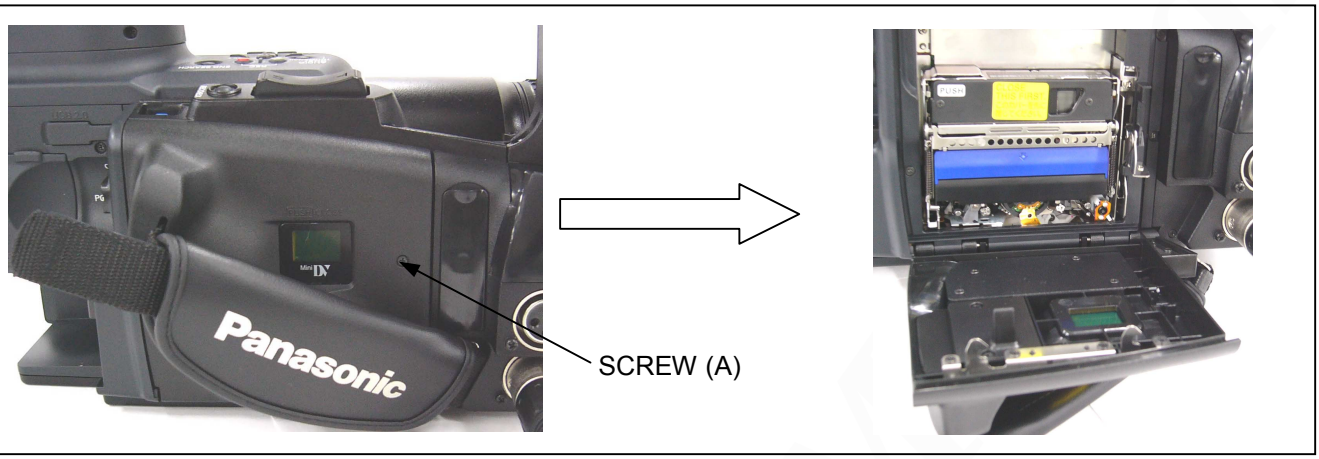
1-2. Tape Path Adjustment Procedure



1-3. Adjustment of S1 and T2 Post

LISTA linearity and Envelope waveform are adjusted by S1 and T2 post.
To adjust height of S1 and T2 post, below indicated operation is required.

1. Set to TAPE-VCR mode in camera recorder and open the cassette cover.
2. Insert DV cassette tape and confirm that the camera recorder is in the loading completion condition.
3. Close the cassette cover.
4. Unscrew the screw (A) and open the cassette cover.



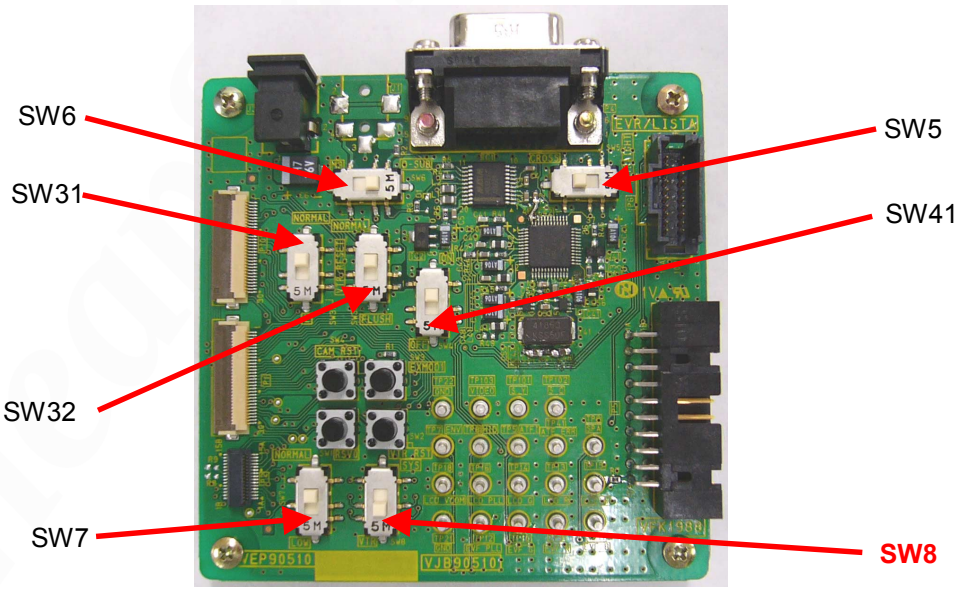
1-4. Connection of Measuring Board

To performing the confirmation of envelope (item “1-11. Self-REC/PLAY Envelope Waveform Confirmation”), the following tools are required.

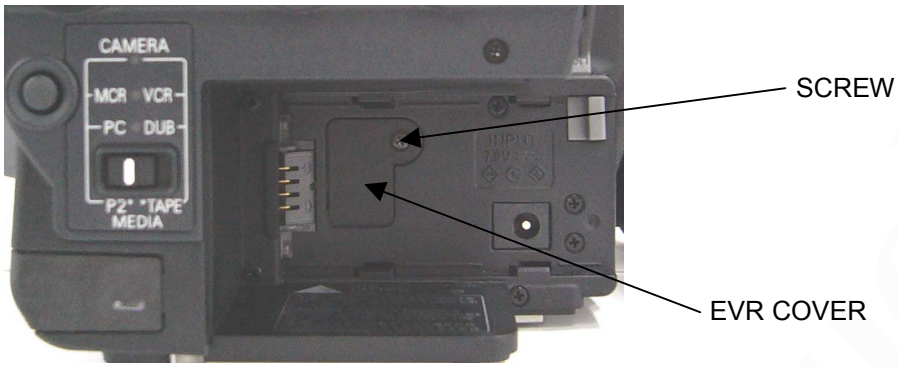
NAME	Part Number	Pcs.	Remark
Measuring Board	VFK1988	1	
Extension Cable	VFK1989	1	
DC Cable	K2GJ2DC00002 or VJA1128	1	For AG-HVX200/202
AC Adapter	-----	1	For AG-HVX200/202

To confirm the envelope output, connect the Measuring Boards as follows.

1. Set the SW8 to VTR side.

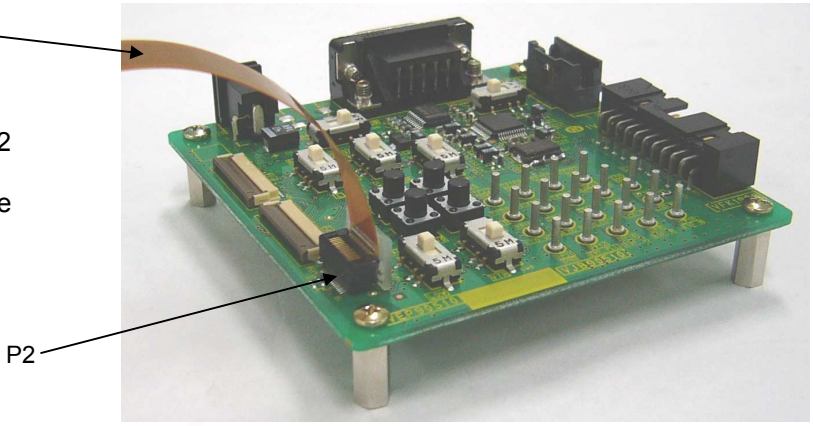


2. Loosen the screw and remove the EVR COVER.



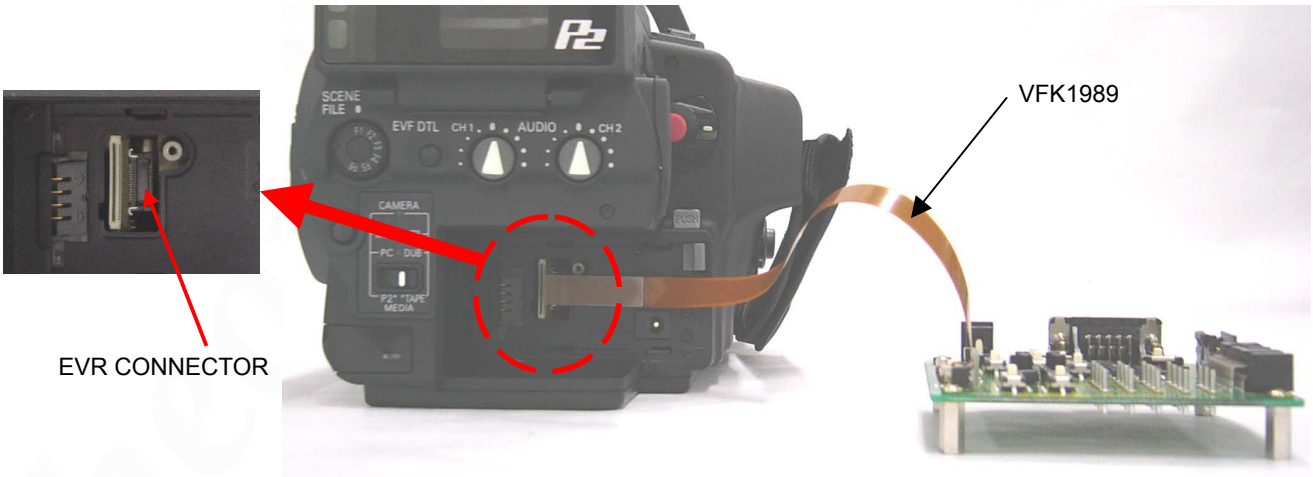
3. Connect the Extension Cable (VFK1989) to connector P2 on Measuring Board (VFK1988)

Connect VFK1989 with connector P2 as shown in picture.
The unit will not work if the connector is attached backwards.



4. Connect the Extension Cable (VFK1989) to EVR connector in Unit. Then make sure that the direction of the VFK1989 is correct as shown in Figure.

When the VFK1989 is connected to EVR connector, be careful of the direction of connector on VFK1989. Please follow as shown in the figure.



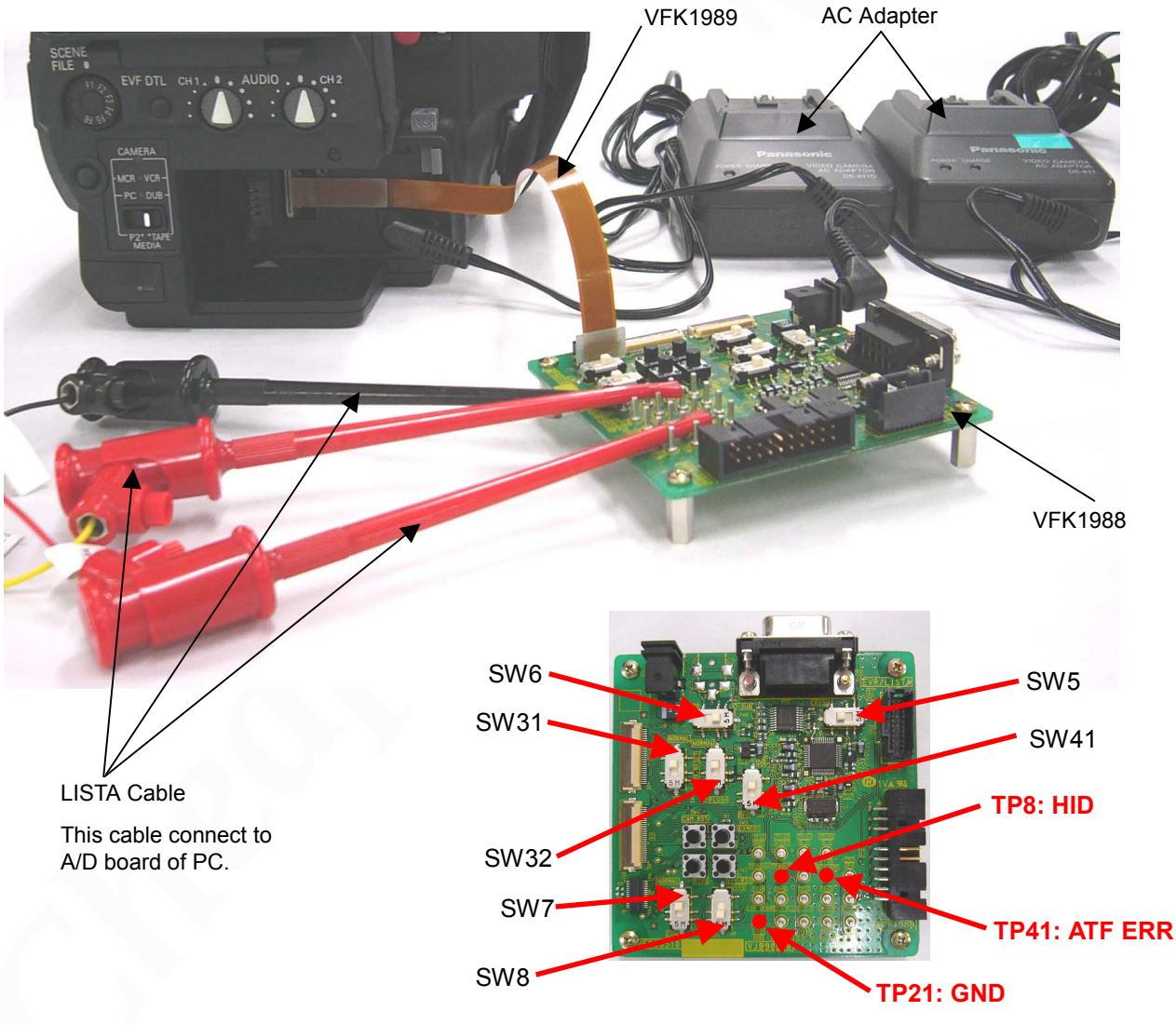
1-5. Connection of LISTA Adjustment System

TAPE	VFM3000LS (DV LISTA)
M. EQ	Personal Computer (A/D Board should be installed.)
TOOL	VFK1481N (LISTA Software), VFK1186 (LISTA Cable), VFK1300 (A/D Converter Board), VFK1988 (Measuring Board), VFK1989 (Extension Cable)
TP	**TP41** : ATF ERR, **TP8** : HID , **GND** : TP21 or 22

1. Connect the Measuring Board (refer to item ”1-4. Connection of Measuring Board”).
2. Confirm that the switches on the Measuring Board set to setting position as shown in the table below.

NAME	SETTING POSITION
SW5	CROSS
SW6	D-SUB
SW7	NORMAL
SW8	VTR
SW31	NORMAL
SW32	NORMAL
SW41	ON

3. Supply DC6V-9V to the Measuring Board (VFK1988). Please use the DC cable and AC Adapter to supply DC voltage to Measuring Board.
4. Connect the clips of the LISTA cable to test point on the Measuring Board.

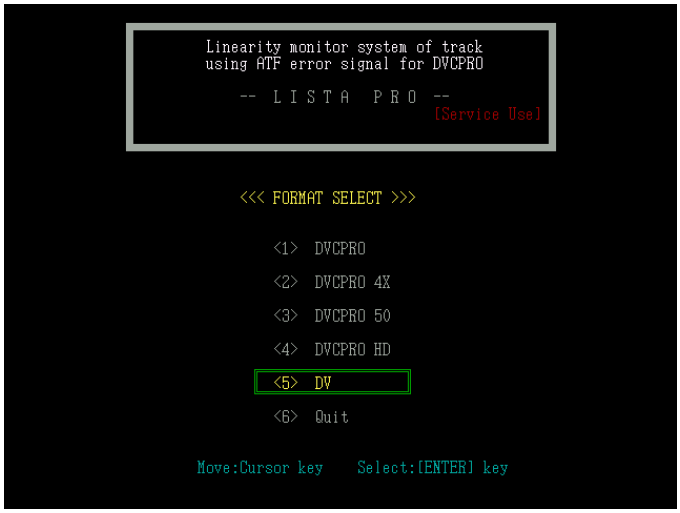


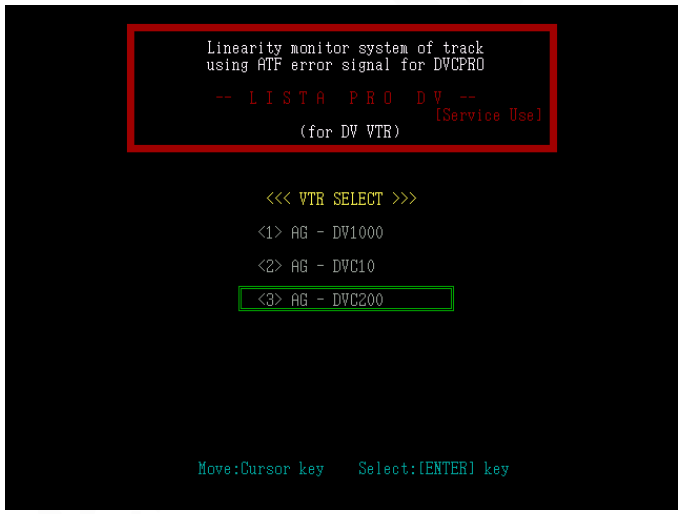
1-6. Boot up the LISTA Software

1. Boot up the LISTA software on DOS mode.

> **< How to Install and Boot Up >**
> Make a directory like C: LISTA and copy all files in the VFK1481N(LISTA Software) to it on PC.
> Type **"LISTA"** and press **ENTER** key, then boot up the LISTA software VFK1481N.

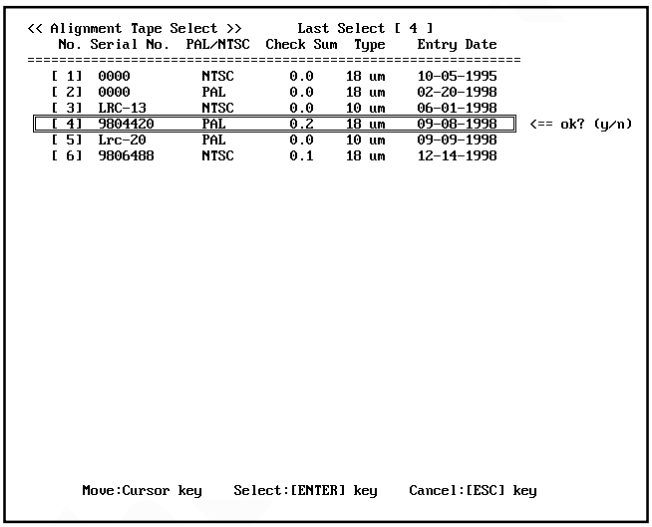
2. After boot up the LISTA software, **<<< FORMAT SELECT >>>** display appears. Select the item **"DV"**. After select the format, **<<< VTR SELECT >>>** display appears, and select the model **"AG-DVC200"**.



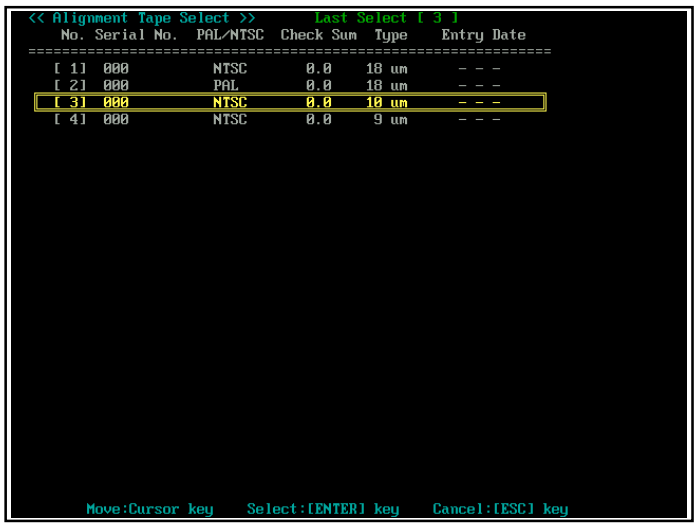


3. Next, select the Serial number of the Alignment tape on the screen. In case of LISTA software is not entered with data of alignment tape, press the ESC key, then main menu is displayed on the screen. And select the item **"<4> Alignment Tape"** for entry the data on the attachment sheet, which is enclosed with alignment tape.
4. In case of LISTA software has entered data of alignment tape, select the serial number of Alignment tape, then message appears **"ok? (y/n)"** on the screen. And press **" Y "** or **" ENTER "** key, then LISTA main menu is displayed on screen.

< In case of Alignment Tape entered already >



< In case of Alignment Tape does not entered >



1-7. How to Enter the Alignment Tape Data

1. Select the item **"<4> Alignment Tape"** on the LISTA main menu.
2. Select the item **"<2> ENTRY"** on the alignment menu.
3. After the screen displays the screen of **<<Alignment Tape Data Entry>>**, first input the Serial Number follow the printed number on the tape label. And input the number **"0"** or **"1"** for selected the PAL/NTSC. And after that enter the tape type, input **"0"** for DVCPRO, input **"1"** for DV or input **"2"** for HDLP.
4. After selecting the tape type, the frame for inputting the DATA and CHECK SUM appears on the screen. Input the numerical value in numerical order on the data sheet, which is enclosed with alignment tape. If the wrong number is inputted, the error message on the screen, then confirm that data on the sheet.
5. After the data entry, the screen returns to **"LISTA MAIN"** menu. Confirm the serial number of the alignment tape.

<< Alignment Tape Data Entry >> **Serial No. Lrc-20 (NTSC) 10μm**

[1]	- 0.1
[2]	0.1
[3]	0.0
[4]	0.2
[5]	0.6
[6]	0.5
[7]	0.7
[8]	0.9
[9]	1.0
[10]	0.8

[11]	0.7
[12]	1.0
[13]	0.7
[14]	0.5
[15]	0.2
[16]	- 0.5
[17]	- 0.3
[18]	- 0.3
[19]	- 0.1
[20]	- 0.6

[21]	- 0.4
[22]	- 0.2
[23]	- 0.7
[24]	- 0.6
[25]	- 0.7
[26]	- 0.3
[27]	- 0.4
[28]	- 0.4
[29]	- 0.6
[30]	- 0.3

[31]	- 0.4
[32]	- 0.6
[33]	- 0.3
[34]	- 0.2
[35]	- 0.1
[36]	- 0.3
[37]	- 0.1

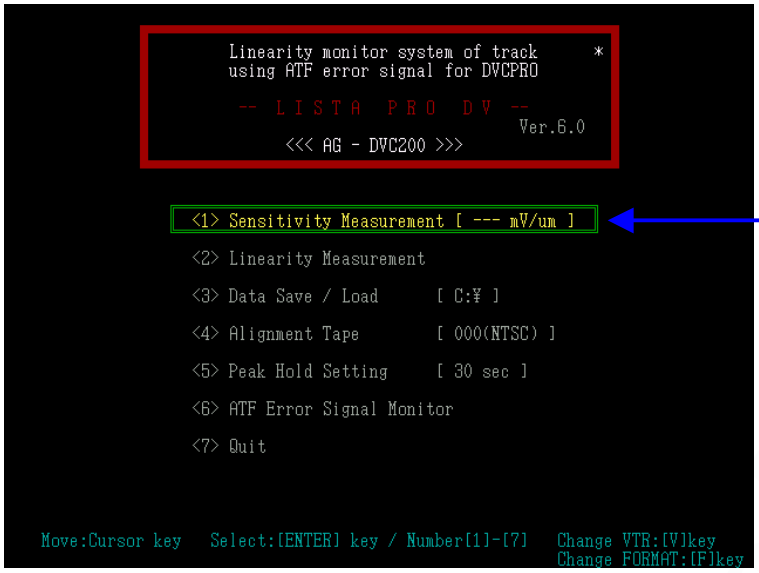
[CS]	- 0.6

NOTE: This is sample only, you must enter information from your alignment tape. Each tape is different.

Circuit Service Manuals

1-8. LISTA Sensitivity Detection

TP	**TP41** : ATF ERR, **TP8** : HID , **GND** : TP21 or 22
VTR MODE	PLAY
ADJ. MODE	Refer to below explanation
TAPE	VFM3000LS (DV LISTA)
SPEC.	70 mV / µm to 170 mV / µm



Select at Sensitivity Detection.

1. Set the camera recorder to TAPE-VCR mode.
2. Insert the DV Alignment Tape (VFM3000LS) to the camera recorder.
3. Press the button in order of **"COUNTER-RESET button"** → **"STOP button"** → **"MODE CHK button"** → **"MENU button"**.
4. Select the item **"ADJUST MENU"** and press the SET(STILL) button to open the **"ADJUST MENU"**.
5. Select the item **"ATF GAIN"** and press the SET(STILL) button.
6. Select the item **"YES"** and press the SET(STILL) button, then message **"NOW SERVO ADJUST PUSH MENU TO RETURN"** appears on screen and press the PLAY button to playback the tape.
7. Select item **"<1> Sensitivity Measurement"** on the LISTA main menu, and press **"ENTER"**.
8. Then the tape is played back (tape speed : 101.2%) automatically, and message **"1.2% Speed…"** appears on the screen.
9. Press the ENTER key, and then start measurement of the sensitivity value.
10. Confirm that the sensitivity value is with in specification, after the message **"<<Sensitivity Measurement Finish>>"**.

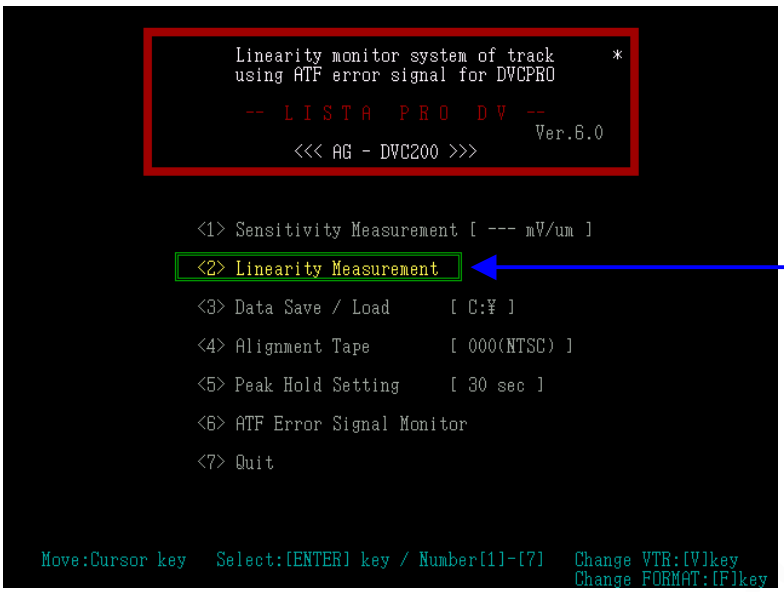
<<Sensitivity Measurement Finish>>

Sensitivity	**72.95 (mV/um)**
Sens.1	65.43 (mV/um)
Sens.1	85.48 (mV/um)

Confirm that the this value in specification

1-9. LISTA Linearity Adjustment

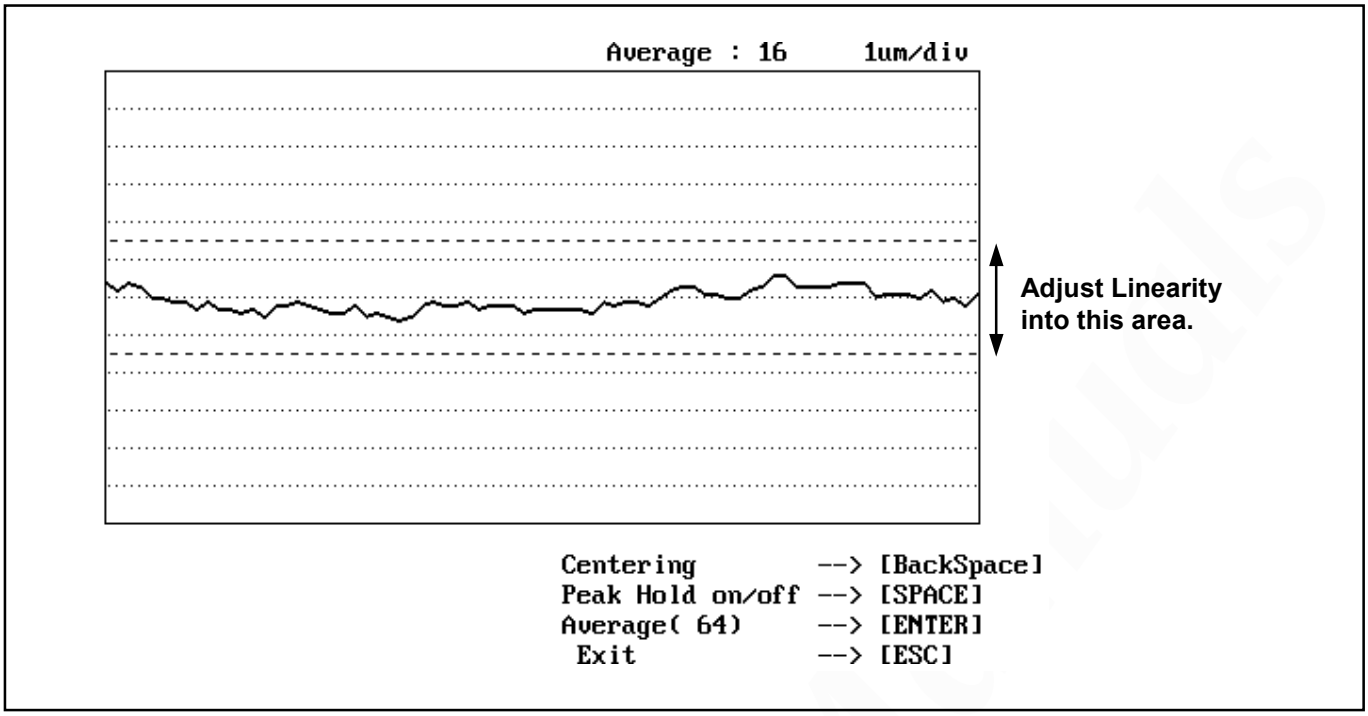
TP	**TP41** : ATF ERR, **TP8** : HID , **GND** : TP21 or 22
ADJ.	S1 and T2 Post Height
VTR MODE	PLAY
ADJ. MODE	Refer to below explanation
TAPE	VFM3000LS (DV LISTA)
TOOL	VFK1899 : Post Driver
SPEC.	Linearity : less than 3μm



Select at Linearity Measurement.

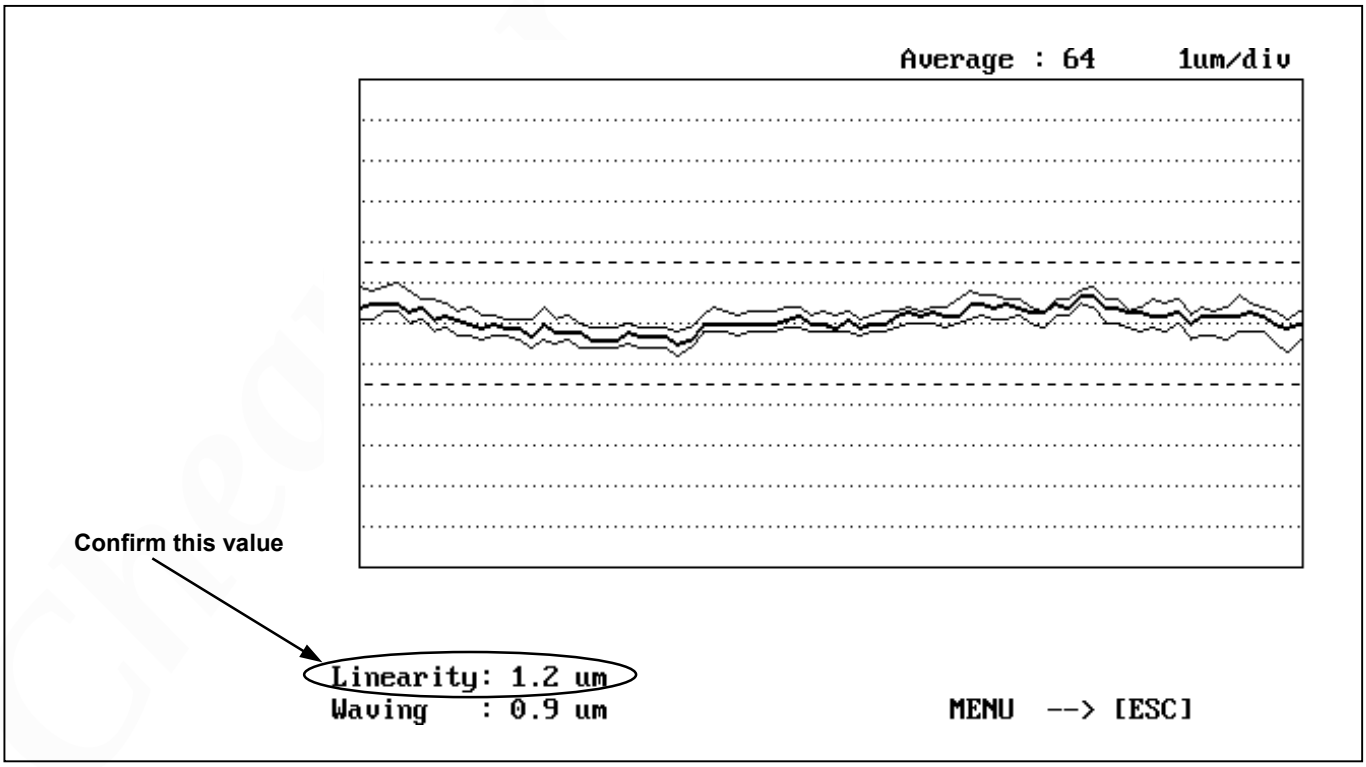
1. Set the camera recorder to TAPE-VCR mode.
2. Insert the DV Alignment Tape (VFM3000LS) to the camera recorder.
3. Open the cassette cover follow the item **"1-3. Adjustment of S1 and T2 Post"** in this section.
4. Press the button in order of **"COUNTER-RESET button"** → **"STOP button"** → **"MODE CHK button"** → **"MENU button"**.
5. Select the item **"ADJUST MENU"** and press the SET(STILL) button to open the **"ADJUST MENU"**.
6. Select the item **"LINEARITY"** and press the SET(STILL) button.
7. Select the item **"YES "** and press the SET(STILL) button, then message **"NOW SERVO ADJUST PUSH MENU TO RETURN"** appears on screen and press the PLAY button to playback the tape.
8. Select item **"<2> Linearity Measurement"** on the LISTA main menu, and press **"ENTER"**, then the Linearity Waveform appears.
9. When the waveform as shown in figure below is displayed on the screen, press the **"BS (Back Space)"** key for display the waveform positioned at the center of the scale on screen. Adjust S1 and T2 post height by using the post driver so that the linearity waveform is becomes flat as possible, and it should be within specification.
   (Adjust linearity waveform in the red dot line on the screen.)

Circuit Diagram Unofficial



POINT :
The left side of the waveform (entrance side) is adjusted by the height of S1 post and the right side of the waveform (exit side) is adjusted by the height of T2 post.
When the post driver is removed from upper part of post, linearity waveform is changed.
After finishing this adjustment, eject the tape and insert the tape again to confirm that the shape of the linearity waveform has not changed.

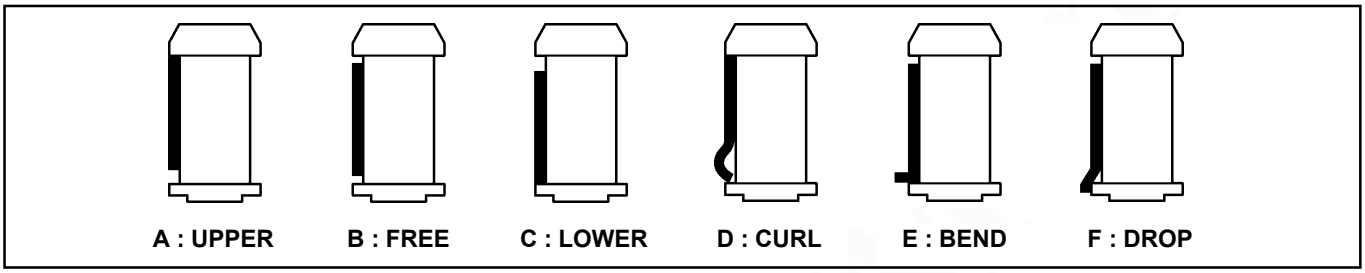
10. Press **"SPACE"** key to perform the Peak Hold in 30 seconds when linearity is displayed.
11. After finishing the Peak Hold, press **"SHIFT"** and **" } "** key simultaneously on the Key Board, then the numerical values of **"Linearity"** and **"Waving"** is displayed on left lower portion of screen. And confirm the numerical value of **"Linearity"** is in the specification. If the **"Linearity"** is out of specification, adjust height of S1 and T2 post.
12. After this measurement is finished, press the ESC key to return to the main menu.



1-10. Tape Pass Confirmation

1. Set the camera recorder to TAPE-VCR mode.
2. Insert the Blank tape to the camera recorder.
3. Open the cassette cover follow the item **"1-3. Adjustment of S1 and T2 Post"** in this section.
4. Play back the Blank tape and confirm that the tape passes without curling at the upper and lower guides of the following posts in the Play modes as shown in below table.

Post Name	Tape limit (refer to figure)					
	A	B	C	D	E	F
S1 post	NG	NG	OK	NG	NG	NG
S2 post	OK	OK	NG	NG	NG	NG
T2 post	OK	NG	NG	NG	NG	NG
T3 post	NG	OK	OK	NG	NG	NG



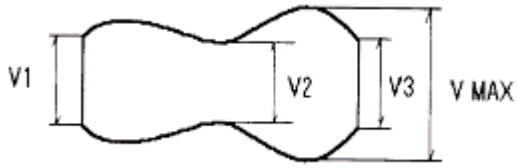
5. Confirm that the tape damage does not occur on tape at S1, T1 and T2 post by loading and unloading.
6. If curl and tape damage occurred at S1 and T2 post, adjust height of post by post driver.

1-11. Self-REC/PLAY Envelope Waveform Confirmation

1. Set the camera recorder to TAPE-VCR mode.
2. Connect the Measuring Board (refer to item "1-4. Connection of Measuring Board").
3. Connect the oscilloscope to the Measuring Points [TP7: ENV] and [TP8: HID] as a trigger on the Measuring Board.

NOTE: Please use [TP22: GND] as GND of probe, when you connect [TP7: ENV].

4. Record a color bar signal.
5. Play back the just recorded portion and confirm that the envelope is within the following specifications.



V1/V max. 0.9
V2/V max. 0.9
V3/V max. 0.9

Make as flat as possible

6. Confirm that the envelope is within the following specification, when the mode is changed as follows.
   STOP→PLAY: Envelope appears completely within 2 seconds and stable.
   REV→PLAY : Envelope appears completely within 2 seconds.
7. Confirm that the shape of envelope is diamond style.
8. If it is out of the specification, adjust height of the S1 and T2 Post. Then open the cassette cover follow the item **"1-3. Adjustment of S1 and T2 Post"** in this section.

2. Mechanical parts replacement procedure

2-1. Cleaning Roller Unit

(Removal)

1. Remove the Mechanism Unit.
2. Unscrew the 2 screws (A) and (B), then remove the Cleaning Roller Unit.

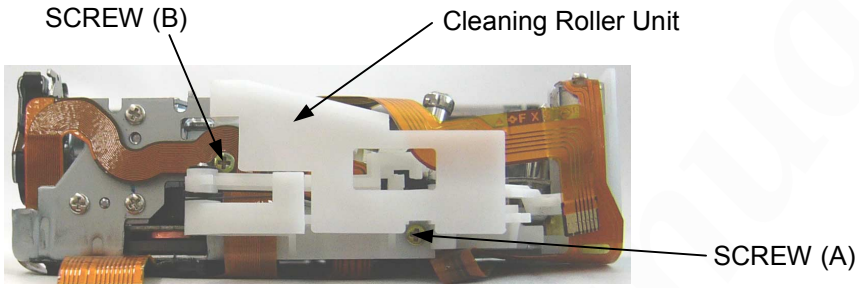


Figure A

(Installation)

1. Hook the portion (B) of Cleaning Roller Unit to portion (A) of Mechanism Chassis and install the Cleaning Roller Unit. Then be careful the Release Arm does not run onto the part at end of sub chassis (C) as shown in figure B.

NOTE: Supply the voltage to loading motor and the Cleaning Roller Unit is installed in the mechanical position as shown in figure (B) to simple installation (No problem it installation in loading complete position).

2. Tighten the Screw (A) and (B) as shown in figure A. When tighten the screw (B), flexible cable also tighten up together as shown in figure A.

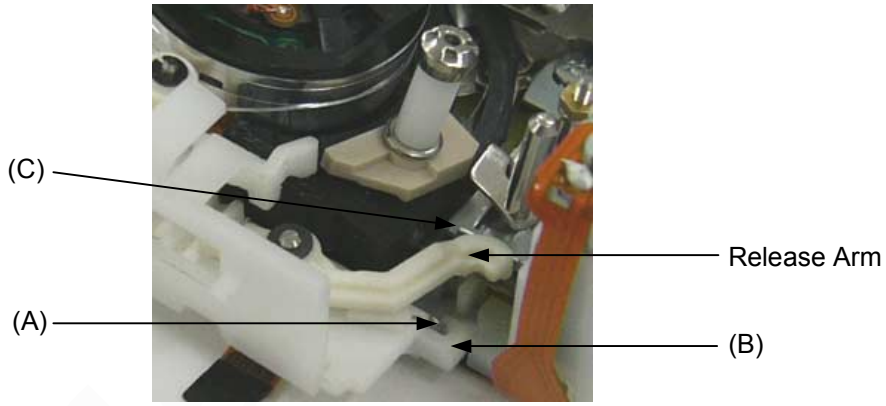


Figure B

(Confirmation of Operation)

1. To confirm that the Cleaning Roller operates normally on the Mechanism Unit, supply the voltage to loading motor and confirm that the Cleaning Roller touches the Cylinder in loading operation.



UNLOADING..... A: +4.5V B: GND
LOADING..... A: GND B: +4.5V

Figure C

SECTION 4

ELECTRICAL ADJUSTMENT

MODEL: AG-HVX200P/AN/E/MC/HVX202EN

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1. Adjustment after replacement of major parts

If one of the Major part listed requires replacement, the table below indicates what electrical adjustments are required.

1-1. CAMERA Adjustment

ADJUSTMENT ITEM	CAMERA Board	CAMERA LENS Ass`y			ZOOM SW Ass`y	SIDE JACK1 Board
		LENS Ass`y	PRISM Ass`y	ZOOM MOTOR Ass`y		
Zoom SW Center Value	X				X	
Hall Amp (Auto)	X	X				
Iris PWM (Auto)	X	X				
OIS (Auto)	X	X				
Zoom Tracking (Auto)	X	X		X		
CCD White scratch damage revision	X		X			
Preparation of White Balance	X		X			
White Balance (3100K) (Auto)	X		X			
White Balance (5100K) (Auto)	X		X			
White Balance (4500K) (Auto)	X		X			
White Balance (3600K) (Auto) *NOTE	X		X			
White Shading (Auto)	X		X			
Sync Level	X					●
Y Level	X					●
Pb Level	X					●
Pr Level	X					●
Luminance Level	X					●
Chroma Level	X					●
SETUP *NOTE	X					

X: Adjustment Required
● : Confirmation Required

***NOTE:** White Balance (3600K) and SETUP adjustment is required only for NTSC model.

1-2. VTR Adjustment

ADJUSTMENT ITEM	VTR Board	MECHANIZM Ass`y	MECHA IF Board
Sensitivity adj of Tape sensor	X	X	X
PG Shifter	X	X	X

X: Adjustment Required

NOTE:
When the adjustment data backed up is written in a new board when VTR board is exchanged, the adjustment is unnecessary.

Circuit Diagram

2. Required tools and equipment for each adj. items.

Below indicated tools are required to perform each adjustment in addition to tools in introduced in item 3-1.

Adjustment	Item	Required Tool	Remark
CAMERA	Zoom SW Center Value	Unnecessary	
	Hall Amp (Auto)	Unnecessary	
	Iris PWM (Auto)	Unnecessary	
	OIS (Auto)	Unnecessary	
	Zoom Tracking (Auto)	82mm Attachment Ring (VFK1987)	
		43mm Attachment Ring (VFK1164TAR43)	
		Collimator Set (VFK1164TCM01)	
		Halogen lamp	
	CCD White scratch damage revision (Auto)	Unnecessary	
	Preparation of White Balance	Halogen lamp & Grayscale chart	
		Color Pyrometer & Lux Meter	
	White Balance (3100K) (Auto)	Halogen lamp & Grayscale chart	
		Color Pyrometer & Lux Meter	
	White Balance (5100K) (Auto)	CC filter (LB120) (VFK1347)	
		CC filter (LBA2) (VFK1884)	
		CC filter (LBB6) (VFK1888)	
		82mm Attachment Ring (VFK1987)	
		CC Filter Holder (VFK1345)	
		Step-down Ring (62mm-52mm) (VFK1346)	
		Step-up Ring (43mm-49mm) (VFK1659)	
		Step-up Ring (49mm-62mm) (VFK1660)	
		Halogen lamp & Grayscale chart	
		Color Pyrometer & Lux Meter	
	White Balance (4500K) (Auto)	CC filter (LB120) (VFK1347)	NTSC model only
		CC filter (LB40) (VFK1341)	PAL model only
		CC filter (LBB2) (VFK1885)	PAL model only
		82mm Attachment Ring (VFK1987)	
		CC Filter Holder (VFK1345)	
		Step-down Ring (62mm-52mm) (VFK1346)	
		Step-up Ring (43mm-49mm) (VFK1659)	
		Step-up Ring (49mm-62mm) (VFK1660)	
		Halogen lamp & Grayscale chart	
		Color Pyrometer & Lux Meter	
	White Balance (3600K) (Auto) (NTSC model only required)	CC filter (LB40) (VFK1341)	NTSC model only
		CC filter (LBB2) (VFK1885)	NTSC model only
		82mm Attachment Ring (VFK1987)	
		CC Filter Holder (VFK1345)	
		Step-down Ring (62mm-52mm) (VFK1346)	
		Step-up Ring (43mm-49mm) (VFK1659)	
		Step-up Ring (49mm-62mm) (VFK1660)	
		Halogen lamp & Grayscale chart	
		Color Pyrometer & Lux Meter	
	White Shading (Auto)	Halogen lamp	
	Sync Level	Waveform Monitor	
	Y Level	Waveform Monitor	
	Pb Level	Waveform Monitor	
	Pr Level	Waveform Monitor	
	Luminance Level	Waveform Monitor	
	Chroma Level	Waveform Monitor	
VTR	Sensitivity adj of Tape sensor (Auto)	Unnecessary	
	PG Shifter (Auto)	Oscilloscope	
		DV Color bar Alignment Tape (VFM3010EDS)	NTSC model only
		DV Color bar Alignment Tape (VFM3110EDS)	PAL model only

3. Adjustment system

When performing the electrical adjustment, the PC EVR software is used.

3-1. Required tools and equipment for PC EVR software

When the PC EVR software is used, the following tools are required.

NAME	Part Number	Pcs.	Remark
PC EVR software	VVS0030	1	Download from the Global Service WEB site.
PC EVR software	VVS0032	1	Download from the Global Service WEB site. NOTE: Only VTR adjustment is used.
Measuring board	VFK1988	1	
Extension cable	VFK1989	1	
DC cable	K2GJ2DC00002 or VJA1128	2	For AG-HVX200/202 and Measuring board
AC Adapter	---	2	For AG-HVX200/202 and Measuring board
9pin RS232C cross cable	---	1	
Personal Computer	---	1	***NOTE:**

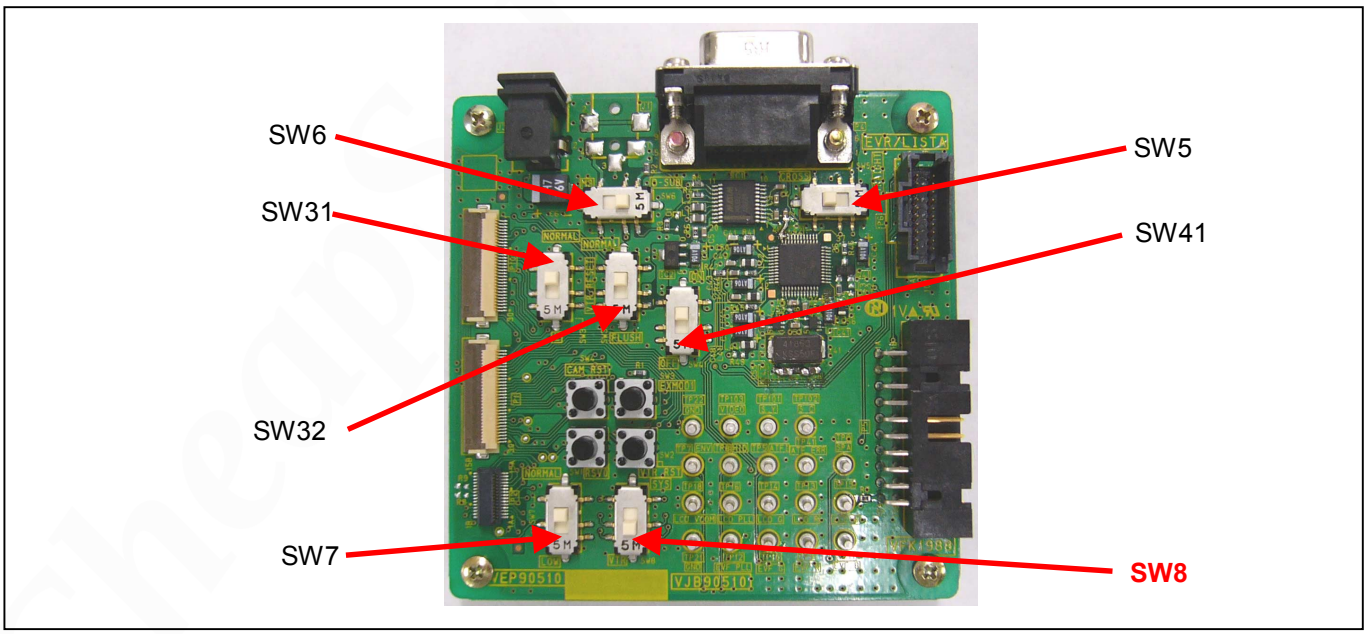
***OS: WINDOWS XP SP2**

3-2. Connection

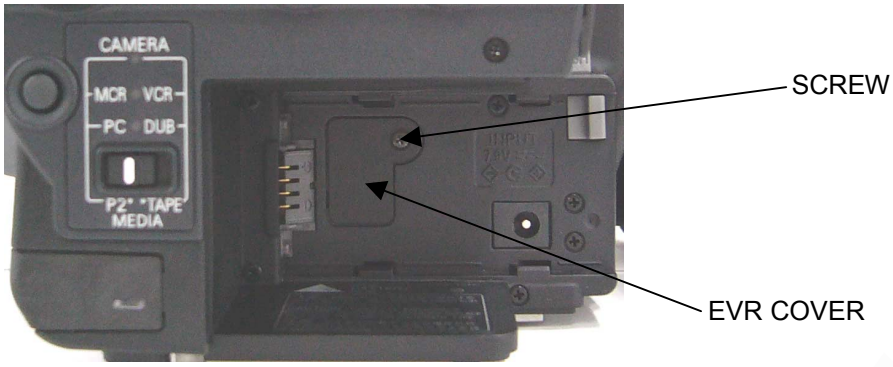
1. Unless otherwise specified, set the switches on the Measuring Board as shown in the table below.

NAME	SETTING POSITION
SW5	CROSS
SW6	D-SUB
SW7	NORMAL
SW8	***NOTE**
SW31	NORMAL
SW32	NORMAL
SW41	ON

***NOTE:** SW8 is VTR/SYS selection switch. When the camera part is adjusted, SW8 sets to the SYS side. When the VTR part is adjusted, SW8 sets to VTR side.

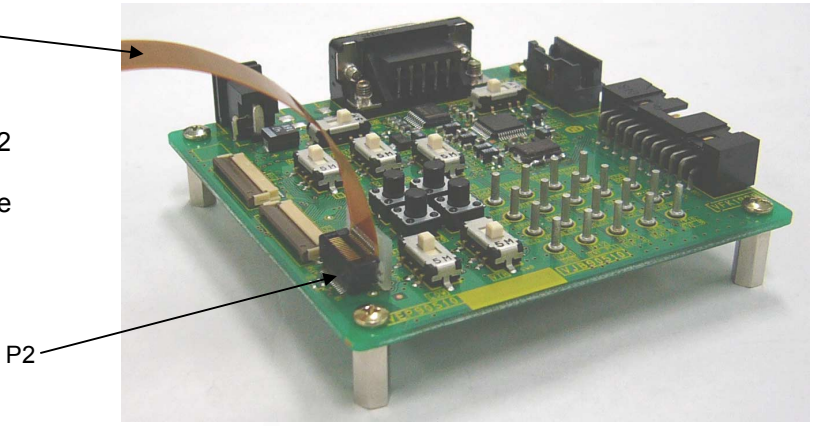


2. Loosen the screw and remove the EVR cover.



3. Connect the Extension Cable (VFK1989) to connector P2 on Measuring Board (VFK1988)

Connect VFK1989 with connector P2 as shown in picture.
The unit will not work if the connector is attached backwards.

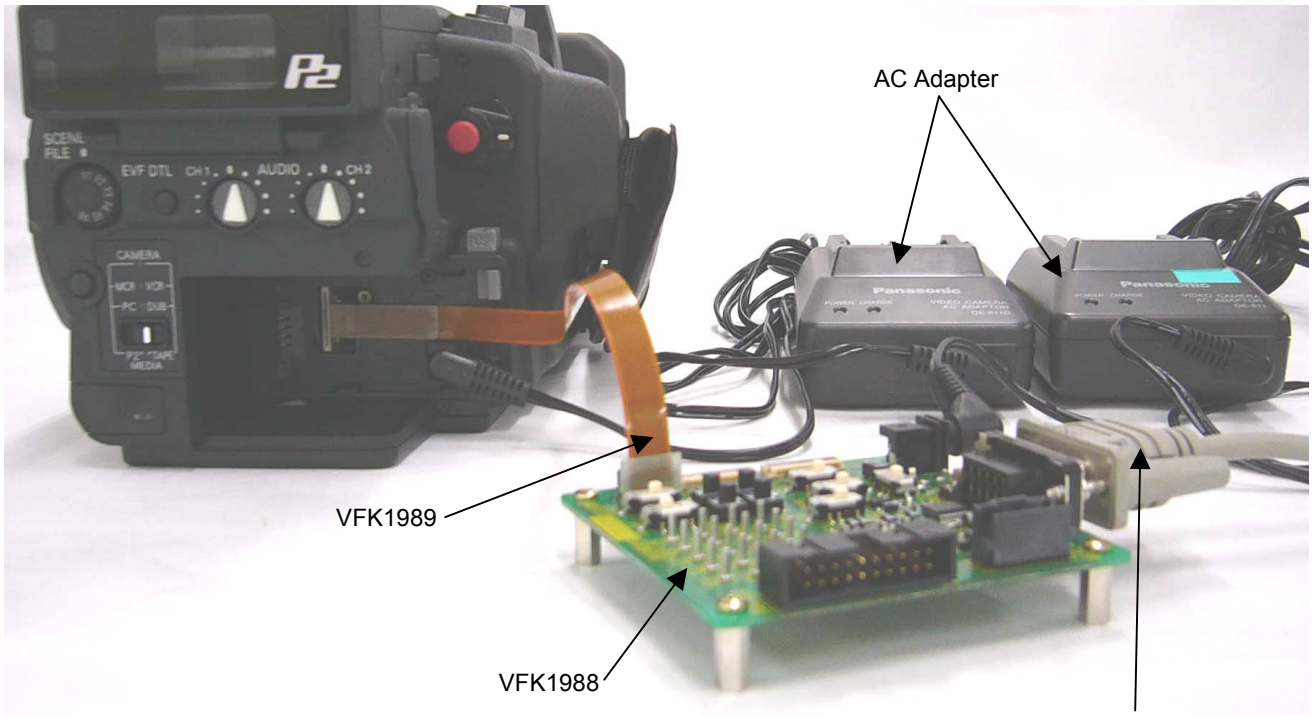


4. Connect the Extension Cable (VFK1989) to EVR connector in camera recorder. Then make sure that the direction of the VFK1989 is correct as shown in Figure.

When the VFK1989 is connected to EVR connector, be careful of the direction of connector on VFK1989. Please follow as shown in the figure.



5. Supply DC6V-9V to the Measuring Board (VFK1988). Please use the DC cable and AC Adapter to supply DC voltage to Measuring Board.
6. Connect a 9 pin RS-232C cross cable between the Measuring Board and RS-232C connector on Personal Computer as shown in Figure.



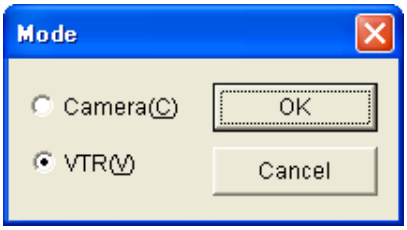
Circuitservice.ru

4. Adjustment procedure (CAMERA section)

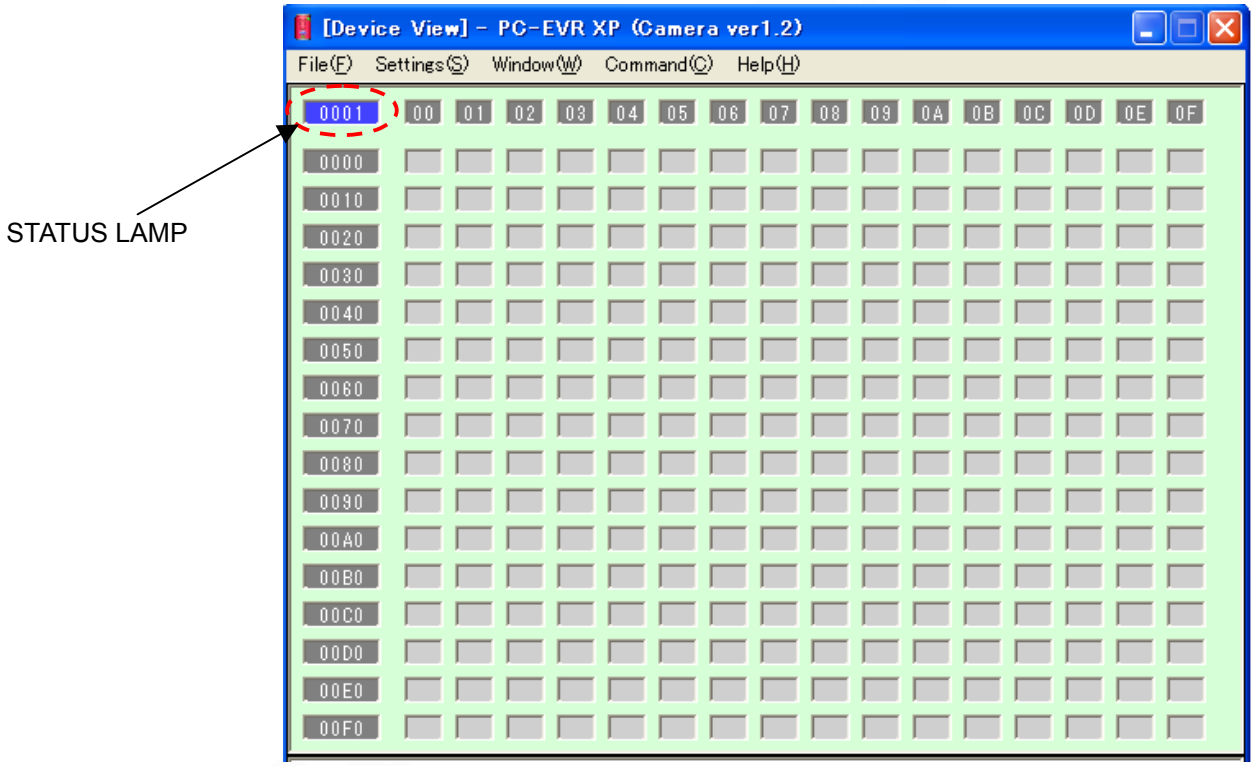
Set the AUTO/MANUAL switch to MANUAL position.
Confirm that the **SW8** on measuring board sets to **"SYS"** side.

4-1. Setup of PC EVR software for camera adjustment

1. Copy all files of the PC EVR software **(VVS0030)** for AG-HVX200/202 series to the PC.
2. Set the **MEDIA** switch to **"P2"** position.
3. Supply power to the Camera-Recorder and turn power ON.
4. Start up the PC EVR software by double-clicking **"VVS0030.exe"**. When communication between the PC and the Camera-Recorder has been succeeded, the following screen will appear.



5. Select **"Camera(C)"** mode on screen and click **"OK"** button. The following screen will appear and blue is displayed to the status lamp.

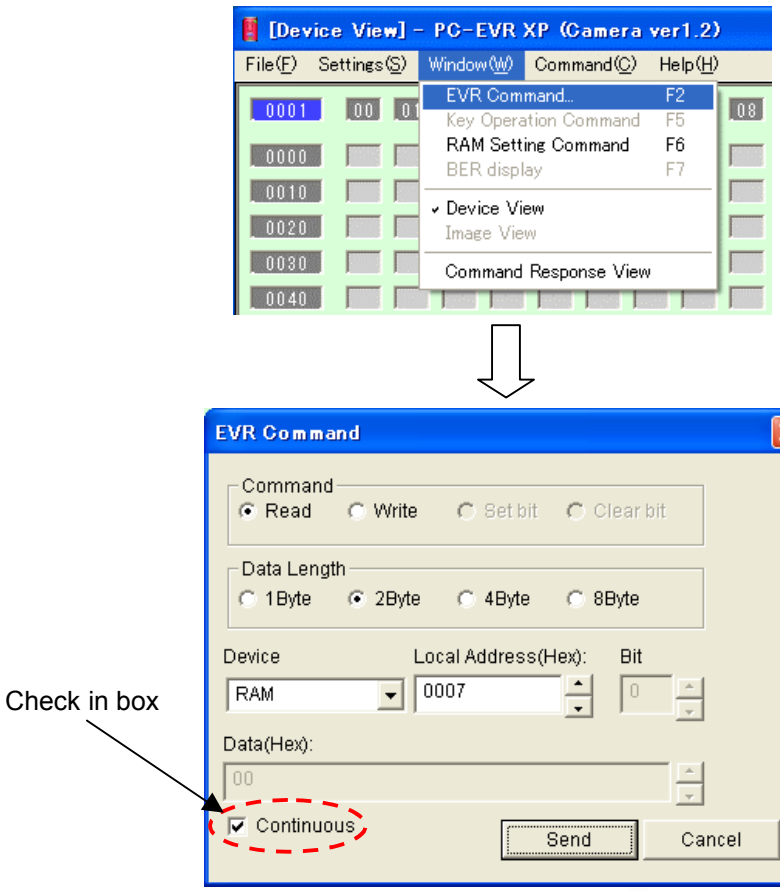


6. The communication status between the PC and the Camera-Recorder can be confirmed with the status lamp as following color.

Not Connected	:	black
Connected	:	blue
Reading	:	green
Writing	:	red

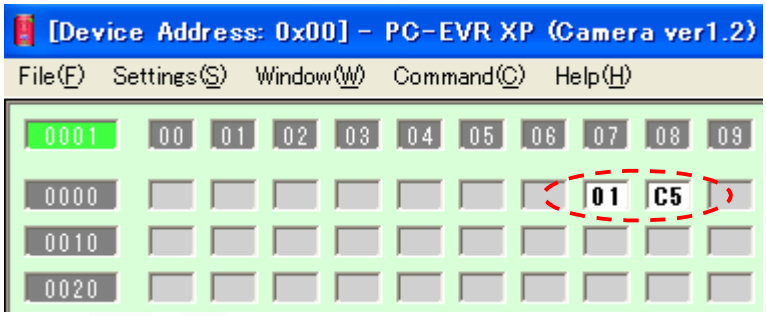
4-2. Zoom SW center value adjustment

1. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Read
Data Length	2Byte
Device	RAM
Local Address(Hex)	0007

2. Click **"Send"** button, the data of 0007 and 0008 address is displayed, and confirm that the status lamp is green.



Readout the data of zoom position at T side

3. Press T side button of zoom SW on the Grip cover to T position fully and release the finger from the button slowly.
4. Take notes of numeral value in **"Data"** box.
5. Repeat three times from the above steps 3 to 4.
6. Select the minimum value among three measurement value.

Readout the data of zoom position at W side

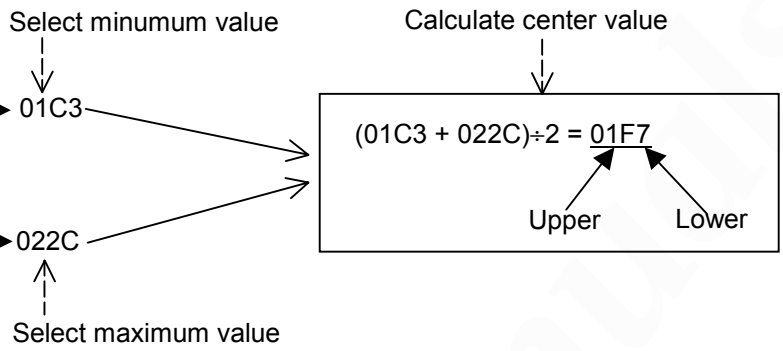
7. Press S side button of zoom SW on the Grip cover to W position fully and release the finger from the button slowly.
8. Take notes of numeral value in **"Data"** box.
9. Repeat three times from the above steps 7 to 8.
10. Select the maximum value among three measurement value.

Calculation of zoom SW center value

11. Calculate the center value with the minimum value of T side and the maximum value of W side as follows.

<For example>

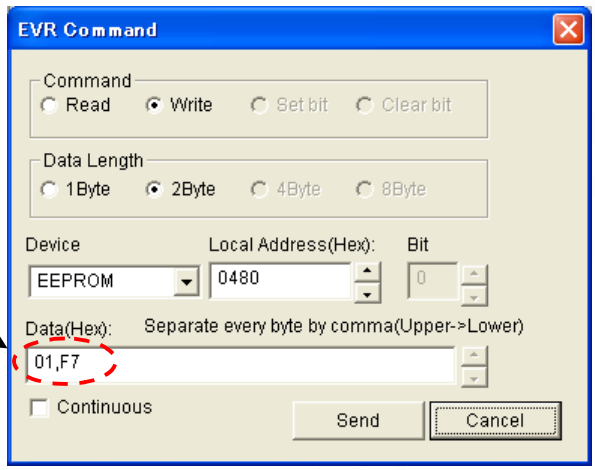
---	0007 (Upper)	0008 (Lower)
Tele	01	C3
	01	C5
	01	C7
Wide	02	2C
	02	2C
	02	2B



Writing the data of zoom SW center value

12. Set each item on EVR Command screen as follows.

ex.)
When inputting as 01,F7



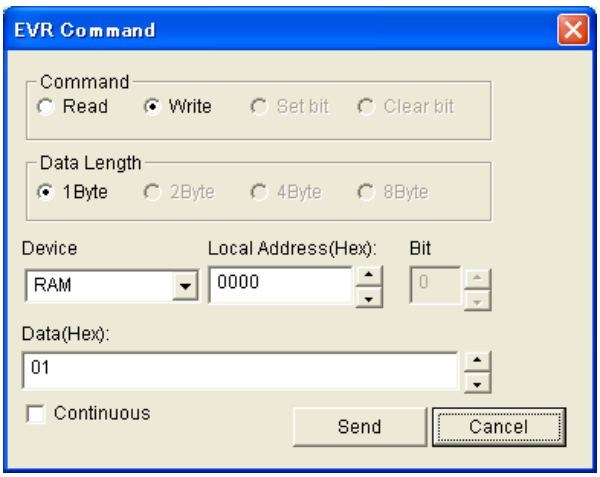
Command	Write
Data Length	2Byte
Device	EEPROM
Local Address(Hex)	0480

13. Input the zoom SW center value, which is calculated at step 11, in **"Data(Hex)"** box and click **"Send"** button.
    Example: Input **"01,F7"** when the zoom SW center value is **"01F7"**.
    Operate the zoom SW on the Grip cover and confirm that zoom operation works smoothly.

Circuit Diagram

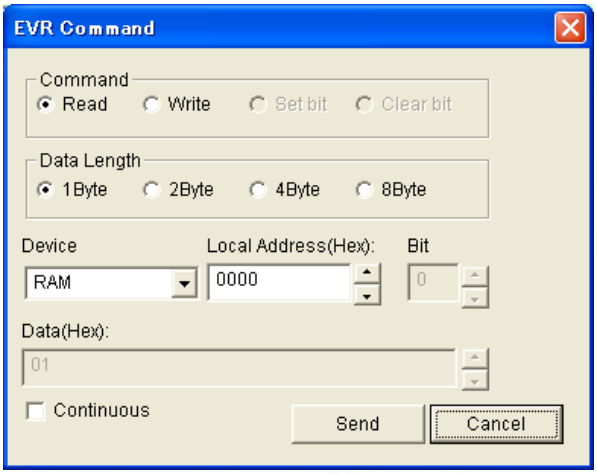
4-3. Hall Amp adjustment (Auto)

1. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



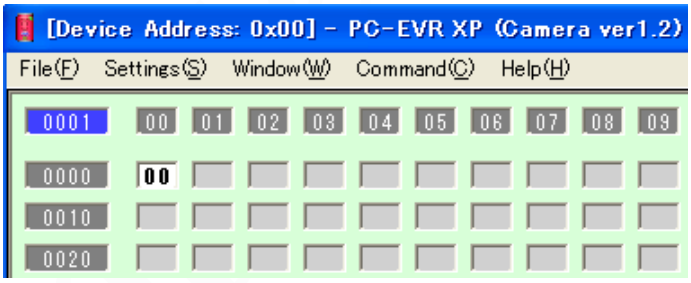
Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	01

2. Click **"Send"** button. Automatic adjustment starts.
3. After the status lamp display is return to blue, set each item on EVR Command screen as follows.



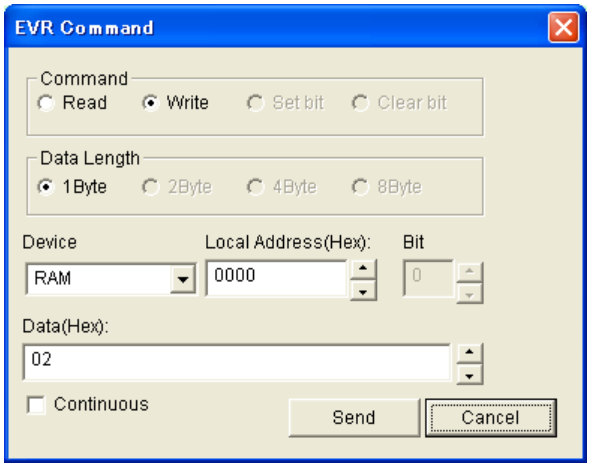
Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

4. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.



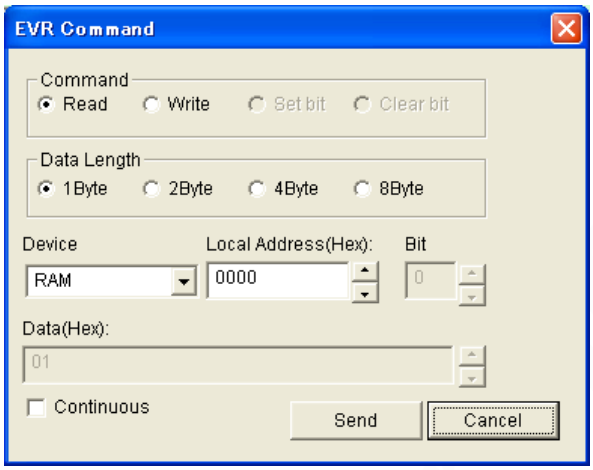
4-4. Iris PWM adjustment (Auto)

1. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	02

2. Click **"Send"** button. Automatic adjustment starts.
3. After the status lamp display is return to blue, set each item on EVR Command screen as follows.



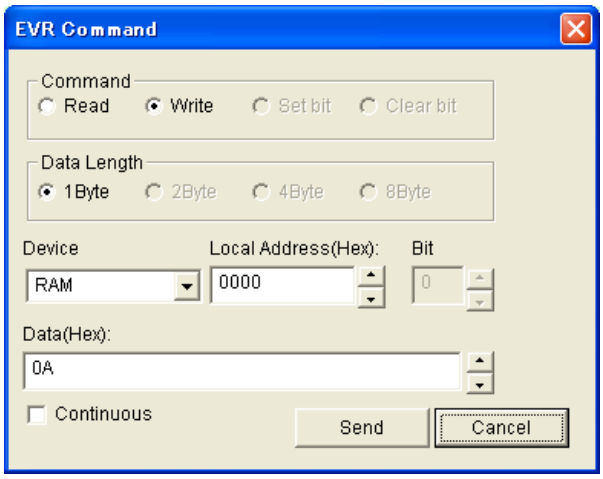
Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

4. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.

Clegg Service Manual

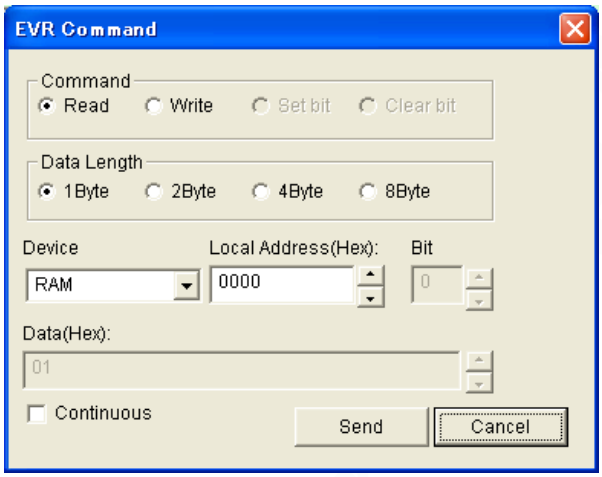
4-5. OISu adjustment (Auto)

1. Select **“EVR Command”** in **“File(F)”** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	0A

2. Click **“Send”** button. Automatic adjustment starts.
3. After the status lamp display is return to blue, set each item on EVR Command screen as follows.



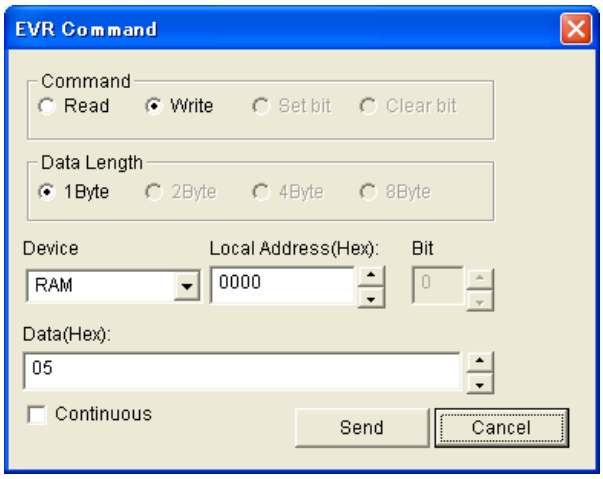
Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

4. Click **“Send”** button and confirm that the data of 0000 address is displayed as **“00”**.

Olympus Confidential

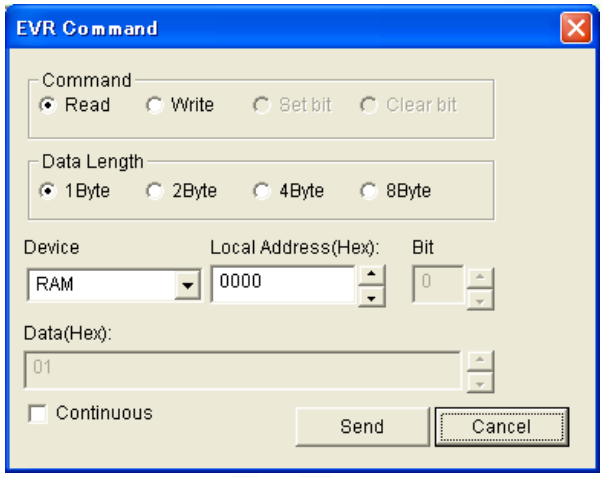
4-6. Zoom tracking adjustment (Auto)

1. Set the 82mm Attachment Ring (VFK1987) to the front of Lens.
2. Set the 43mm attachment ring (VFK1164TAR43) to the Collimator (VFK1164TCM01).
3. Set the Collimator (VFK1164TCM01) with the 43mm attachment ring (VFK1164TAR43) to 82mm Attachment Ring (VFK1987).
4. Adjust the position of lens unit and collimator so that the center of chart is always located at the center of monitor when moved between T and W.
5. Set the Iris to Auto.
6. Set the ZOOM switch toSERVO.
7. Aim the Camera-Recorder at white paper under the Halogen lamp condition (3100K, 2000Lux).
8. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	05

9. Click **"Send"** button. Automatic adjustment starts.
10. After the status lamp display is return to blue, set each item on EVR Command screen as follows.

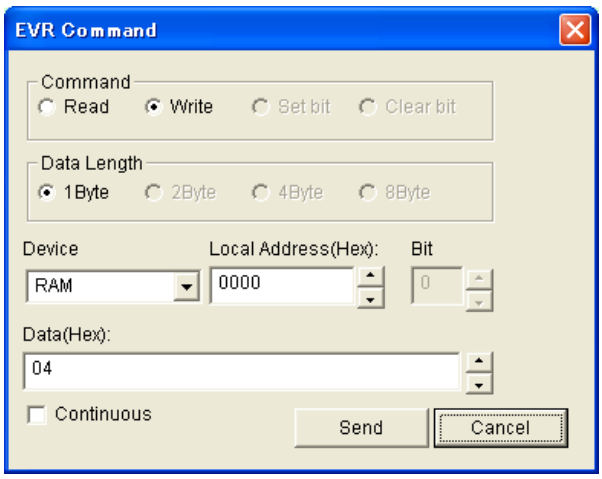


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

11. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.

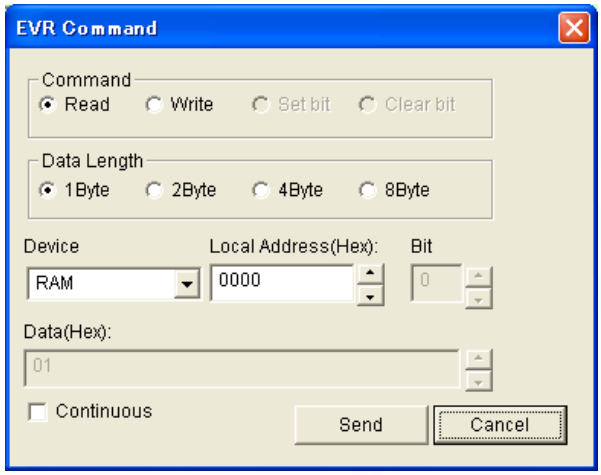
4-7. CCD white scratch damage revision adjustment (Auto)

1. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	04

2. Click **"Send"** button. Automatic adjustment starts.
3. After the status lamp display is return to blue, set each item on EVR Command screen as follows.



Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

4. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.

Checked & Confirmed 2010.10.15

4-8. White balance adjustment

Please adjust it according to the following flow chart when you adjust the white balance.

4-8-1. Preparation of White balance adjustment

↓

4-8-2. White balance adjustment (3100K) (Auto)

↓

4-8-3. White balance adjustment (5100K) (Auto)

↓

4-8-4. White balance adjustment (4500K) (Auto)

↓

4-8-5. White balance adjustment (3600K) (Auto) **NOTE: Required only for NTSC model**

↓

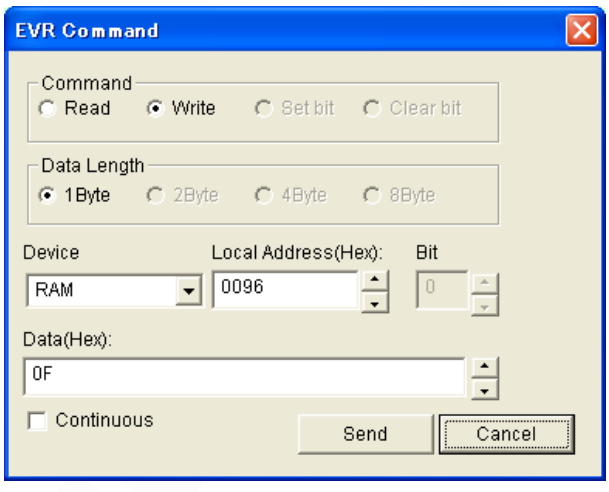
4-8-6. End of White Balance adjustment processing

4-8-1. Preparation of White balance adjustment

1. Set the Iris to Auto.
2. Set the ND filter SW to OFF position.
3. Aim the Camera-Recorder at grayscale chart under the Halogen lamp condition (3100K, 2000Lux).
4. Set the WHITE BAL switch to PRST position.
5. Press the AWB button to set P3.2.
6. Execute ABB.

NOTE: Please change the ND filter position if necessary by the state of brightness.

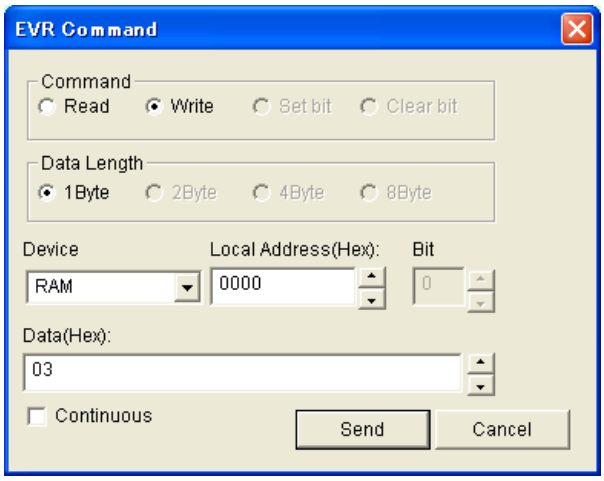
7. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0096
Data(Hex)	0F

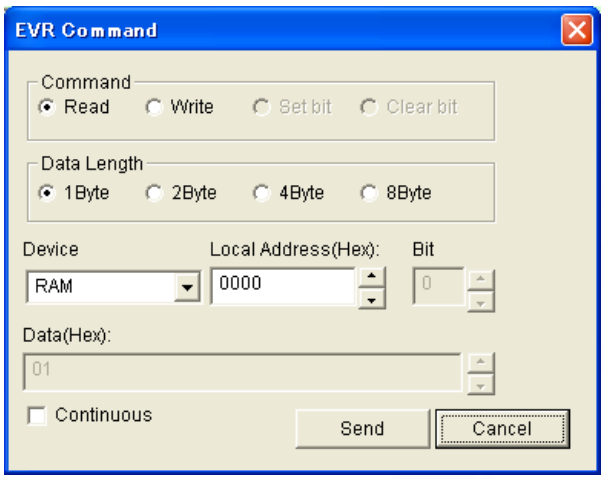
8. Click **"Send"** button.

9. After the status lamp display is return to blue, change the local address to **“0000”** and change the data to **“03”**.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	03

10. Click **“Send”** button.
11. After the status lamp display is return to blue, set each item on EVR Command screen as follows.

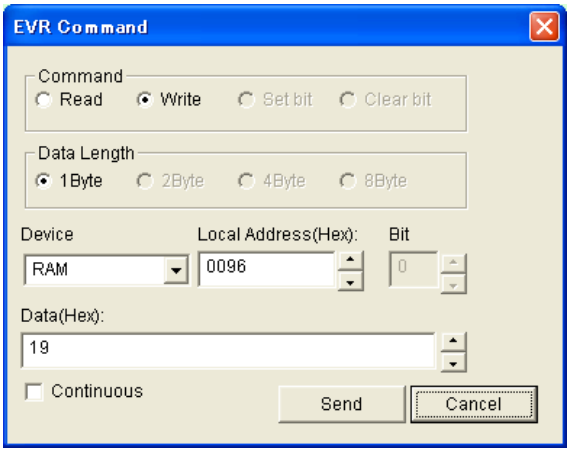


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

12. Click **“Send”** button and confirm that the data of 0000 address is displayed as **“00”**.

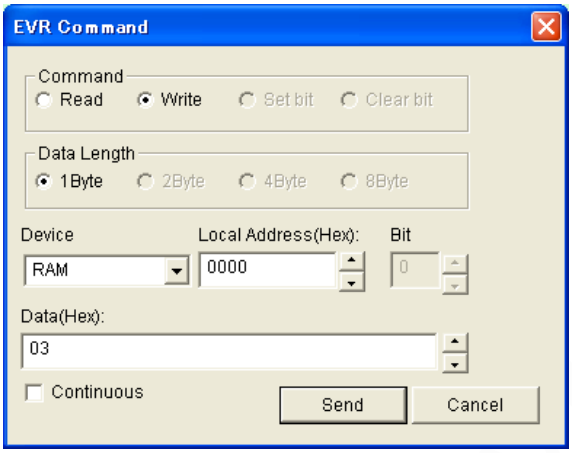
4-8-2. White balance adjustment (3100K) (Auto)

1. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



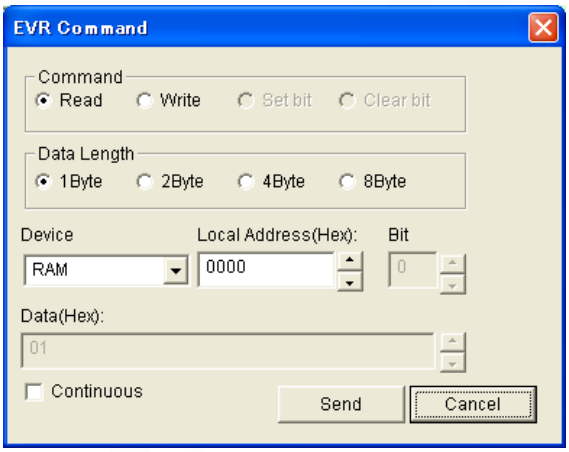
Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0096
Data(Hex)	19

2. Click **"Send"** button. Automatic adjustment starts.
3. After the status lamp display is return to blue, change the local address to **"0000"** and change the data to **"03"**.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	03

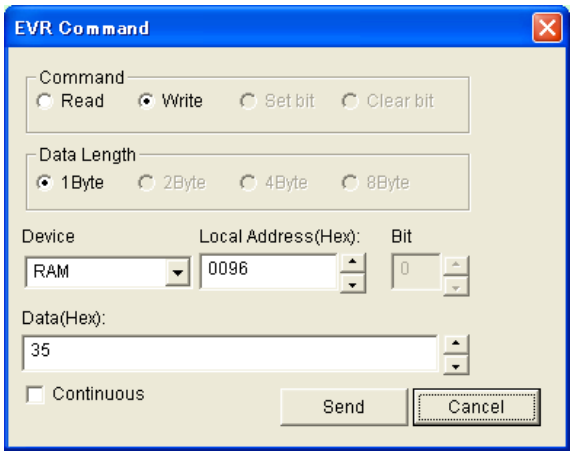
4. Click **"Send"** button. Automatic adjustment starts.
5. After the status lamp display is return to blue, set each item on EVR Command screen as follows.



Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

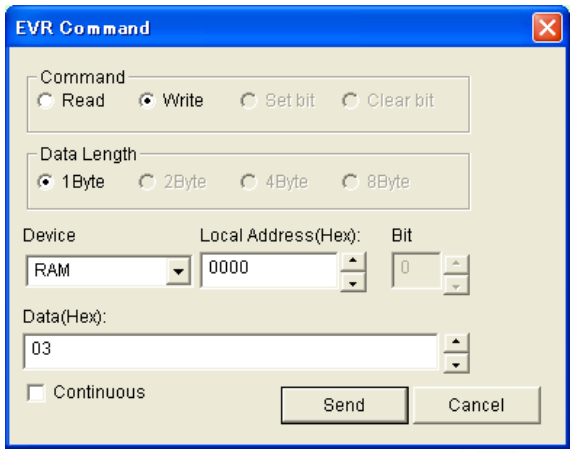
6. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.

7. Set each item on EVR Command screen as follows. Click **"Send"** button. Automatic adjustment starts.



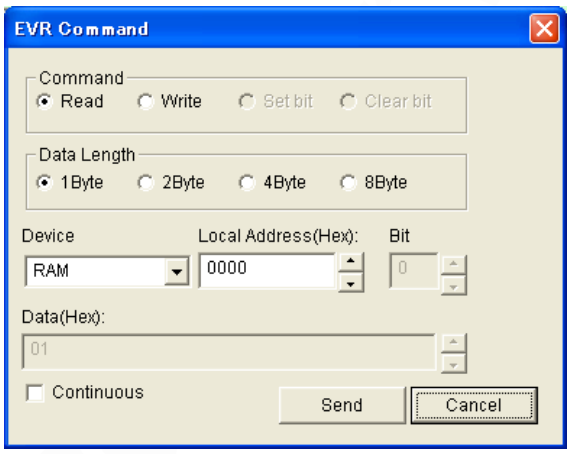
Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0096
Data(Hex)	35

8. After the status lamp display is return to blue, change the local address to **"0000"** and change the data to **"03"**.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	03

9. Click **"Send"** button. Automatic adjustment starts.
10. After the status lamp display is return to blue, set each item on EVR Command screen as follows.

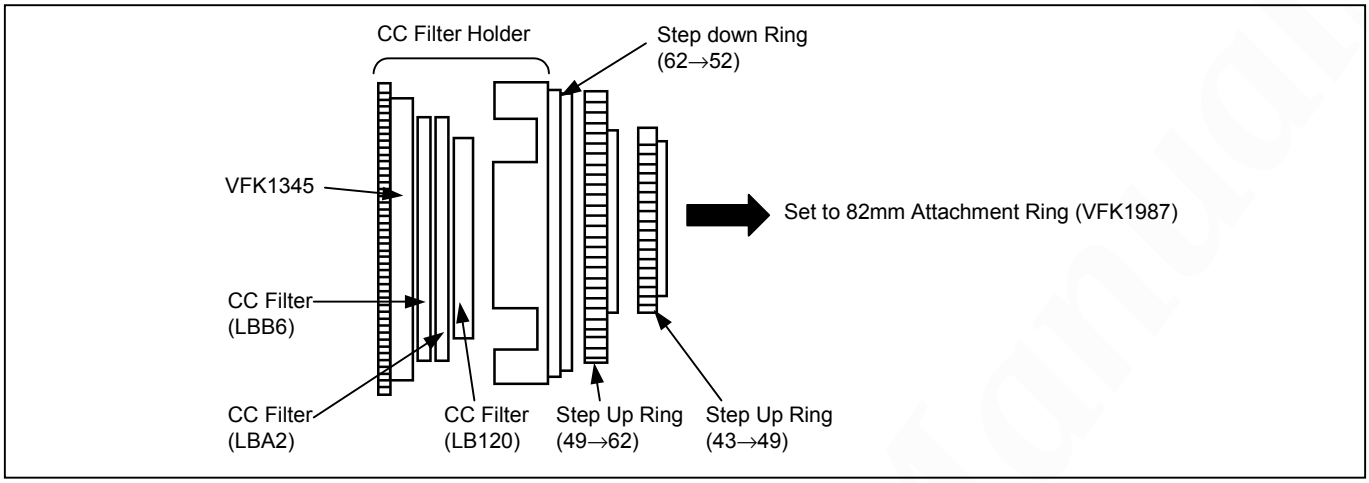


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

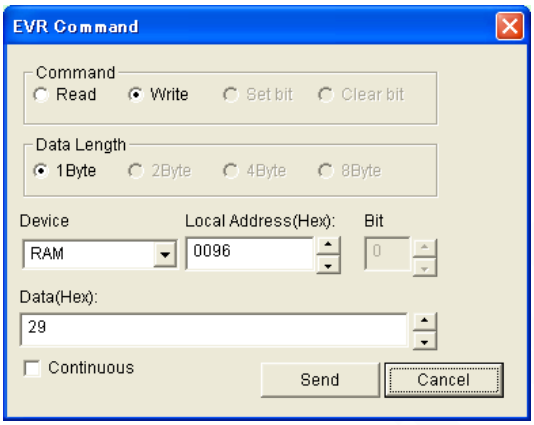
11. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.

4-8-3. White balance adjustment (5100K) (Auto)

1. Set the Color Conversion filters (LB120: VFK1347), (LBA2: VFK1884) and (LBB6: VFK1888) to the CC Filter Holder (VFK1345).
2. Set the one Step-down Ring (VFK1346) and two Step-up Rings (VFK1659, VFK1660) to the CC Filter Holder as shown in figure.
3. Set the 82mm Attachment Ring (VFK1987) to the front of Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 82mm Attachment Ring (VFK1987).

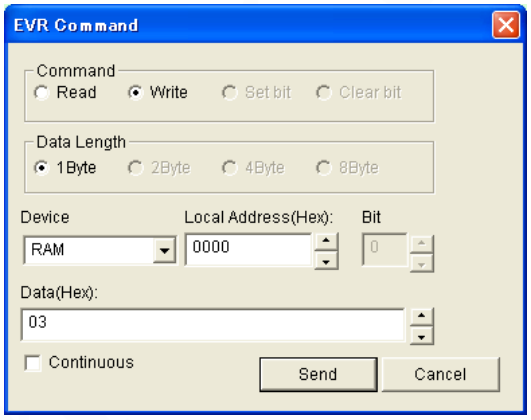


5. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0096
Data(Hex)	29

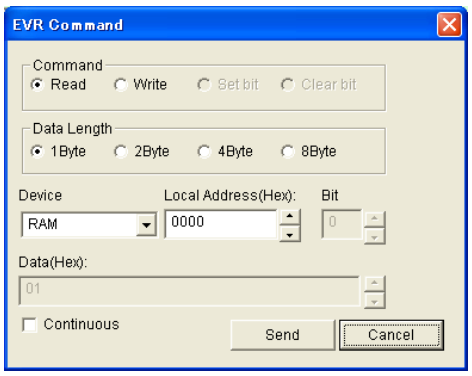
6. Click **"Send"** button. Automatic adjustment starts.
7. After the status lamp display is return to blue, change the local address to **"0000"** and change the data to **"03"**.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	03

8. Click **"Send"** button. Automatic adjustment starts.

9. After the status lamp display is return to blue, set each item on EVR Command screen as follows.



Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

10. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.

4-8-4. White balance adjustment (4500K) (Auto)

< In case of NTSC model >

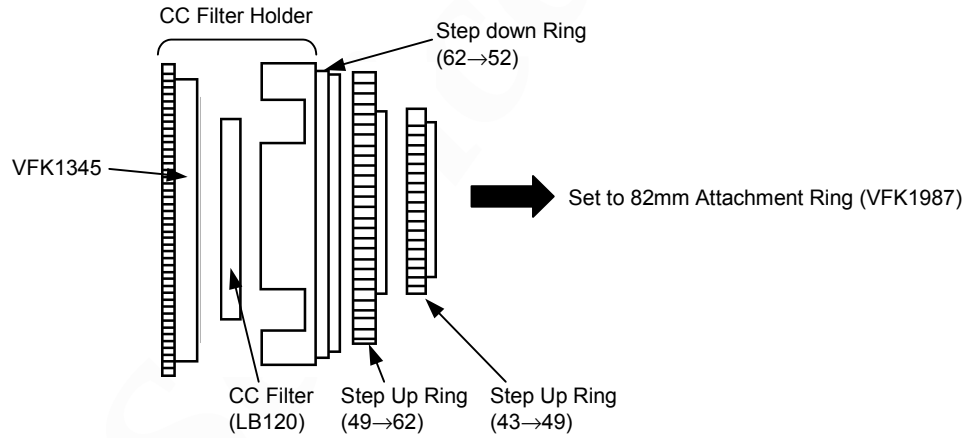
1. Set the Color Conversion filter (LB120: VFK1347) to the CC Filter Holder (VFK1345).

< In case of PAL model >

1. Set the Color Conversion filters (LB40: VFK1341) and (LBB2: VFK1885) to the CC Filter Holder (VFK1345).

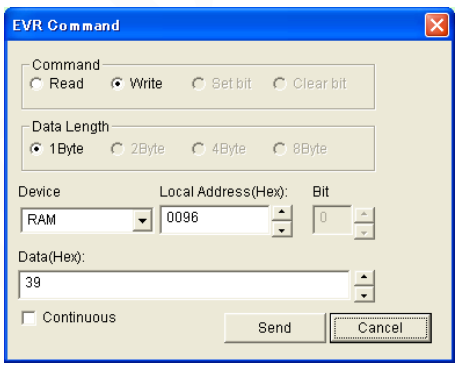
< Common procedures >

2. Set the one Step-down Ring (VFK1346) and two Step-up Rings (VFK1659, VFK1660) to the CC Filter Holder as shown in figure.
3. Set the 82mm Attachment Ring (VFK1987) to the front of Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 82mm Attachment Ring (VFK1987).



NOTE: Above figure shows in case of NTSC.

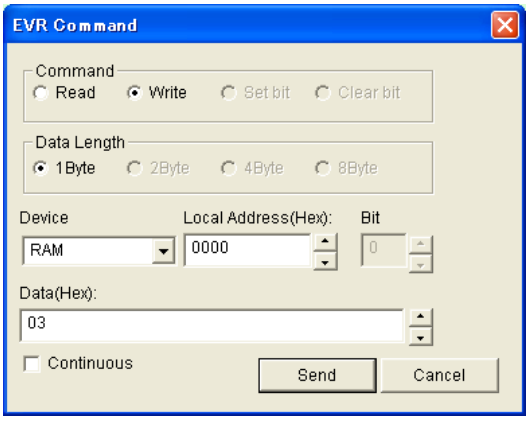
5. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0096
Data(Hex)	39

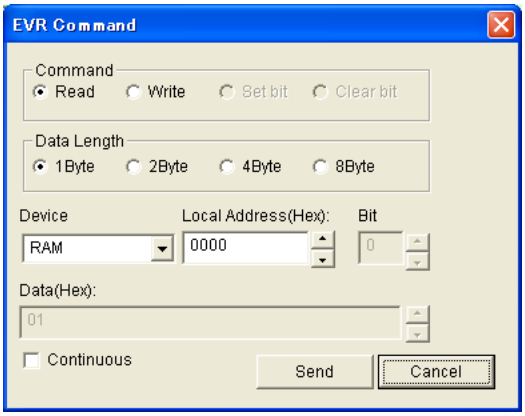
6. Click **"Send"** button. Automatic adjustment starts.

7. After the status lamp display is return to blue, change the local address to **“0000”** and change the data to **“03”**.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	03

8. Click **“Send”** button. Automatic adjustment starts.
9. After the status lamp display is return to blue, set each item on EVR Command screen as follows.

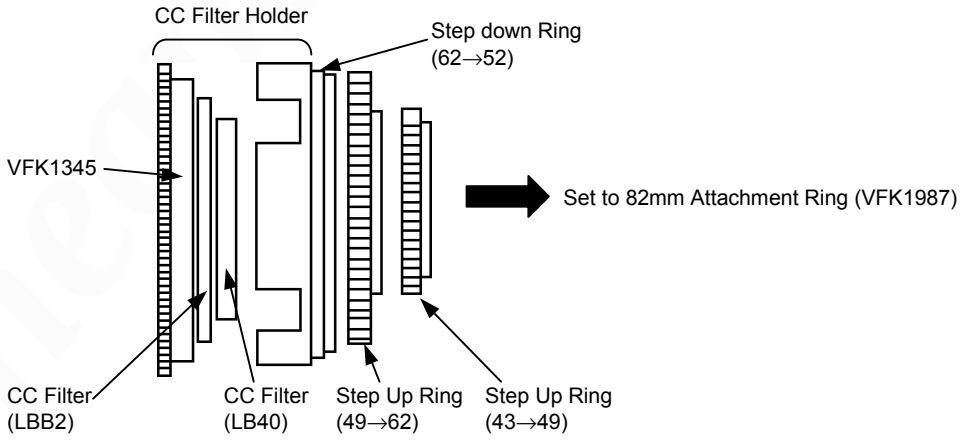


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

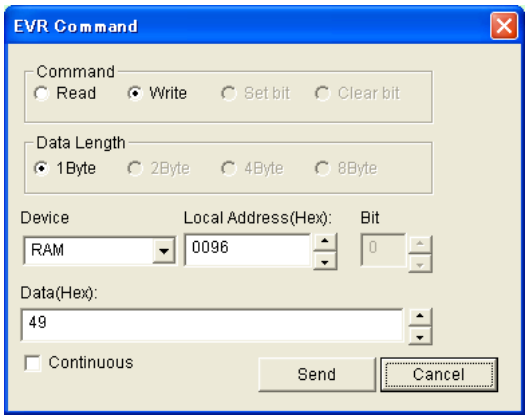
10. Click **“Send”** button and confirm that the data of 0000 address is displayed as **“00”**.

4-8-5. White balance adjustment (3600K) (Auto) (Required only for NTSC model)

1. Set the Color Conversion filters (LB40: VFK1341) and (LBB2: VFK1885) to the CC Filter Holder (VFK1345).
2. Set the one Step-down Ring (VFK1346) and two Step-up Rings (VFK1659, VFK1660) to the CC Filter Holder as shown in figure.
3. Set the 82mm Attachment Ring (VFK1987) to the front of Lens.
4. Set the CC Filter Holder with Step-up & down Rings to 82mm Attachment Ring (VFK1987).

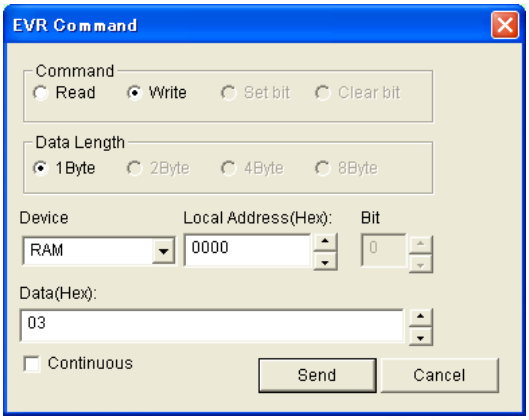


5. Select **“EVR Command”** in **“File(F)”** menu and set each item on EVR Command screen as follows.



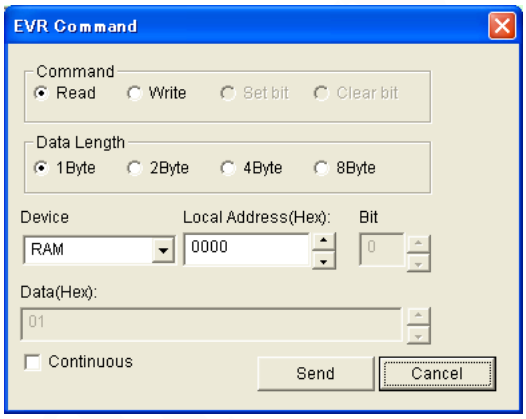
Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0096
Data(Hex)	49

6. Click **“Send”** button. Automatic adjustment starts.
7. After the status lamp display is return to blue, change the local address to **“0000”** and change the data to **“03”**.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	03

8. Click **“Send”** button. Automatic adjustment starts.
9. After the status lamp display is return to blue, set each item on EVR Command screen as follows.

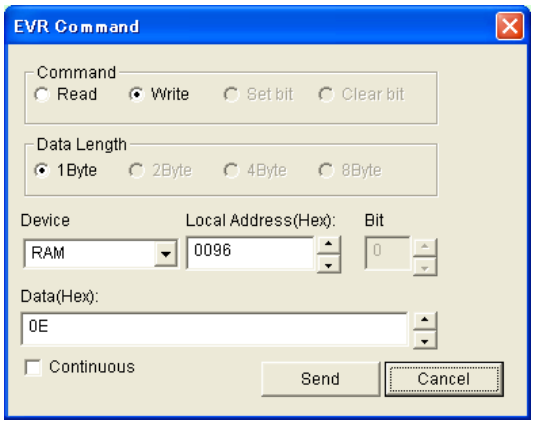


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

10. Click **“Send”** button and confirm that the data of 0000 address is displayed as **“00”**.

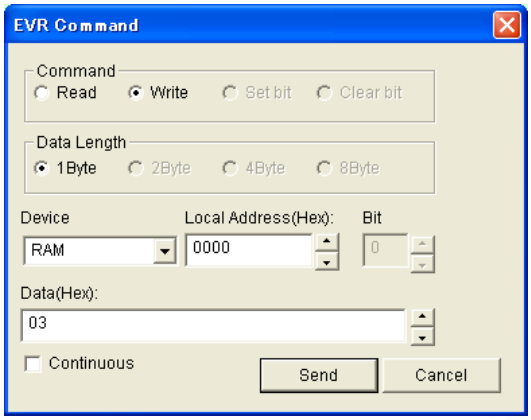
4-8-6. End of White Balance adjustment processing

1. Set each item on EVR Command screen as follows. Click **"Send"** button.



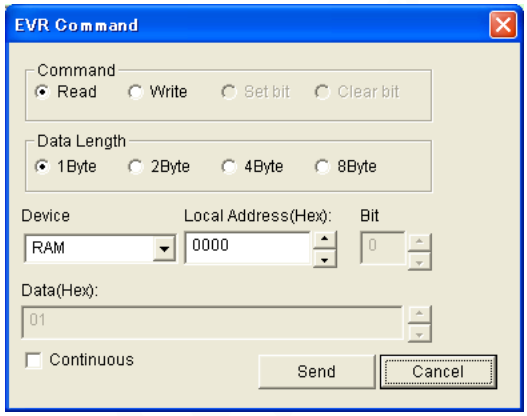
Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0096
Data(Hex)	0E

2. After the status lamp display is return to blue, change the local address to **"0000"** and change the data to **"03"**.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000
Data(Hex)	03

3. Click **"Send"** button. Automatic adjustment starts.
4. After the status lamp display is return to blue, set each item on EVR Command screen as follows.

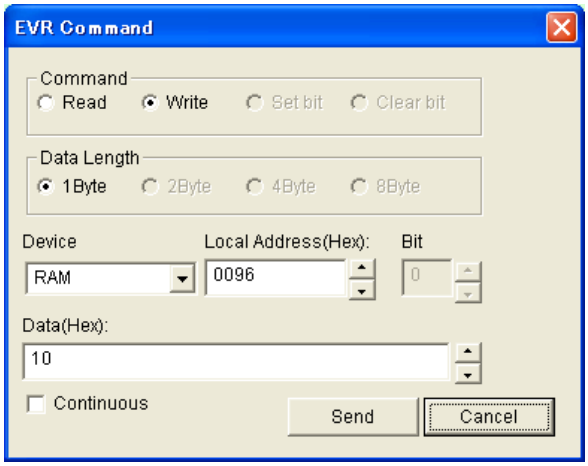


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

5. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.

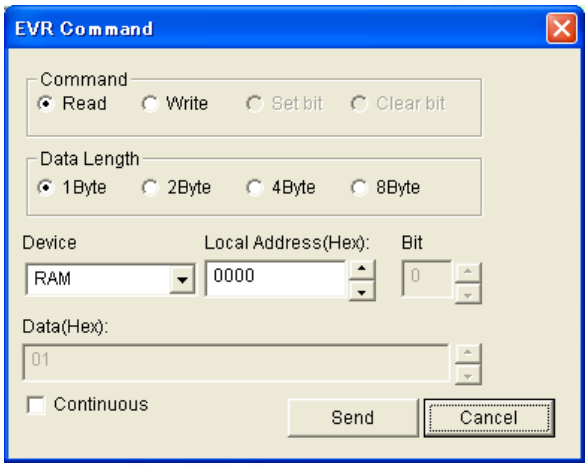
4-9. White shading adjustment (Auto)

1. Set the GAIN SW of Camera-Recorder to L (0dB).
2. Set the ATW to OFF.
3. Set the Iris to Auto.
4. Aim the Camera-Recorder at white paper under the Halogen lamp condition (3100K, 2000Lux).
5. Shoot the white paper so that the full screen is white.
6. Set White Balance by pressing the AWB SW and confirm that the message **"AWB OK"** appears on the center of screen.
7. Set the item **"MARKER"** to **"ON"** in DISPLAY SETUP screen of setting menu.
8. Press the ZEBRA SW and confirm that the marker appears on the screen.
9. Adjust the Iris dial so that luminance level is 70 to 80%. (Luminance level can be confirmed by numerical value displayed at left side of screen.)
10. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0096
Data(Hex)	10

11. Click **"Send"** button. Automatic adjustment starts.
12. After the status lamp display is return to blue, set each item on EVR Command screen as follows.

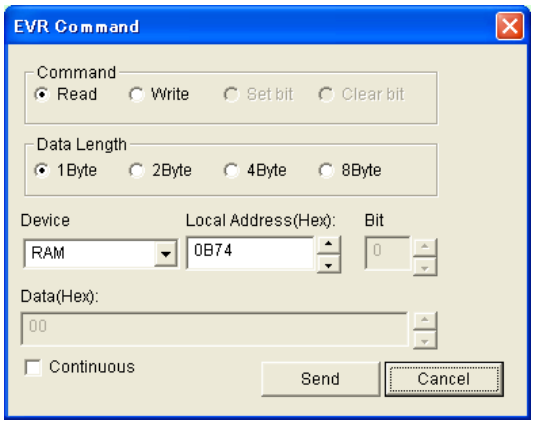


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0000

13. Click **"Send"** button and confirm that the data of 0000 address is displayed as **"00"**.

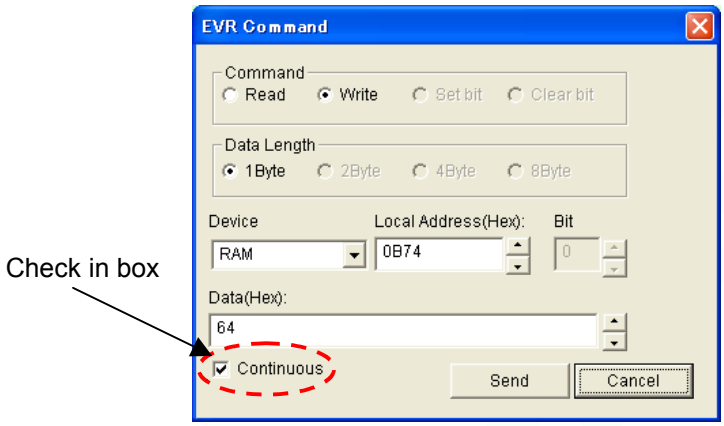
4-10. SYNC level (NTSC: 1080/60i) (PAL: 1080/50i) adjustment

1. Connect the WFM to the COMPONENT Y OUT with 75ohm termination.
   NOTE: Component video cable and PIN-BNC conversion cable are used.
2. Press BARS button to output a color bars signal.
3. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows. Click **"Send"** button.



Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0B74

4. **"Command"** is changed to **"Write"**, and the data value of 0B74 address displayed on the Device View screen is input to the **"Data(Hex)"** box.
5. Check in box of **"Continuous"** and click **"Send"** button.
6. Confirm that the status lamp display became red.

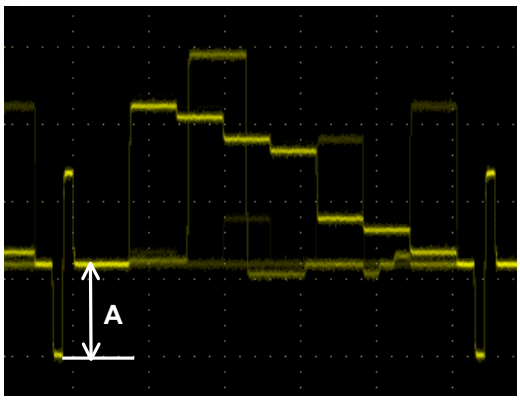


Command	Write
Data Length	1Byte
Device	RAM
Local Address(Hex)	0B74

7. Adjust sync level **"A"** by changing the value of **"Data(Hex)"** so that it is within specification. The value of **"Data(Hex)"** can be change by arrow keys on EVR Command screen.

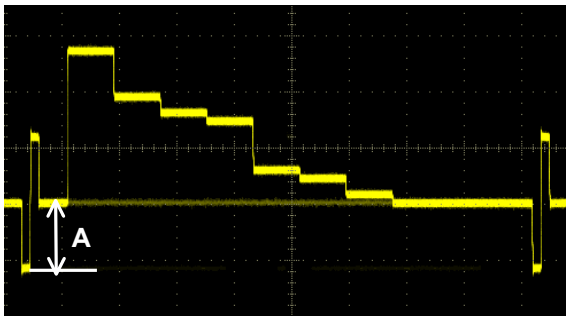
NTSC

A = -300mV ± 6mV

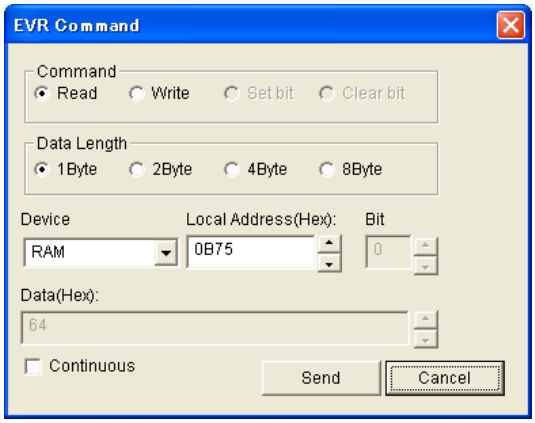


PAL

A = -300mV ± 6mV



8. After completing the adjustment, the check on **"Continuous"** is removed.
9. Set each item on EVR Command screen as follows. Click **"Send"** button.

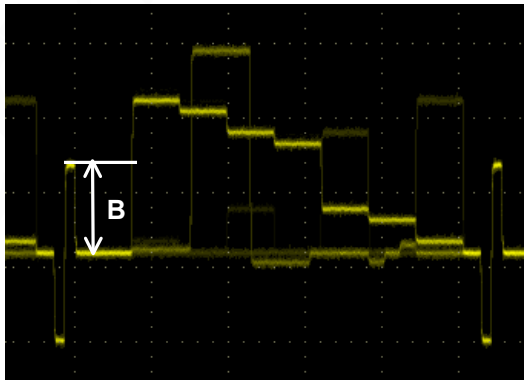


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0B75

10. **"Command"** is changed to **"Write"**, and the data value of 0B75 address displayed on the Device View screen is input to the **"Data(Hex)"** box.
11. Check in box of **"Continuous"** and click **"Send"** button.
12. Confirm that the status lamp display became red.
13. Adjust sync level **"B"** by changing the value of **"Data(Hex)"** so that it is within specification. The value of **"Data(Hex)"** can be change by arrow keys on EVR Command screen.

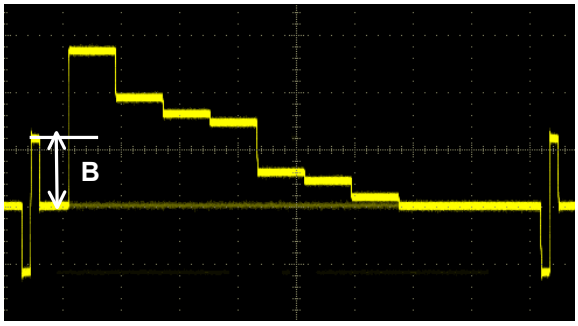
NTSC

B = +300mV ± 6mV



PAL

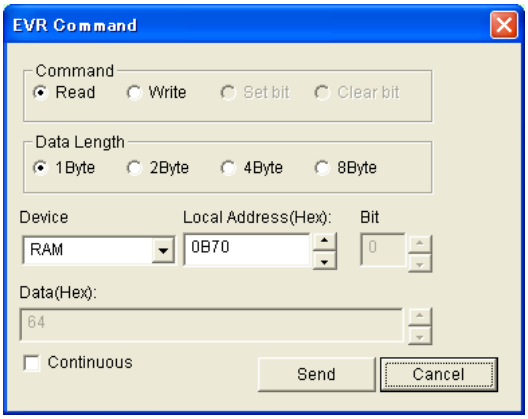
B = +300mV ± 6mV



14. After completing the adjustment, the check on **"Continuous"** is removed.

4-11. Y level (NTSC: 1080/60i) (PAL: 1080/50i) adjustment

1. Connect the WFM to the COMPONENT Y OUT with 75ohm termination.
   NOTE: Component video cable and PIN-BNC conversion cable are used.
2. Press BARS button to output a color bars signal.
3. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows. Click **"Send"** button.

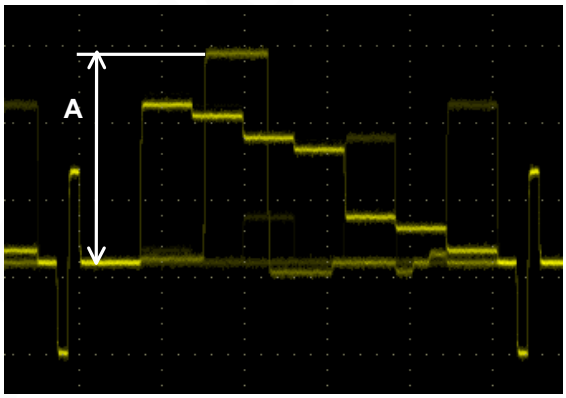


Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0B70

4. **"Command"** is changed to **"Write"**, and the data value of 0B70 address displayed on the Device View screen is input to the **"Data(Hex)"** box.
5. Check in box of **"Continuous"** and click **"Send"** button.
6. Confirm that the status lamp display became red.
7. Adjust Y level **"A"** by changing the value of **"Data(Hex)"** so that it is within specification. The value of **"Data(Hex)"** can be change by arrow keys on EVR Command screen.
   NOTE: The pedestal level is a standard.

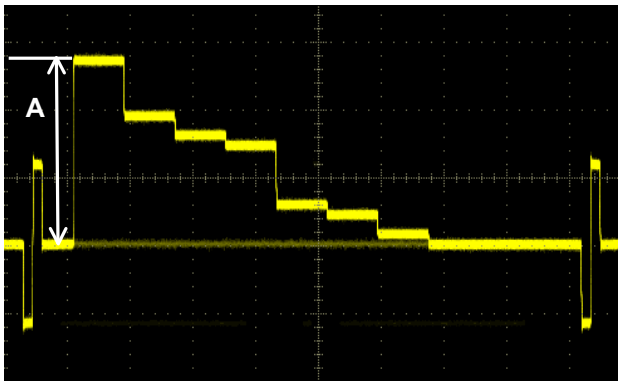
NTSC

A = 700mV ± 14mV



PAL

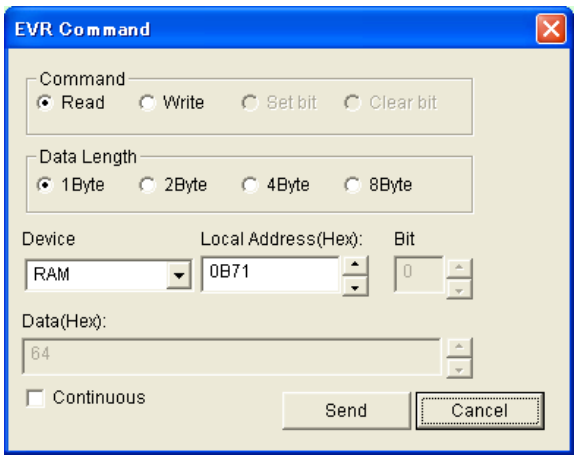
A = 700mV ± 14mV



8. After completing the adjustment, the check on **"Continuous"** is removed.

4-12. Pb level (NTSC: 1080/60i) (PAL: 1080/50i) adjustment

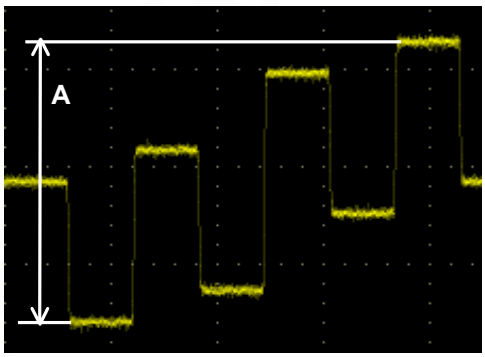
1. Connect the WFM to the COMPONENT Pb OUT with 75ohm termination.
   NOTE: Component video cable and PIN-BNC conversion cable are used.
2. Press BARS button to output a color bars signal.
3. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows. Click **"Send"** button.



Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0B71

4. **"Command"** is changed to **"Write"**, and the data value of 0B71 address displayed on the Device View screen is input to the **"Data(Hex)"** box.
5. Check in box of **"Continuous"** and click **"Send"** button.
6. Confirm that the status lamp display became red.
7. Adjust Pb level **"A"** by changing the value of **"Data(Hex)"** so that it is within specification. The value of **"Data(Hex)"** can be change by arrow keys on EVR Command screen.

A = 525mV ± 11mV

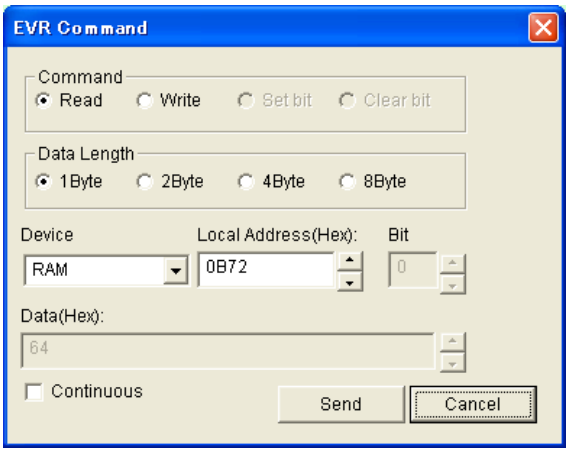


8. After completing the adjustment, the check on **"Continuous"** is removed.

Cleared for Internal Use

4-13. Pr level (NTSC: 1080/60i) (PAL: 1080/50i) adjustment

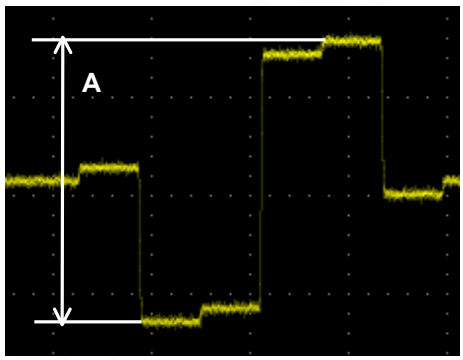
1. Connect the WFM to the COMPONENT Pr OUT with 75ohm termination.
   NOTE: Component video cable and PIN-BNC conversion cable are used.
2. Press BARS button to output a color bars signal.
3. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows. Click **"Send"** button.



Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0B72

4. **"Command"** is changed to **"Write"**, and the data value of 0B72 address displayed on the Device View screen is input to the **"Data(Hex)"** box.
5. Check in box of **"Continuous"** and click **"Send"** button.
6. Confirm that the status lamp display became red.
7. Adjust Pr level **"A"** by changing the value of **"Data(Hex)"** so that it is within specification. The value of **"Data(Hex)"** can be change by arrow keys on EVR Command screen.

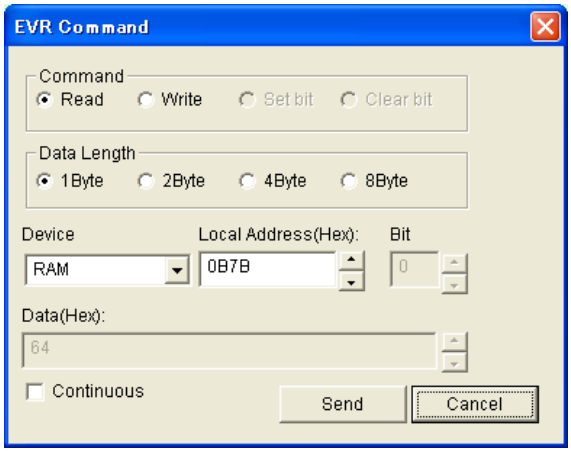
A = 525mV ± 11mV



8. After completing the adjustment, the check on **"Continuous"** is removed.

4-14. Luminance level adjustment

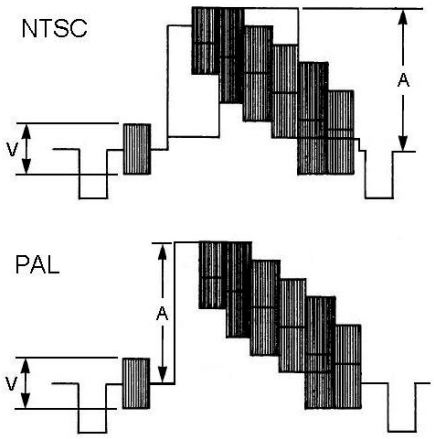
1. Connect the WFM to the VIDEO OUT with 75ohm termination.
2. Press BARS button to output a color bars signal.
3. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows. Click **"Send"** button.



Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0B7B

4. **"Command"** is changed to **"Write"**, and the data value of 0B7B address displayed on the Device View screen is input to the **"Data(Hex)"** box.
5. Check in box of **"Continuous"** and click **"Send"** button.
6. Confirm that the status lamp display became red.
7. Adjust Luminance level **"A"** by changing the value of **"Data(Hex)"** so that it is within specification. The value of **"Data(Hex)"** can be change by arrow keys on EVR Command screen.

NTSC: A = 100 IRE ± 2IRE
PAL: A = 700 mVp-p ± 14mV

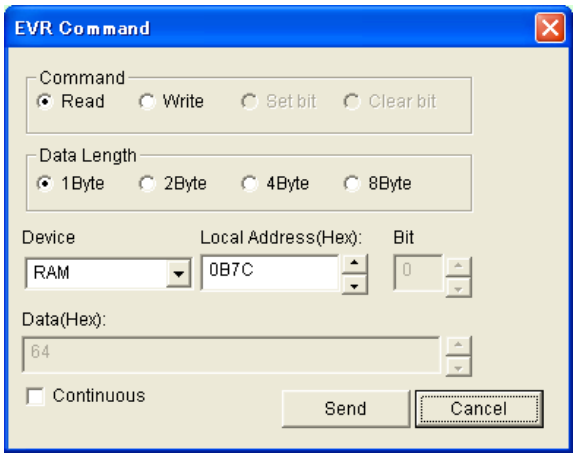


8. After completing the adjustment, the check on **"Continuous"** is removed.

Circuit Diagram

4-15. Chroma level adjustment

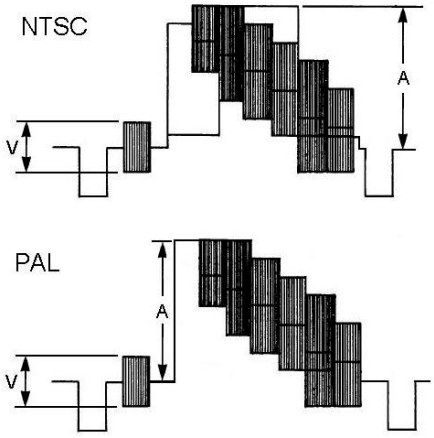
1. Connect the WFM to the VIDEO OUT with 75ohm termination.
2. Press BARS button to output a color bars signal.
3. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows. Click **"Send"** button.



Command	Read
Data Length	1Byte
Device	RAM
Local Address(Hex)	0B7C

4. **"Command"** is changed to **"Write"**, and the data value of 0B7C address displayed on the Device View screen is input to the **"Data(Hex)"** box.
5. Check in box of **"Continuous"** and click **"Send"** button.
6. Confirm that the status lamp display became red.
7. Adjust Chroma level **"A"** by changing the value of **"Data(Hex)"** so that it is within specification. The value of **"Data(Hex)"** can be change by arrow keys on EVR Command screen.

NTSC: V (Burst) = 40 IRE ± 3 IRE
PAL: V (Burst) = 300 mVp-p ± 20 mV



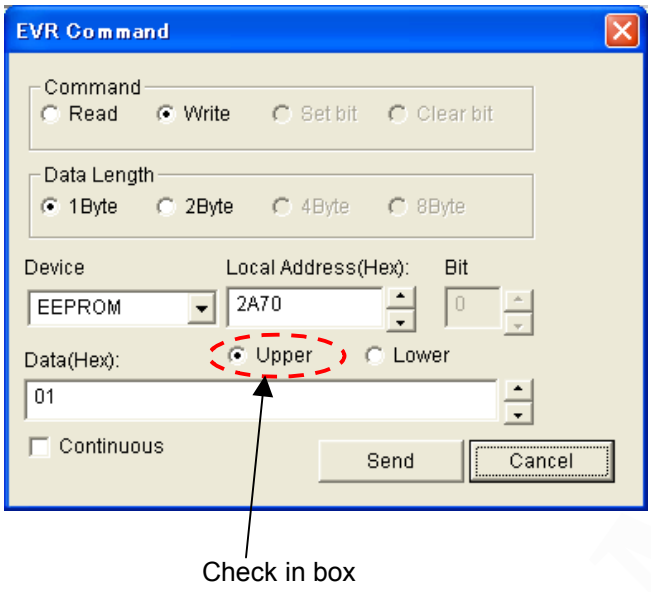
8. After completing the adjustment, the check on **"Continuous"** is removed.

Circuit Diagram

4-16. SETUP adjustment (Required only for NTSC model)

An initial value of item SETUP of the CAMERA SETUP menu is set to **"7.5%A"**.
NOTE: It is a setting of the item SETUP displayed in the P2-CAMERA mode.

1. Select **"EVR Command"** in **"File(F)"** menu and set each item on EVR Command screen as follows.



Command	Write
Data Length	1Byte
Device	EEPROM
Local Address(Hex)	2A70
Data(Hex)	01

2. Check in box of **"Upper"** and click **"Send"** button.
3. After the status lamp display is return to blue, Local Address is changed in **"6920"**.
4. Check in box of **"Lower"** and click **"Send"** button.
5. Next, after the status lamp display is return to blue, Local Address is changed in **"6990"**.
6. Click **"Send"** button.

Circuit Diagram Only

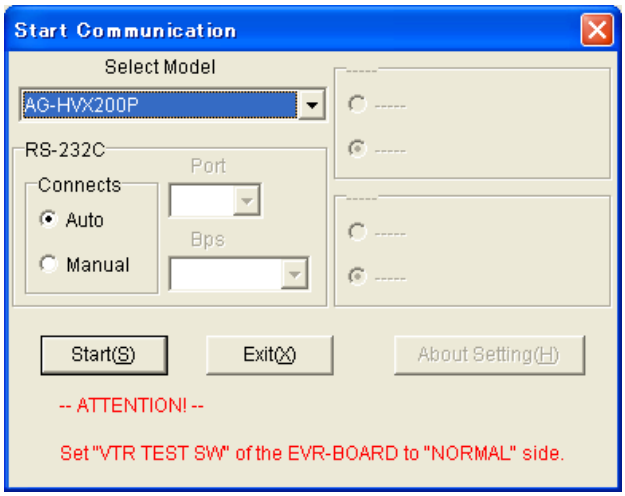
5. Adjustment procedure (VTR section)

When VTR is adjusted, the PC EVR software **(VVS0032)** for VTR adjustment is used.
Confirm that the **SW8** on measuring board sets to **"VTR"** side.

5-1. Preparation of adjustment

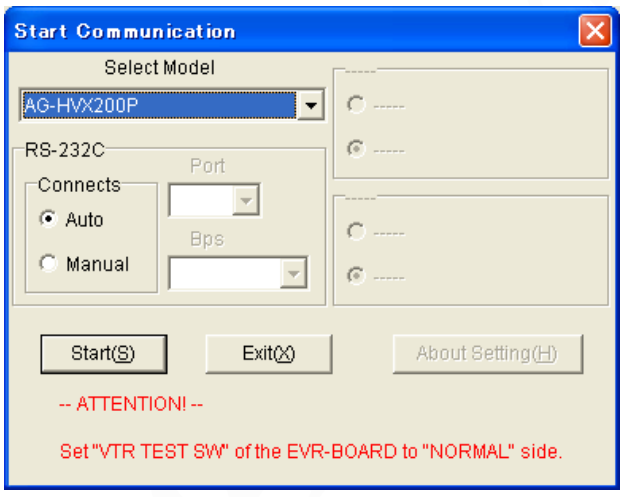
5-1-1. Setup of PC EVR software for VTR adjustment

1. Copy all files of the PC EVR software **(VVS0032)** for VTR adjustment to the PC.
2. Set the **MEDIA** switch to **"VTR"** position.
3. Supply power to the Camera-Recorder and turn power ON.
4. Start up the PC EVR software by double-clicking **"HVX200.exe"**. The following screen will appear.



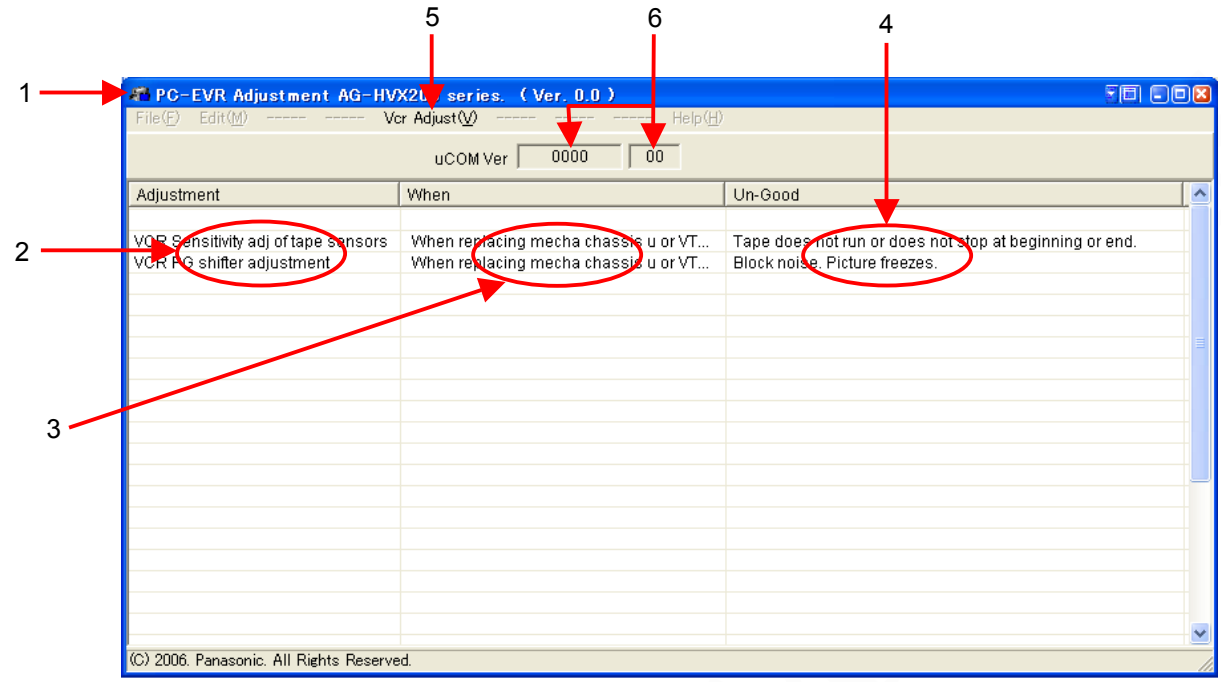
5-1-2. Setting of communication

1. Select the model in **"Select Model"** box.



2. Click **"Start(S)"** button. The main menu screen will appear.

5-1-3. Explanation of main menu

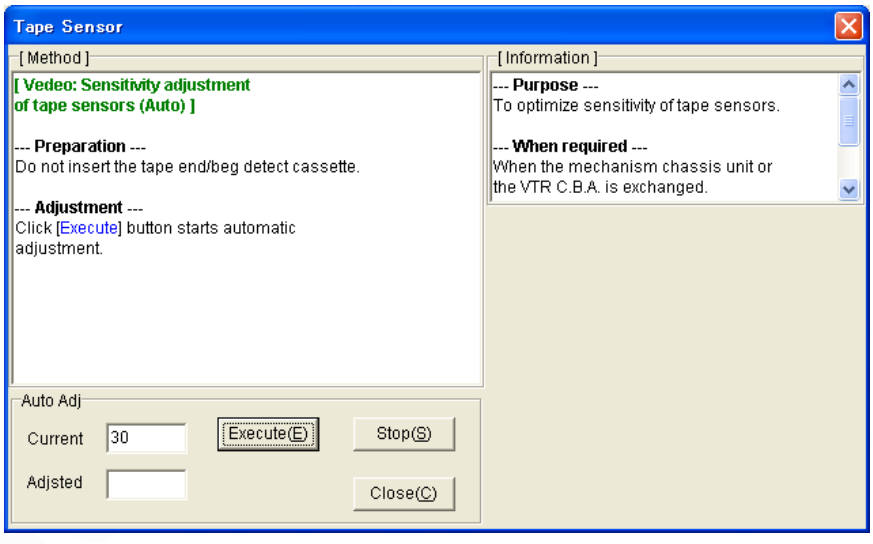


1: Software name and version
2: List of adjustment items
3: When required
4: Phenomenon when adjustment is not good
5: VTR adjustment
6: µCOM version

5-2. Sensitivity adjustment of tape sensors (Auto)

NOTE: Do not insert the tape end/beg detect cassette to the Camera-Recorder.

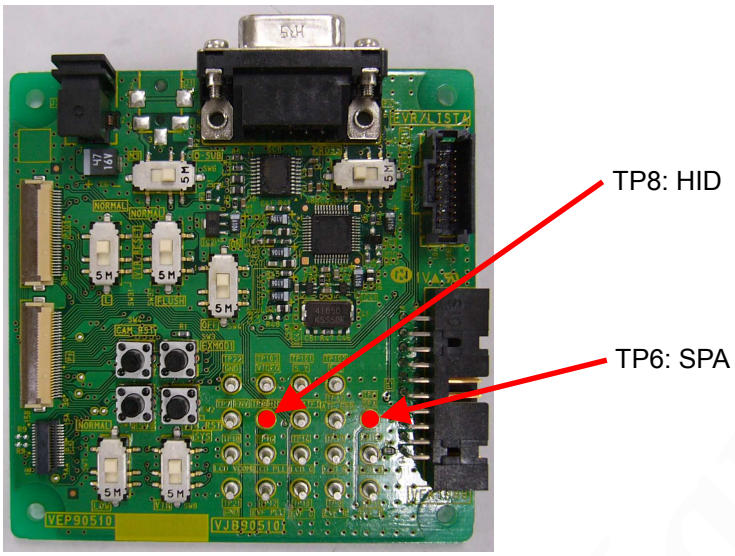
1. Double-click the adjustment item **"VCR Sensitivity adj. of tape sensors"** in the main menu. The following screen will appear.



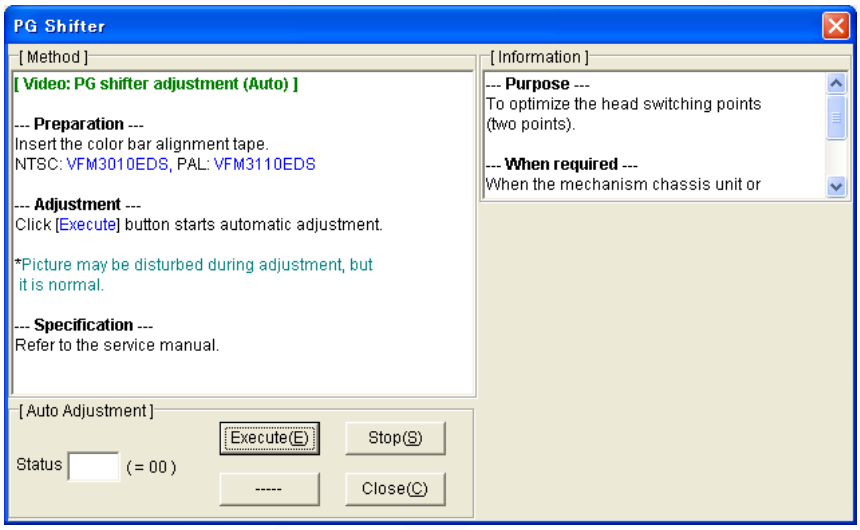
2. Click **"Execute(E)"** button. Automatic adjustment starts.
3. After adjustment has been completed, click **"Close(C)"** button to escape this menu.

5-3. PG shifter adjustment (Auto)

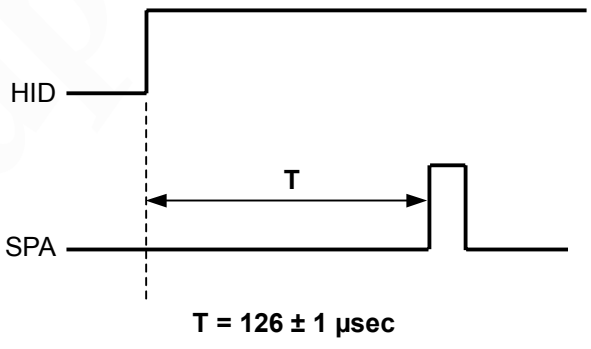
1. Connect the oscilloscope to **"TP6: SPA"** and **"TP8: HID"** on the measuring board.



2. Insert the DV color bar alignment tape (VFM3010EDS: NTSC or VFM3110EDS: PAL) to the Camera-Recorder.
3. Double-click the adjustment item **"VCR PG shifter adjustment"** in the main menu. The following screen will appear.



4. Click **"Execute(E)"** button. Automatic adjustment starts.
5. After adjustment has been completed, confirm that the portion **"T"** is within specification as shown below.



6. Click **"Close(C)"** button to escape this menu.

SECTION 5

BLOCK DIAGRAMS
ブロック図

MODEL: AG-HVX200/P/AN/E/MC/HVX202EN

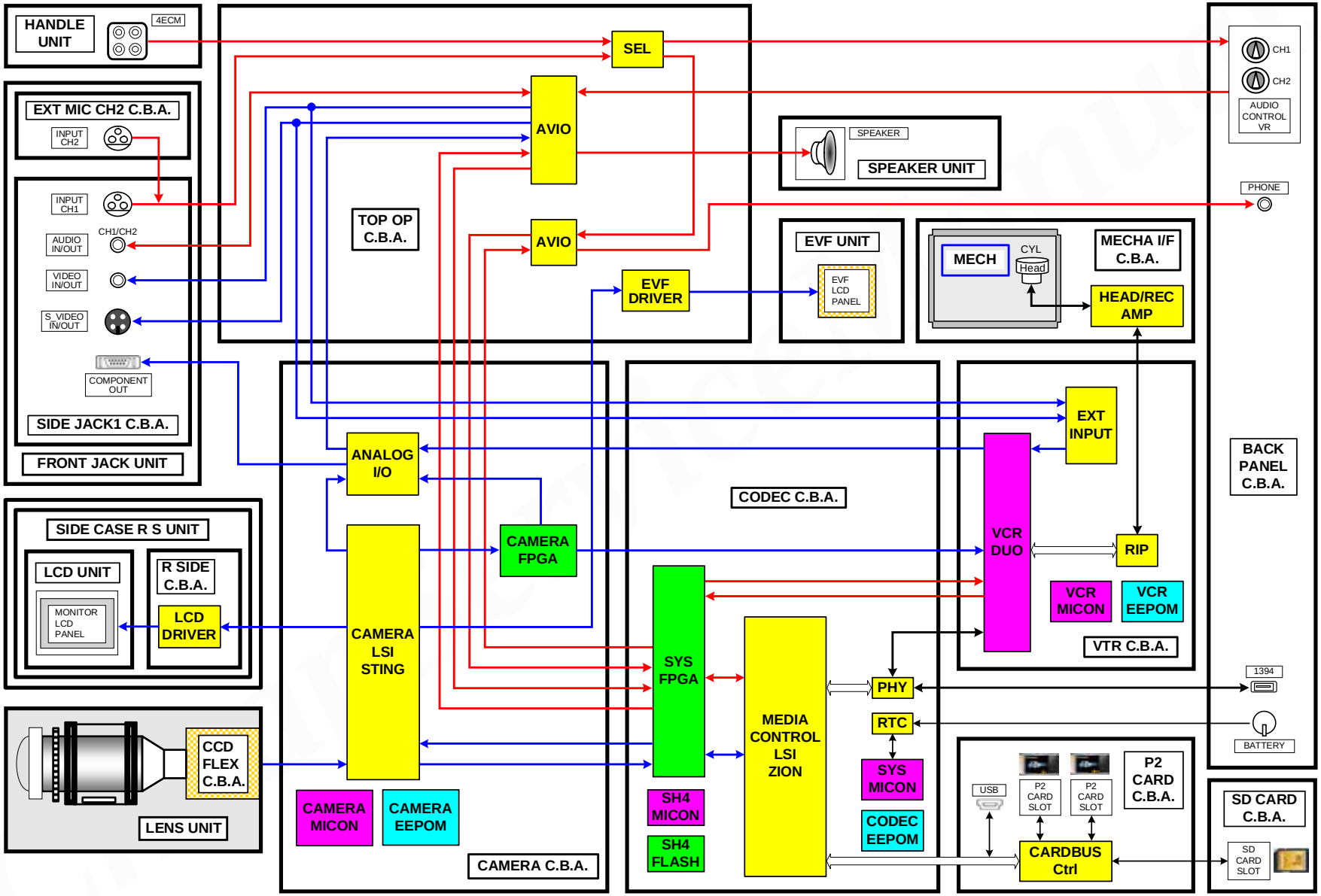
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VIDEO BLOCK DIAGRAM BLK-2
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- VIDEO BLOCK DIAGRAM (VCR REC: EXT IN) BLK-4
- VIDEO BLOCK DIAGRAM (VCR REC: 1394 IN) BLK-5
- VIDEO BLOCK DIAGRAM (VCR PLAY) BLK-6
- VIDEO BLOCK DIAGRAM (P2-CAMERA REC) BLK-7
- VIDEO BLOCK DIAGRAM (MCR REC: 1394 IN) BLK-8
- VIDEO BLOCK DIAGRAM (MCR PLAY) BLK-9
- VIDEO BLOCK DIAGRAM (DUBBING) BLK-10

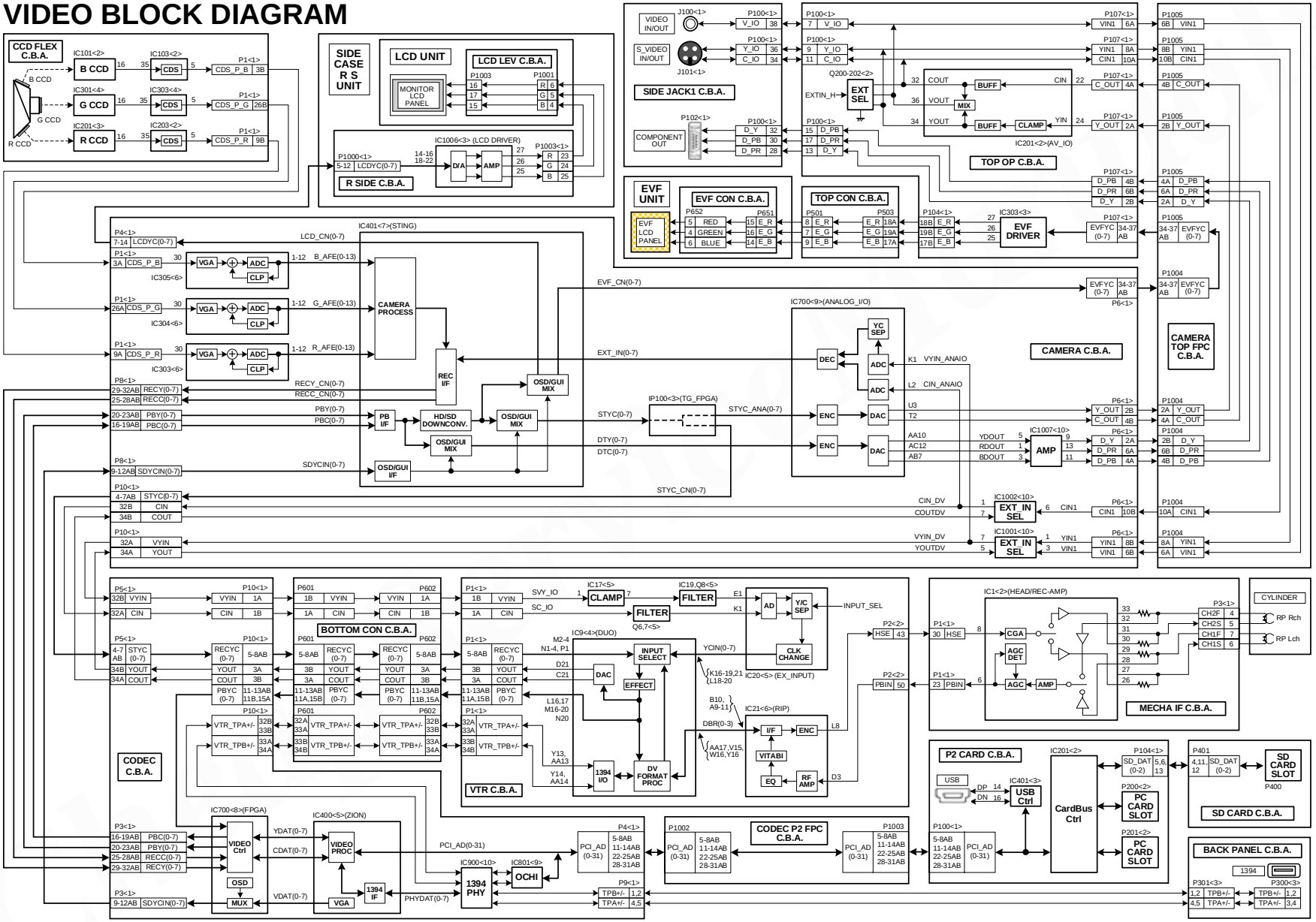
AUDIO BLOCK DIAGRAM BLK-11
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LENS DRIVE (CAMERA C.B.A.) BLOCK DIAGRAM BLK-20
SERVO DRIVE (VTR / MECHA IF C.B.A.) BLOCK DIAGRAM BLK-21

OVERALL BLOCK DIAGRAM

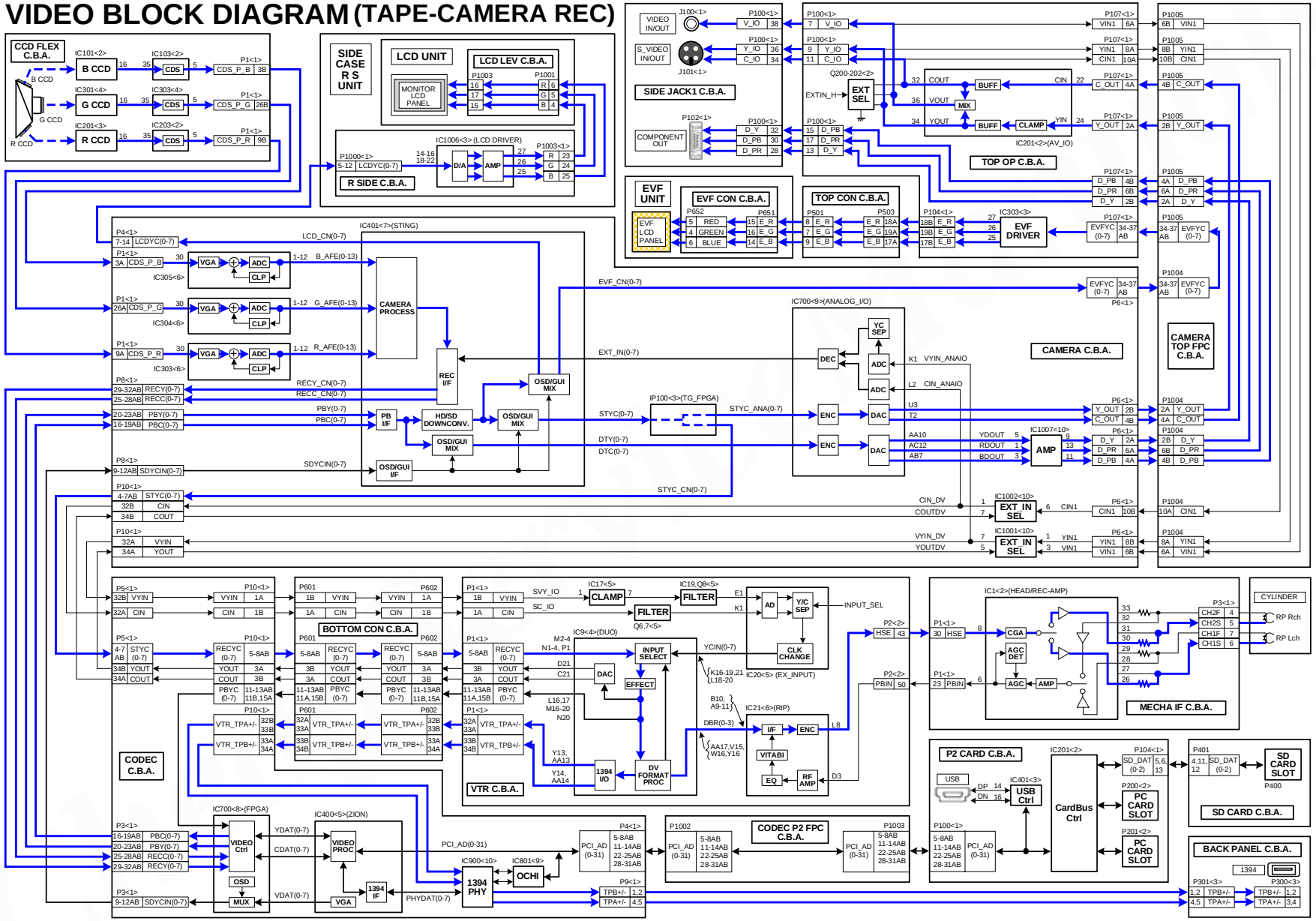


VIDEO BLOCK DIAGRAM

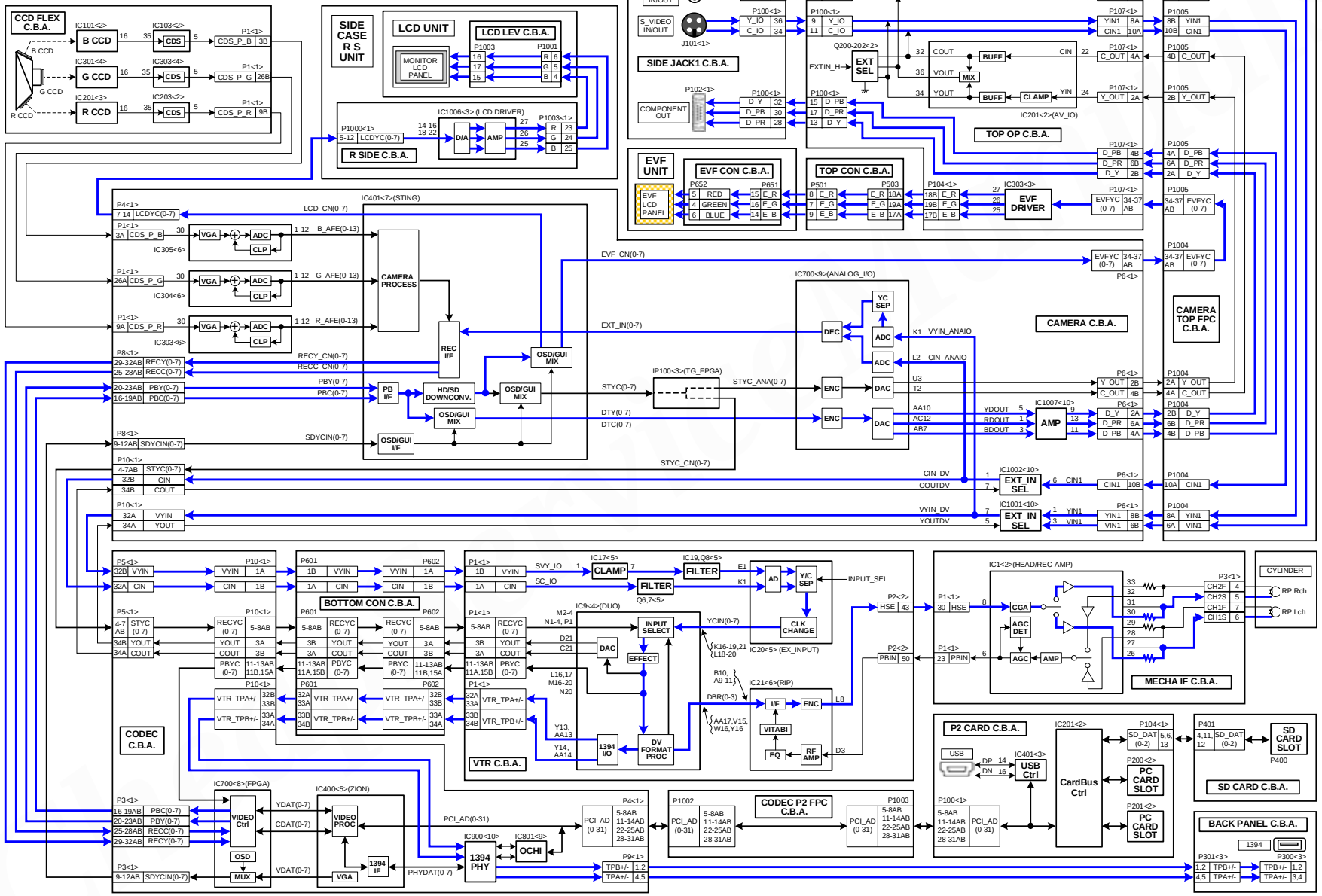


BLK-2

VIDEO BLOCK DIAGRAM (TAPE-CAMERA REC)

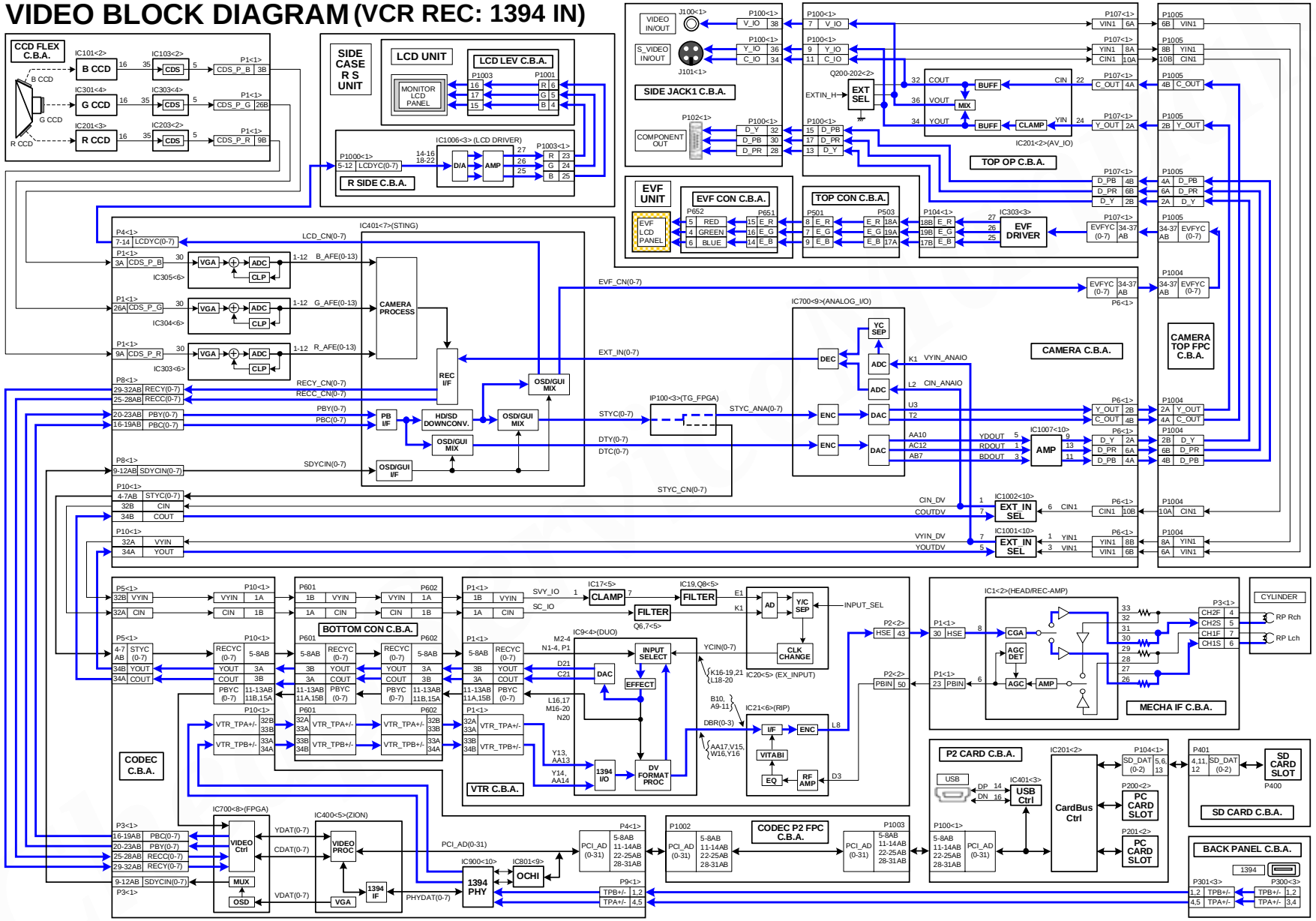


VIDEO BLOCK DIAGRAM (VCR REC: EXT IN)



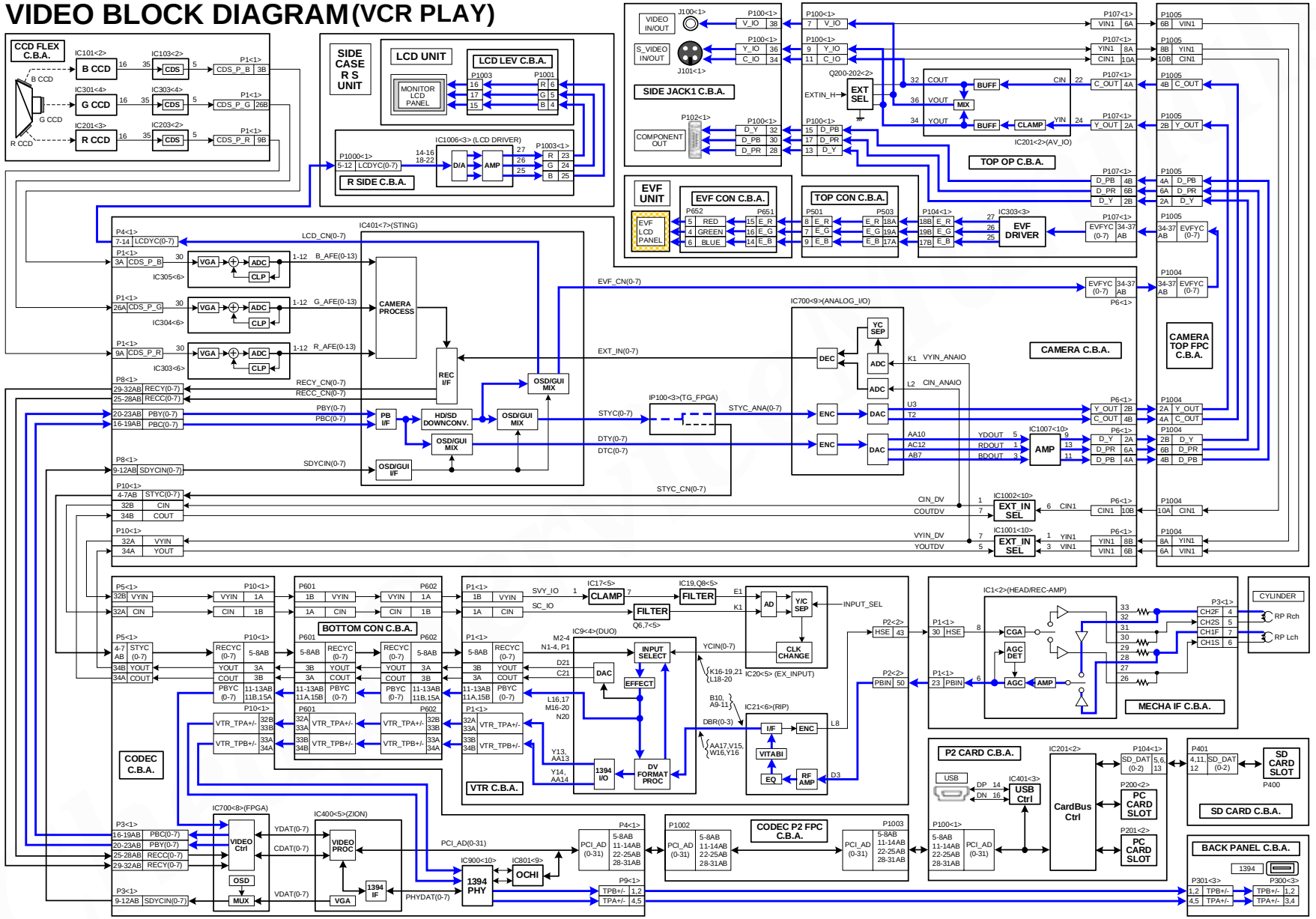
BLK-4

VIDEO BLOCK DIAGRAM (VCR REC: 1394 IN)



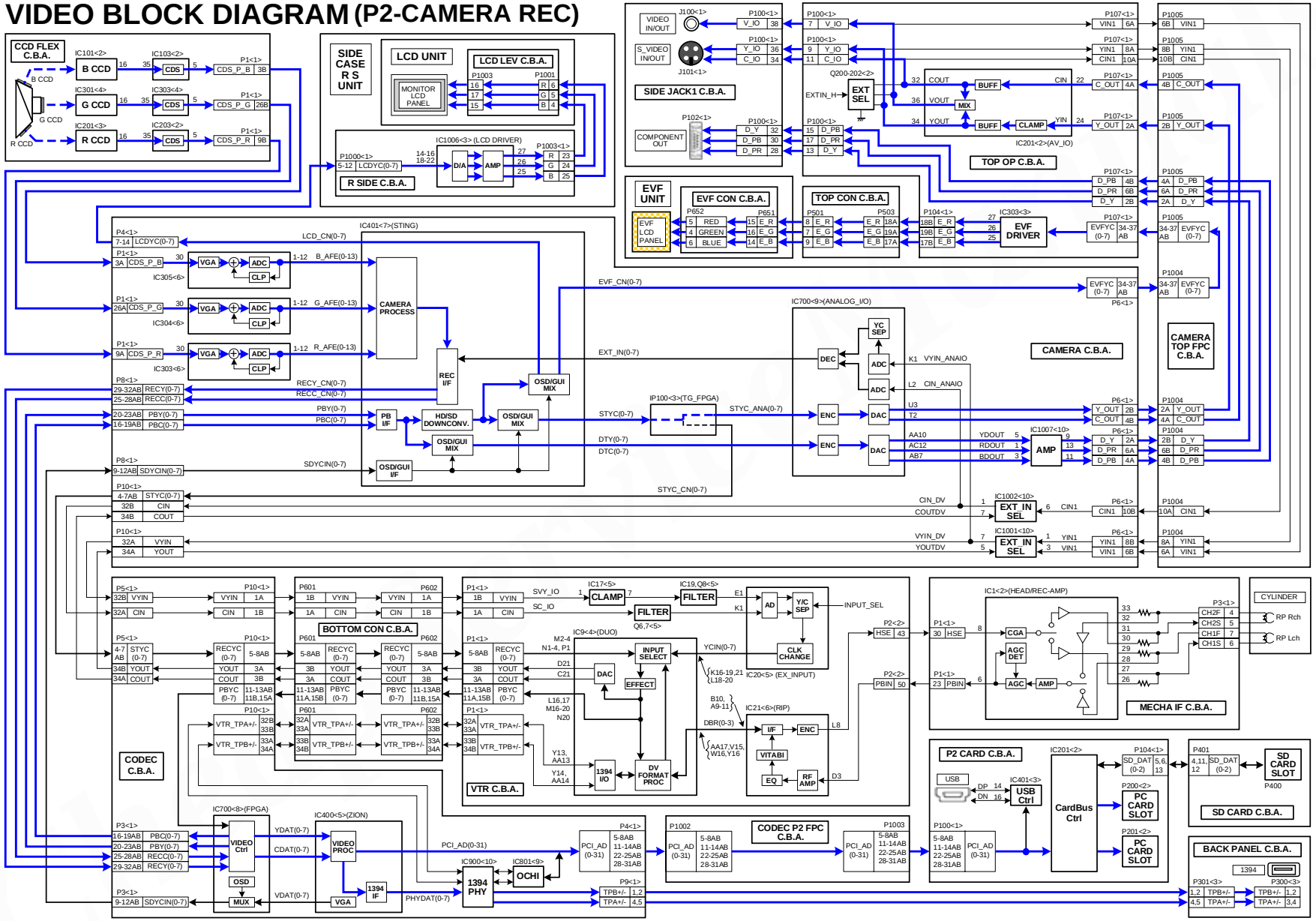
BLK-5

VIDEO BLOCK DIAGRAM (VCR PLAY)



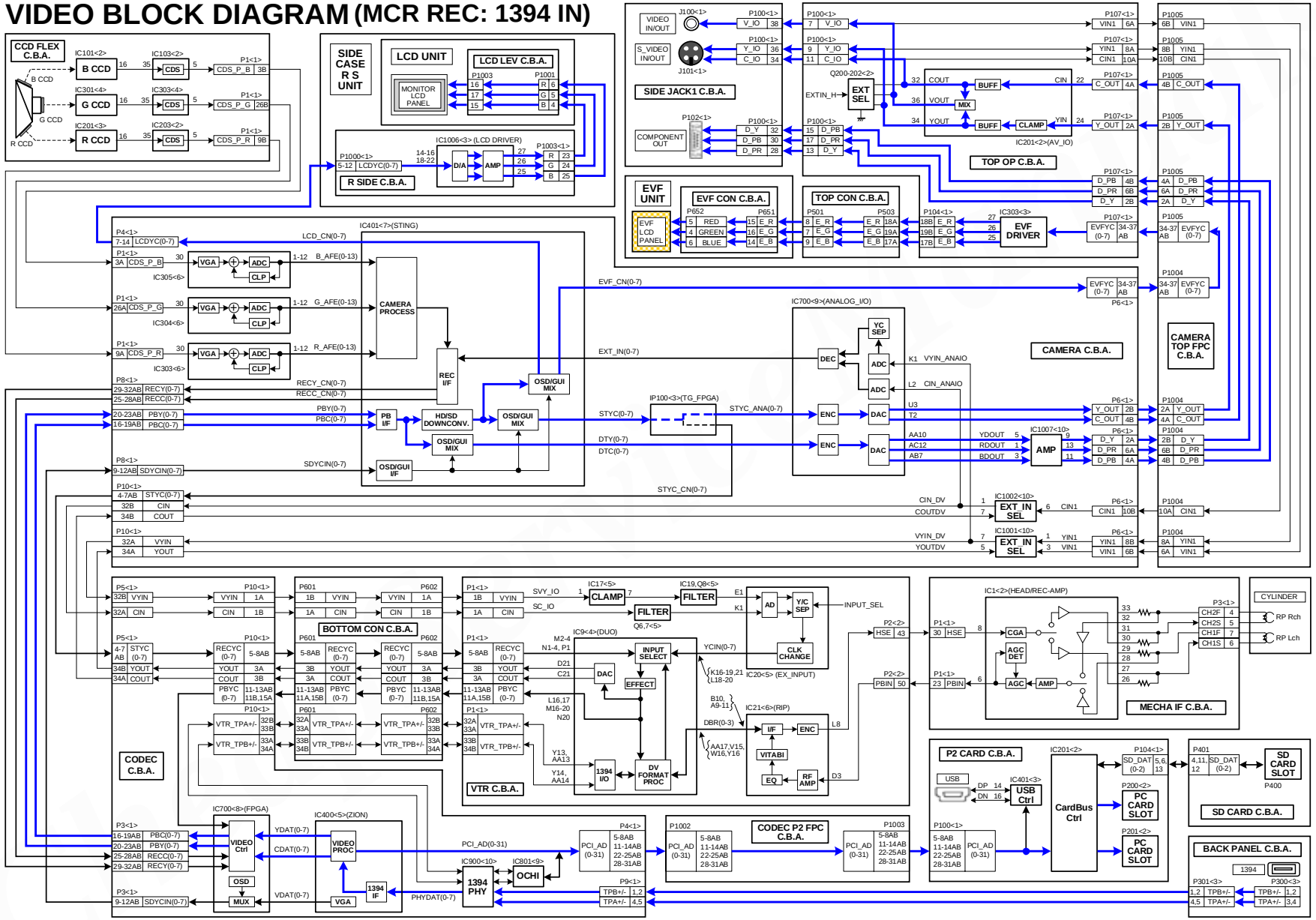
BLK-6

VIDEO BLOCK DIAGRAM (P2-CAMERA REC)

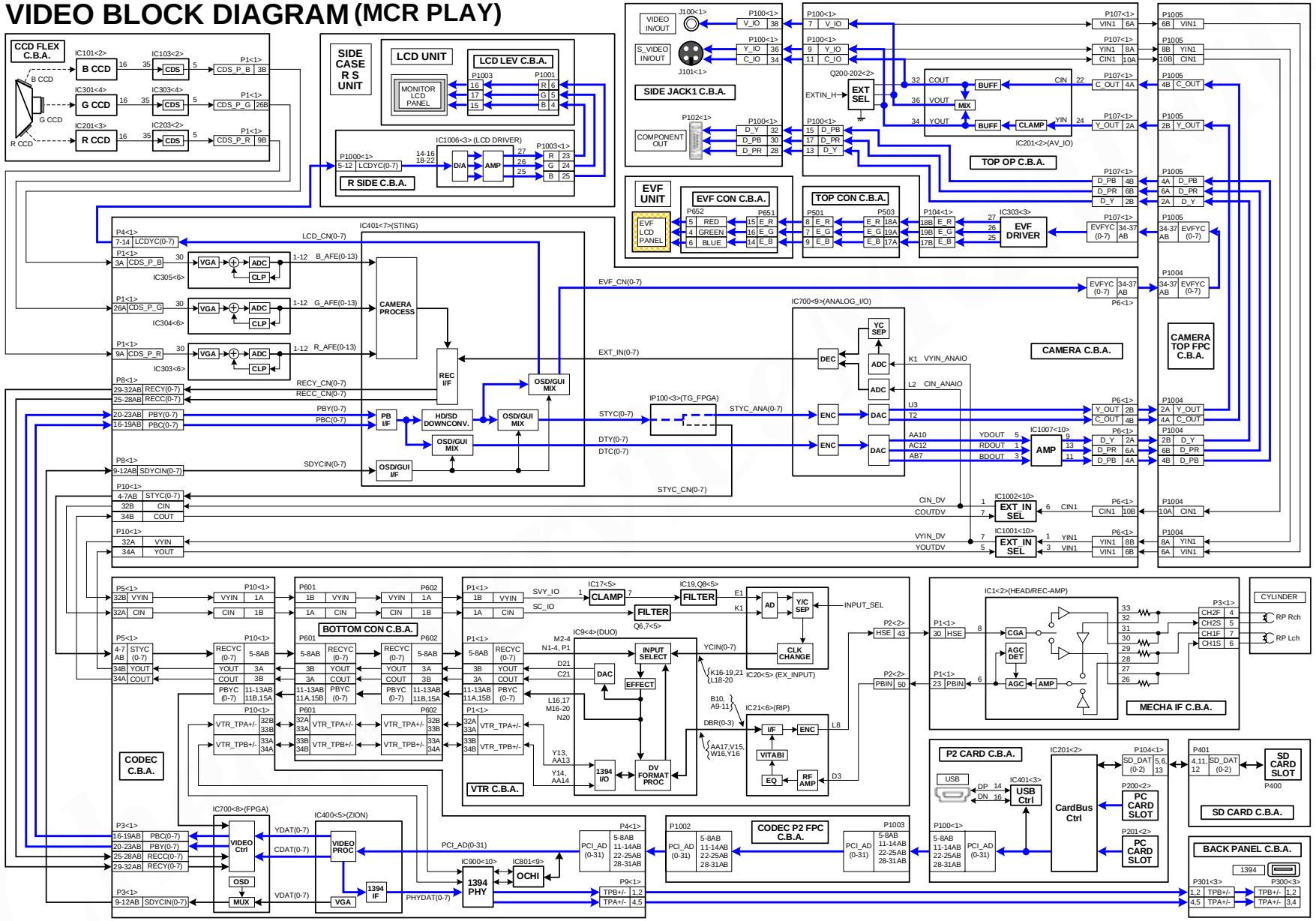


BLK-7

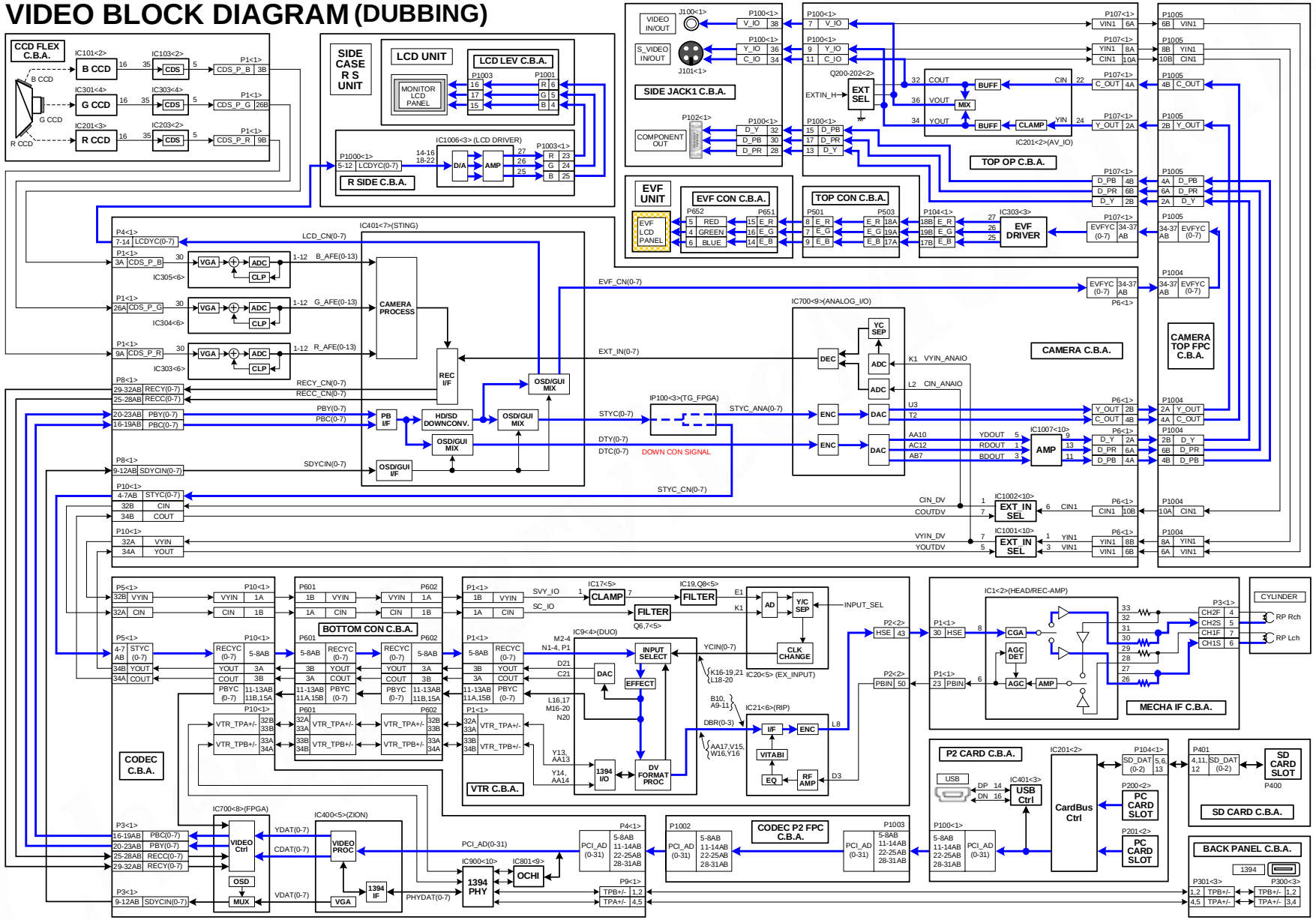
VIDEO BLOCK DIAGRAM (MCR REC: 1394 IN)



VIDEO BLOCK DIAGRAM (MCR PLAY)

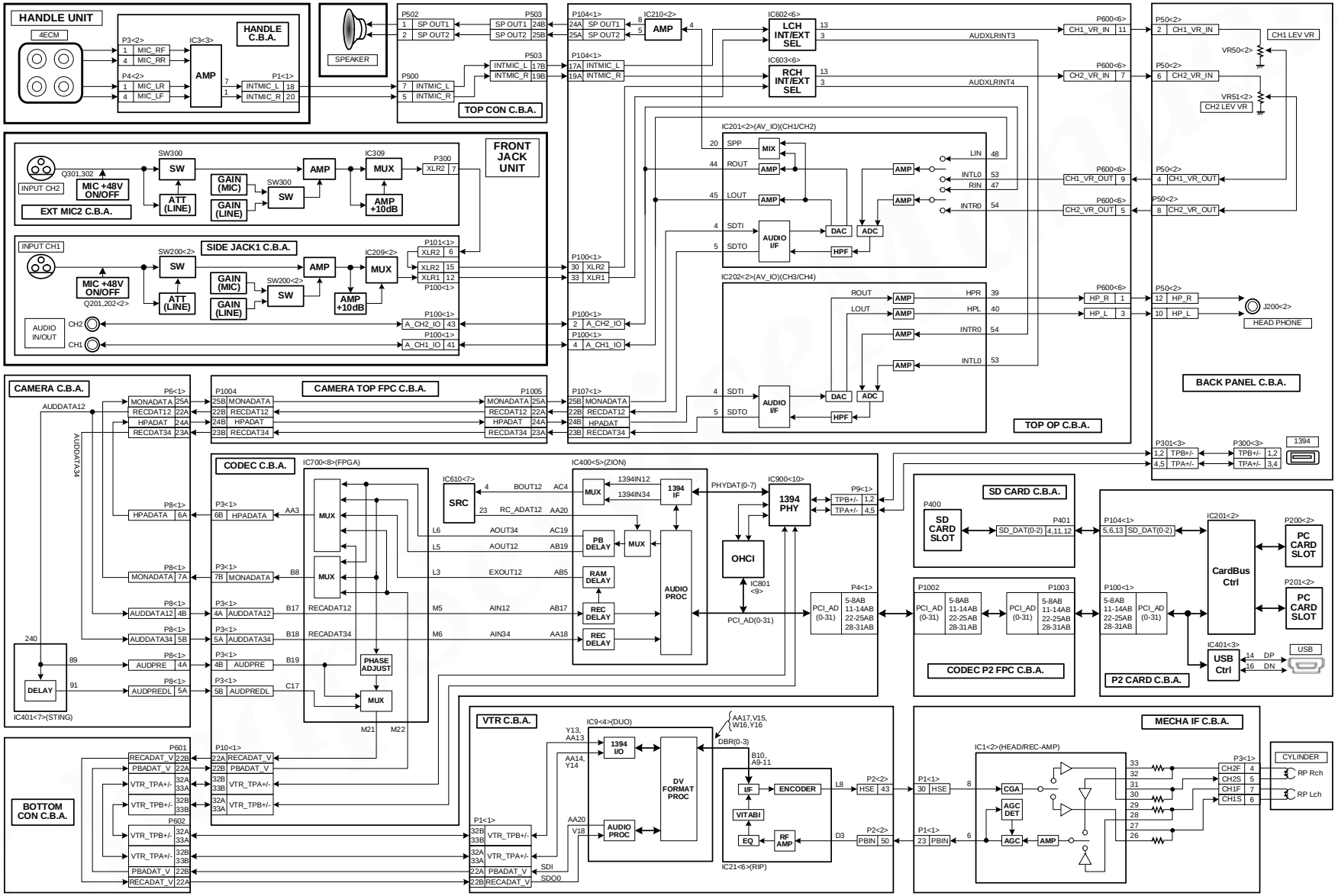


VIDEO BLOCK DIAGRAM (DUBBING)



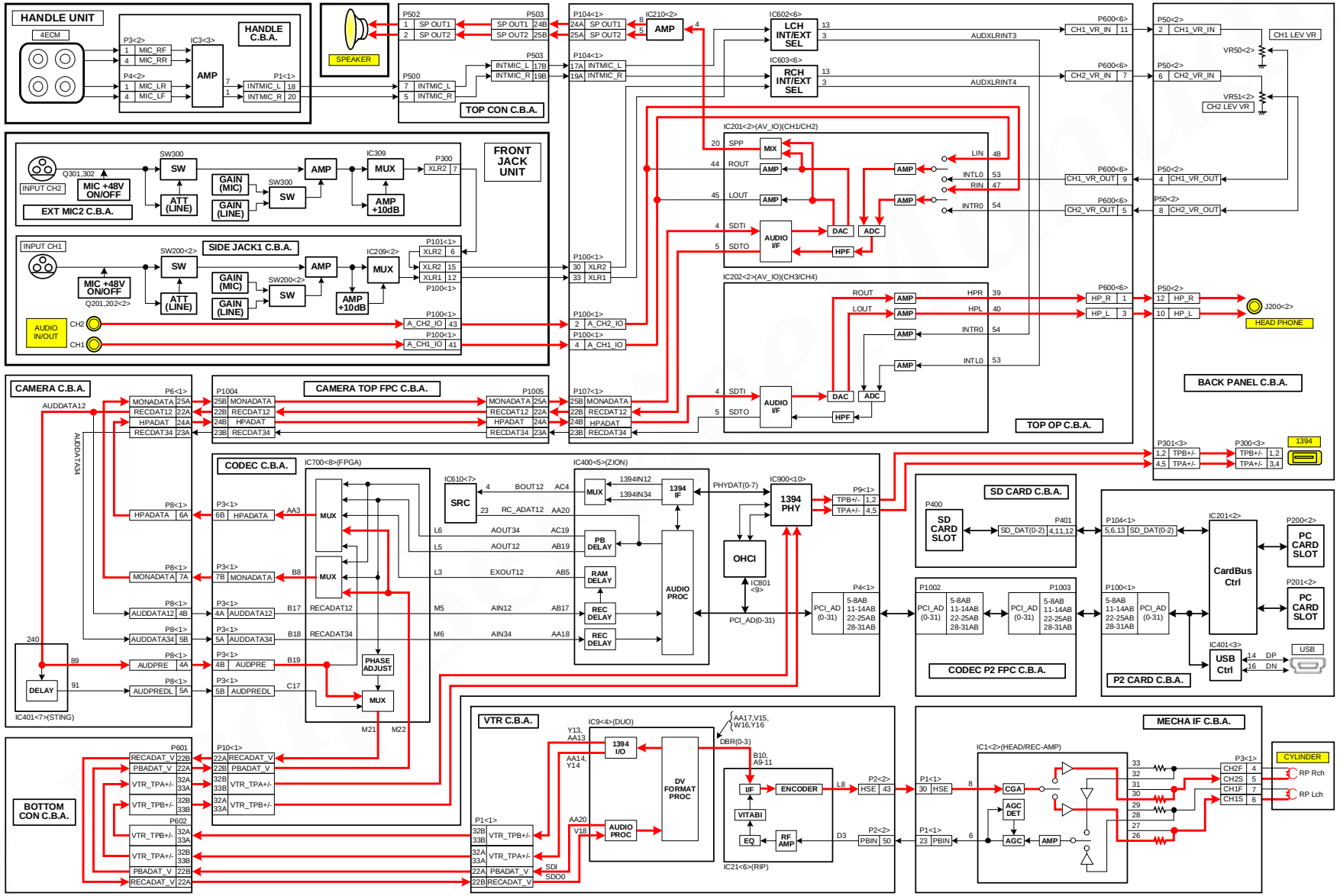
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AUDIO BLOCK DIAGRAM

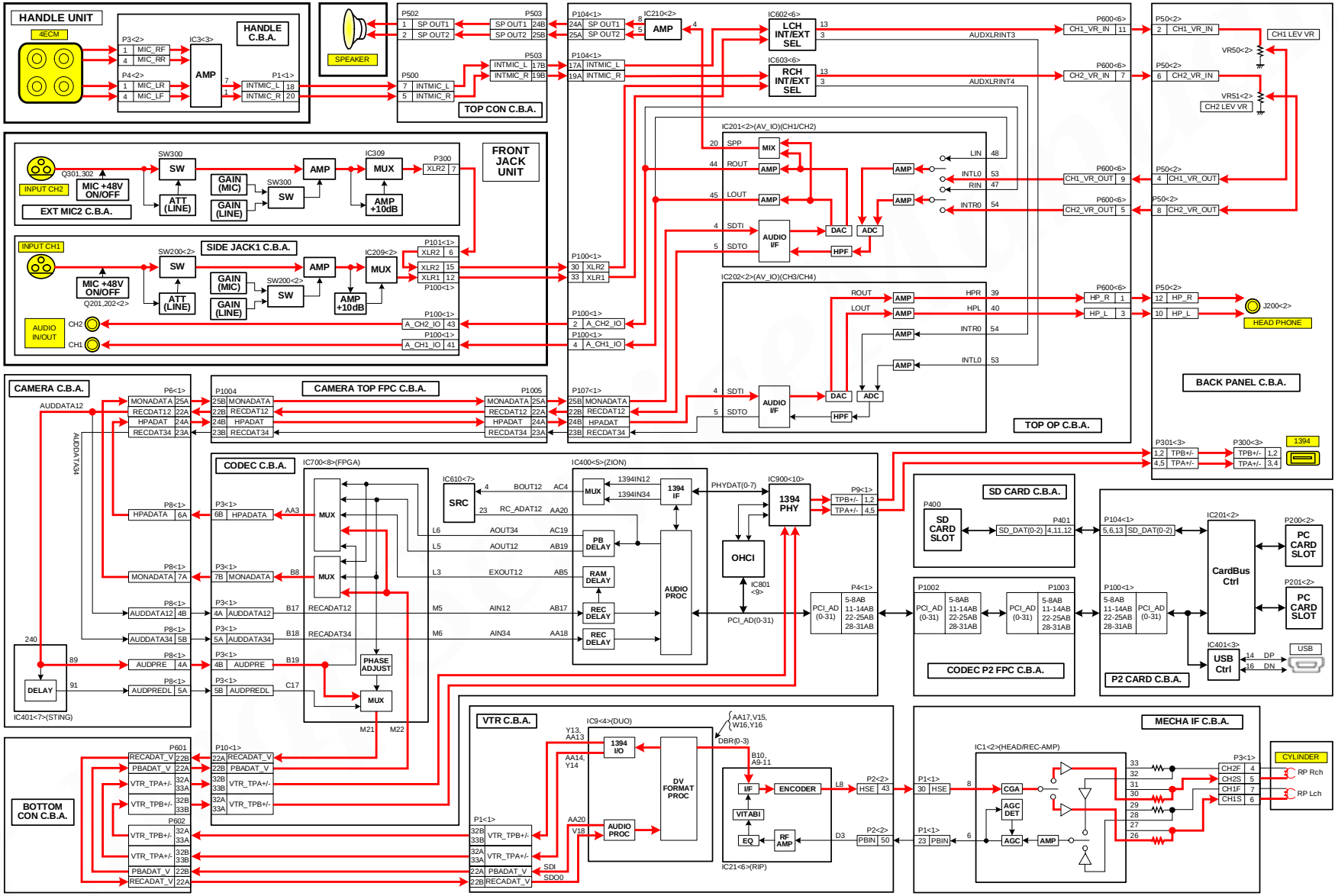


BLK-11

AUDIO BLOCK DIAGRAM (TAPE-CAMERA REC: LINE IN)

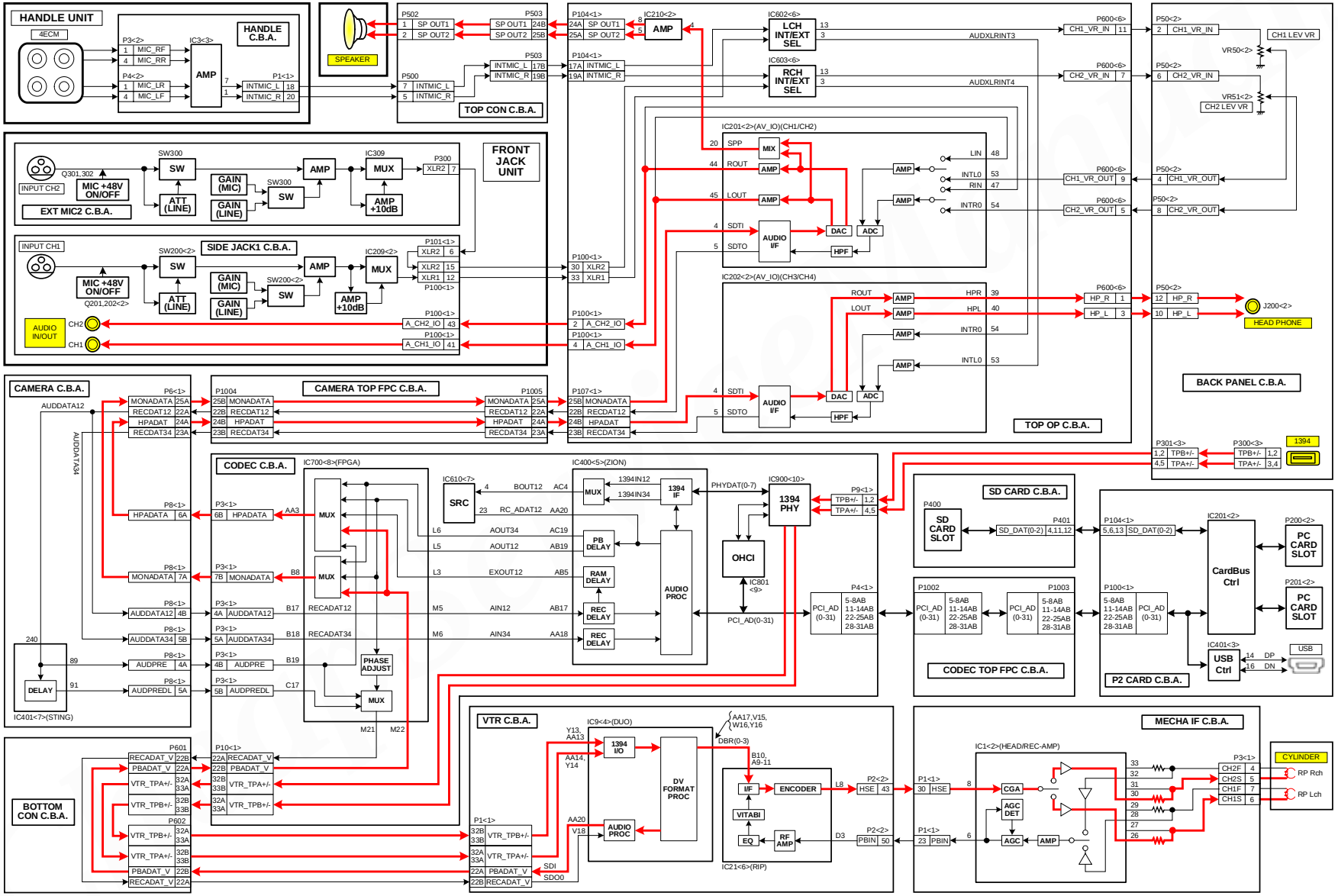


AUDIO BLOCK DIAGRAM (TAPE-CAMERA REC: MIC IN)

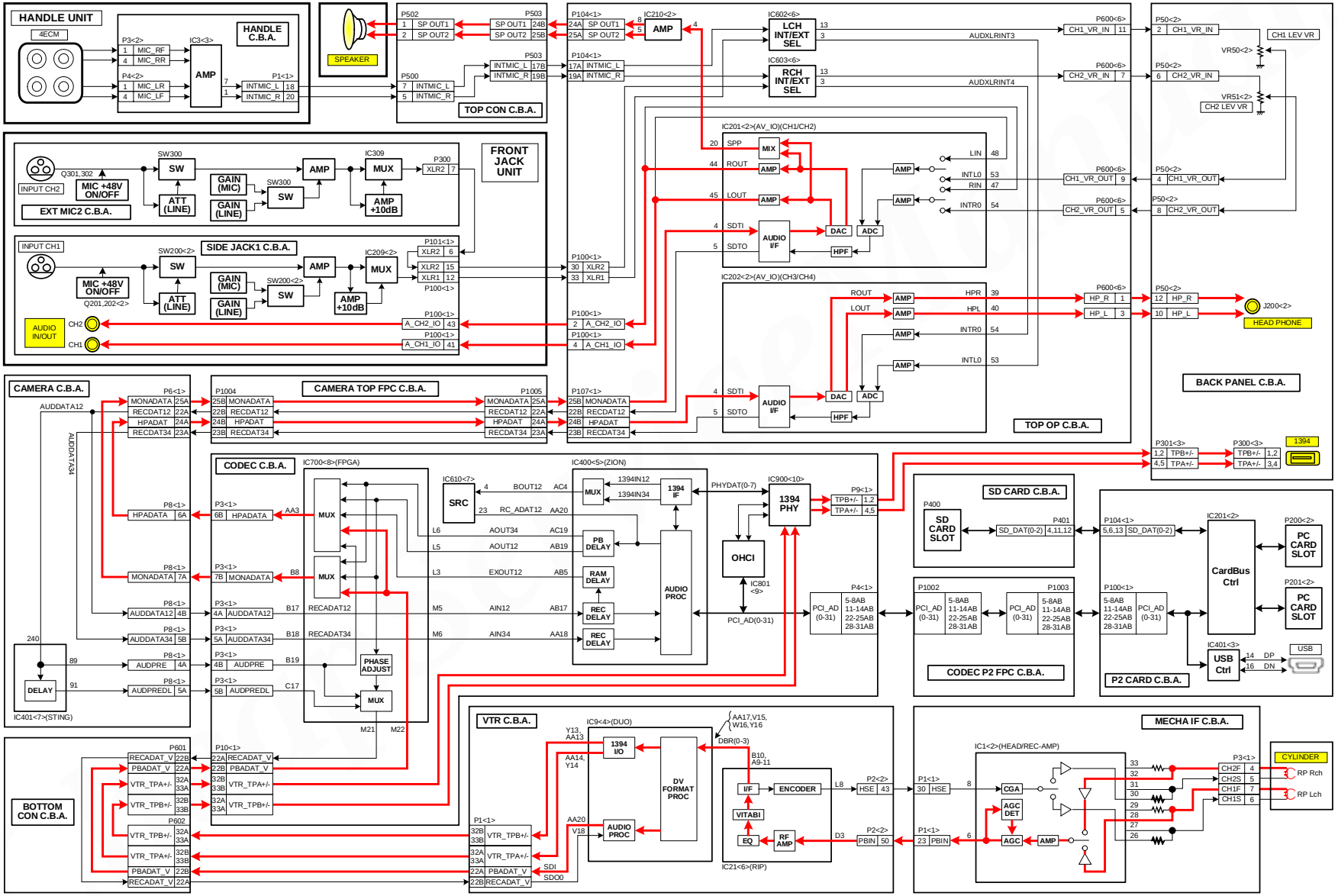


BLK-13

AUDIO BLOCK DIAGRAM (VCR REC: 1394 IN)

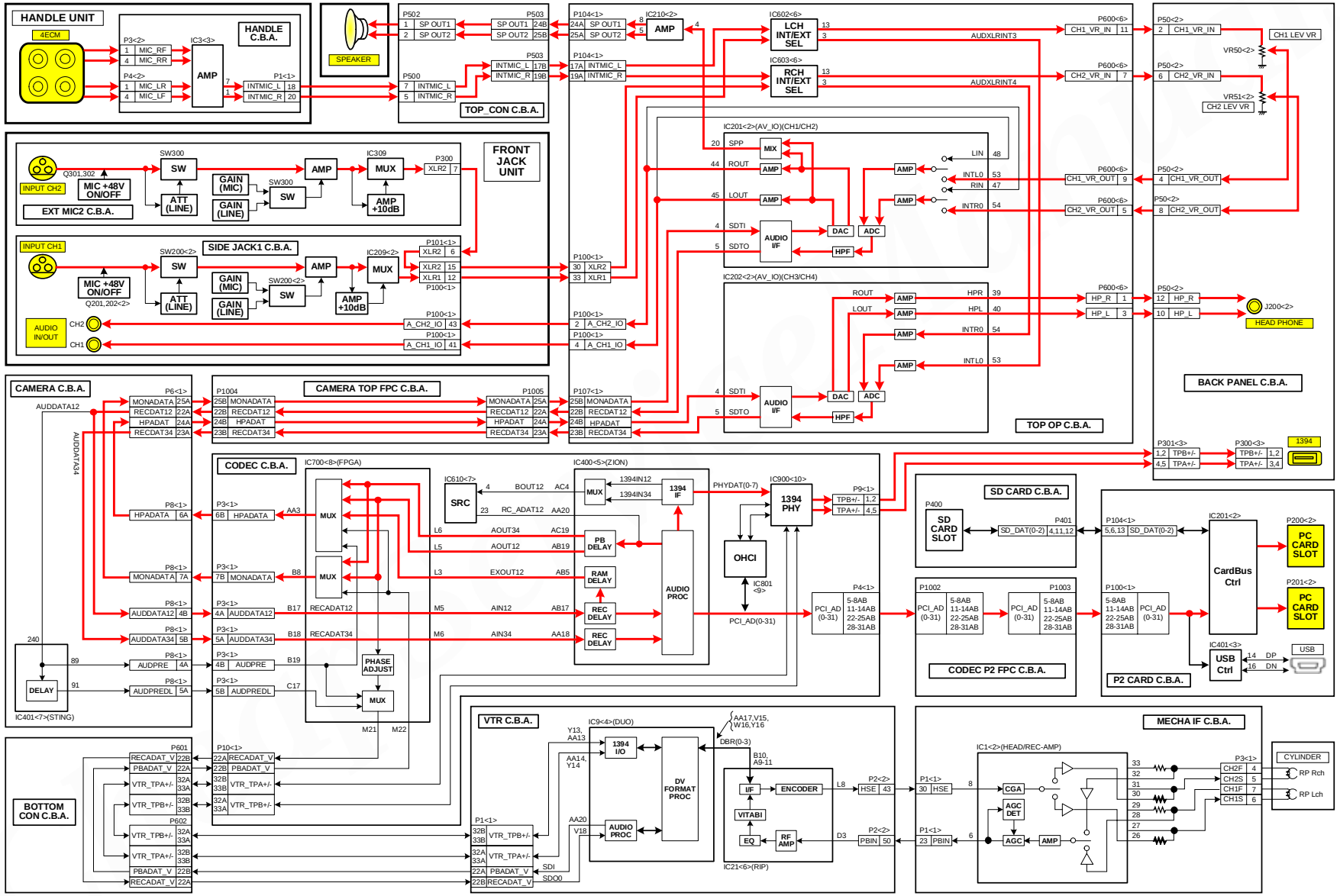


AUDIO BLOCK DIAGRAM (VCR PLAY)



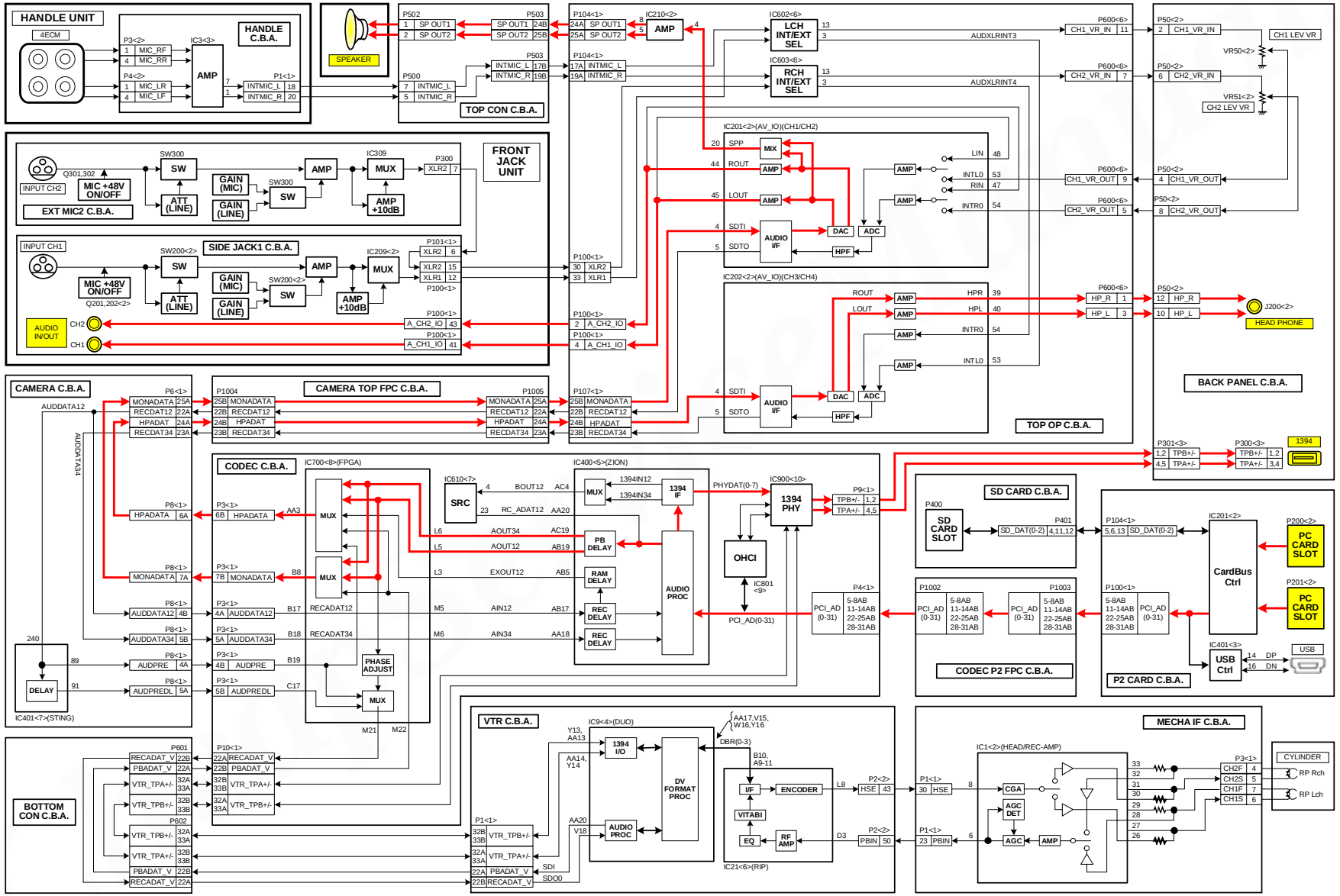
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AUDIO BLOCK DIAGRAM (P2-CAMERA REC: MIC IN)



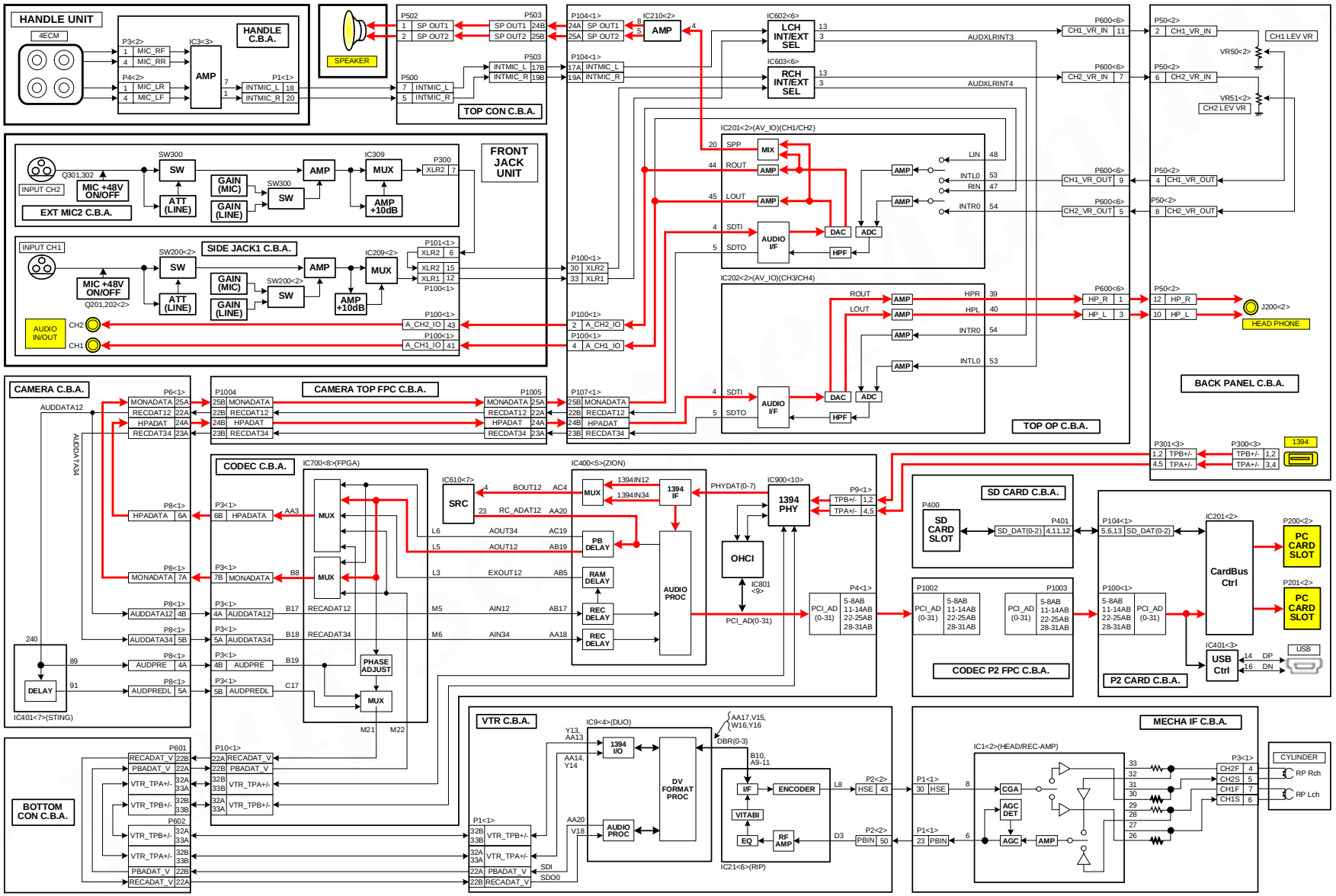
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AUDIO BLOCK DIAGRAM (MCR PLAY)



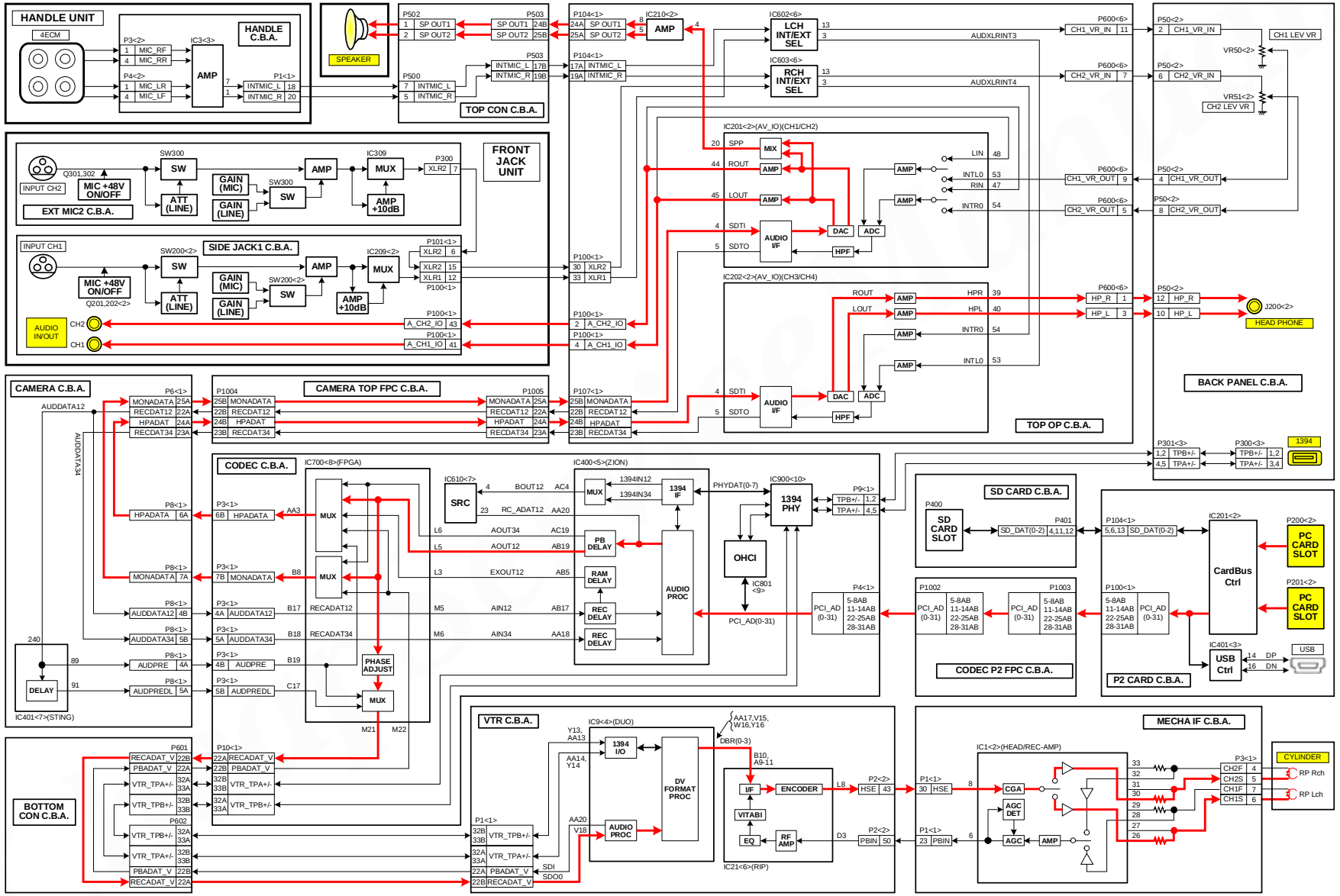
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AUDIO BLOCK DIAGRAM (MCR REC: 1394 IN)

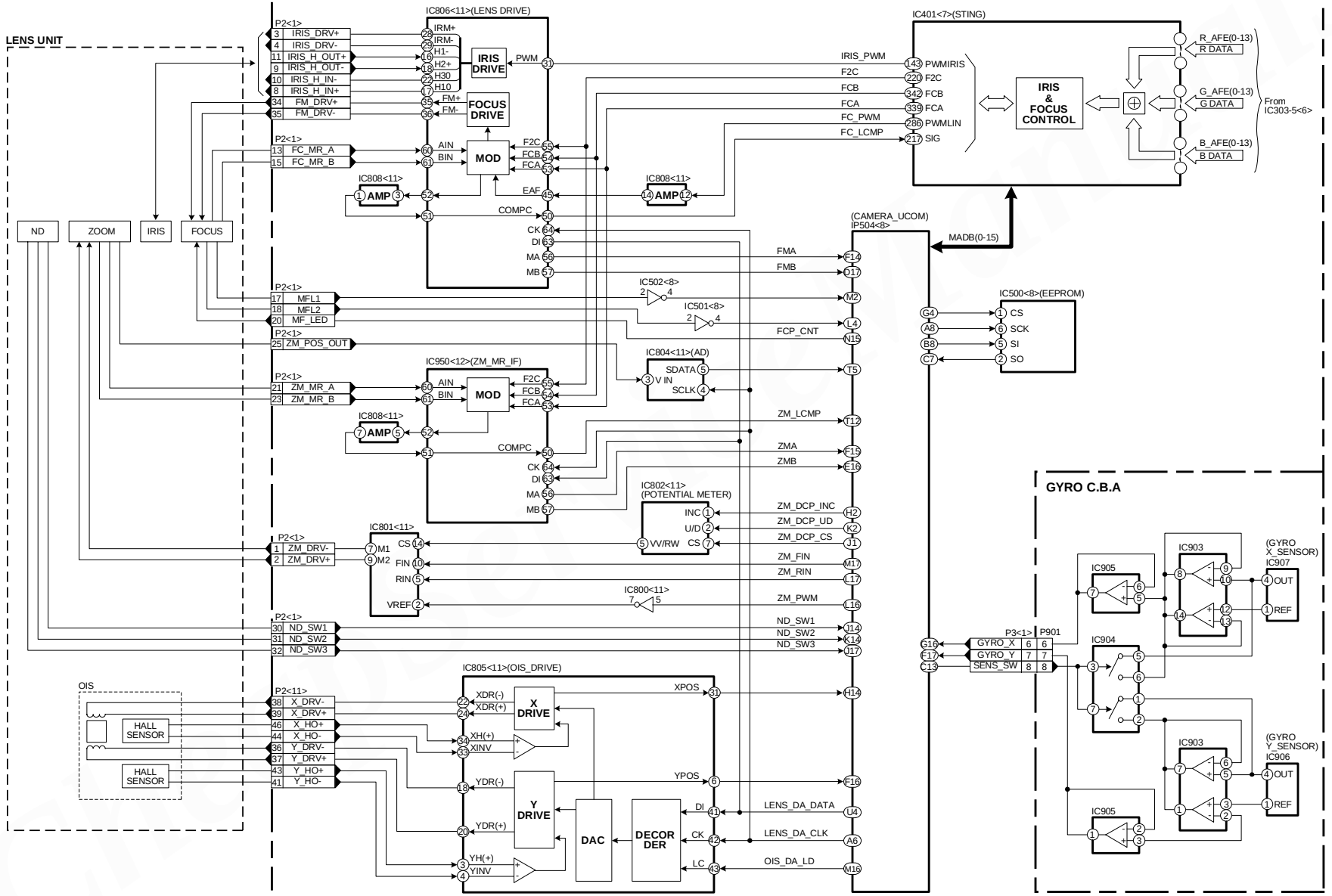


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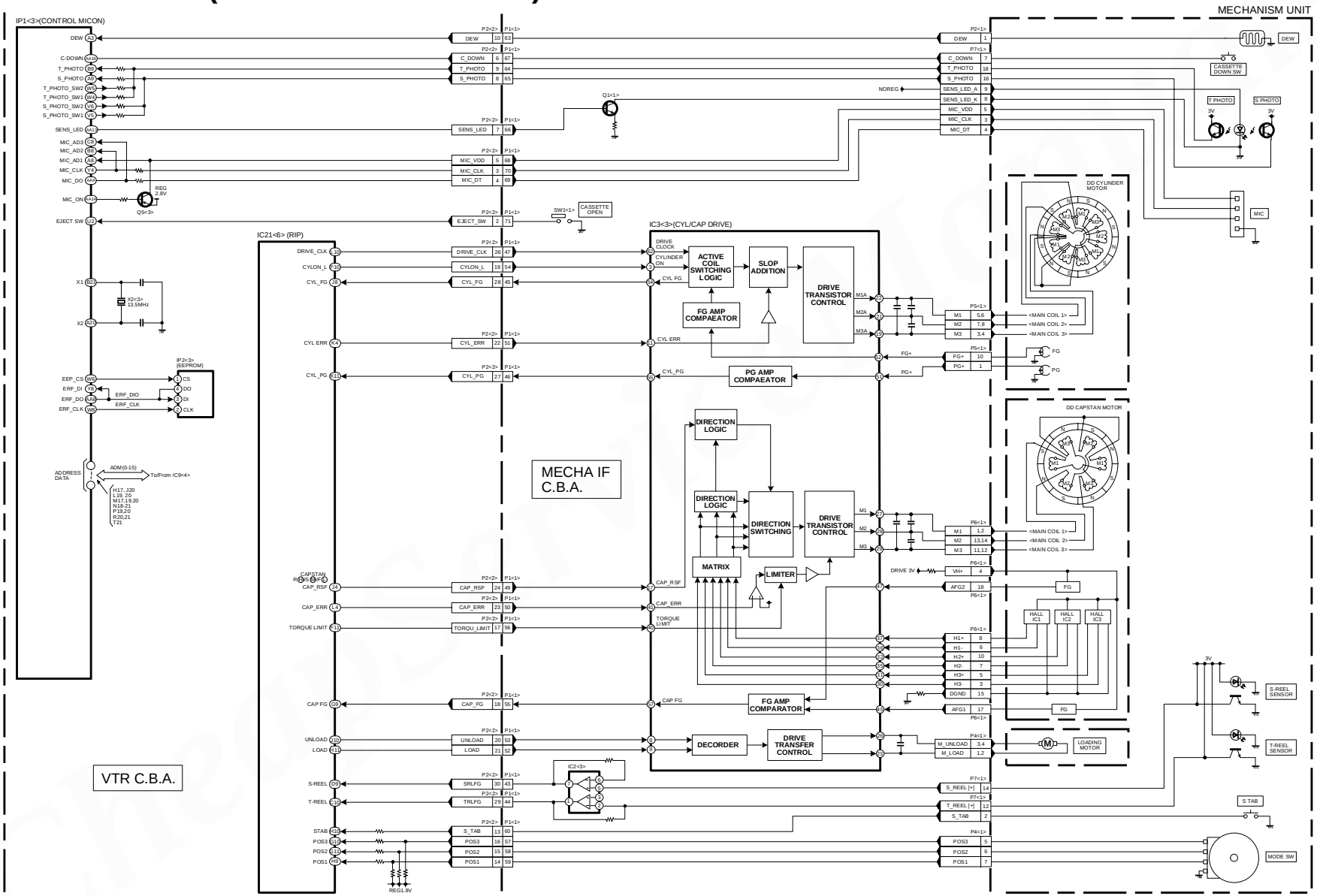
AUDIO BLOCK DIAGRAM (DUBBING mode)



LENS DRIVE (CAMERA C.B.A.) BLOCK DIAGRAM



SERVO DRIVE (VTR / MECHA IF C.B.A.) BLOCK DIAGRAM



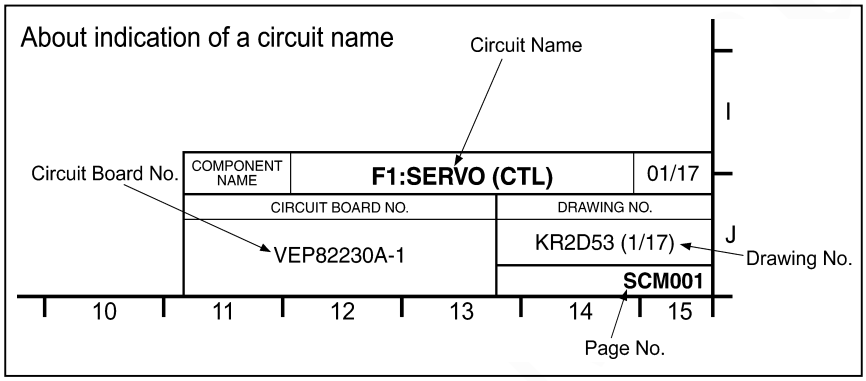
BLK-21

SECTION 6

SCHEMATIC DIAGRAMS

回　路　図

MODEL: AG-HVX200/P/AN/E/MC/HVX202EN

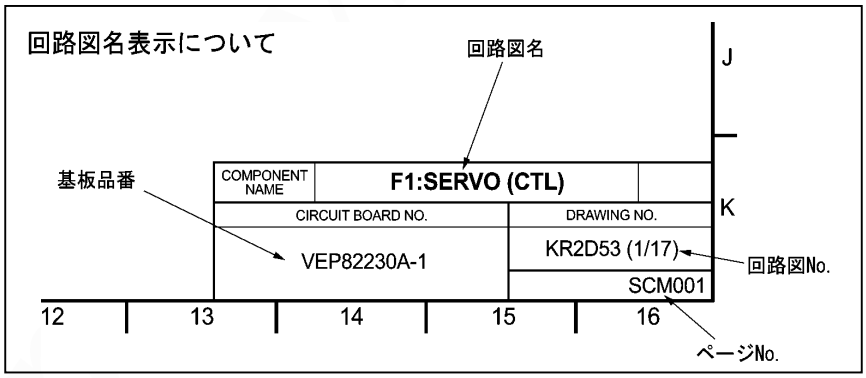


NOTE:
BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST SECTION.

CAUTION

THE ▭ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.



⚠ 警告

⚠の部品は、安全上重要な部品です。
交換するときは、安全及び性能維持のため、必ず指定の部品をご使用ください。
部品は難燃性や耐電圧など、安全上の特性を持ったものとなっていますので、部品交換は、使用されているものと同じ特性の部品をご使用ください。

部品ご注文の際には必ず部品リストに記載の品番でご注文ください。

⚠ 警 告	
感電注意	AC100Vの加わっている活電部（充電部、活電部）に直接触れないでください。 ☞ 感電ややけどの可能性があります。

① ⚠ 警 告　⚠ 印の部品は安全上重要な部品です。交換するときは、安全上および性能維持のため必ず指定の部品をご使用ください。
② ▭ 内は充電部です。AC 100Vが加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。
③ 部品交換時には、電源プラグをぬいてから行ってください。
④ 一次側（充電部）の電圧・波形は、一次側アースを基準に測定してください。
⑤ 部品品番は、部品リストで確認の上交換ください。

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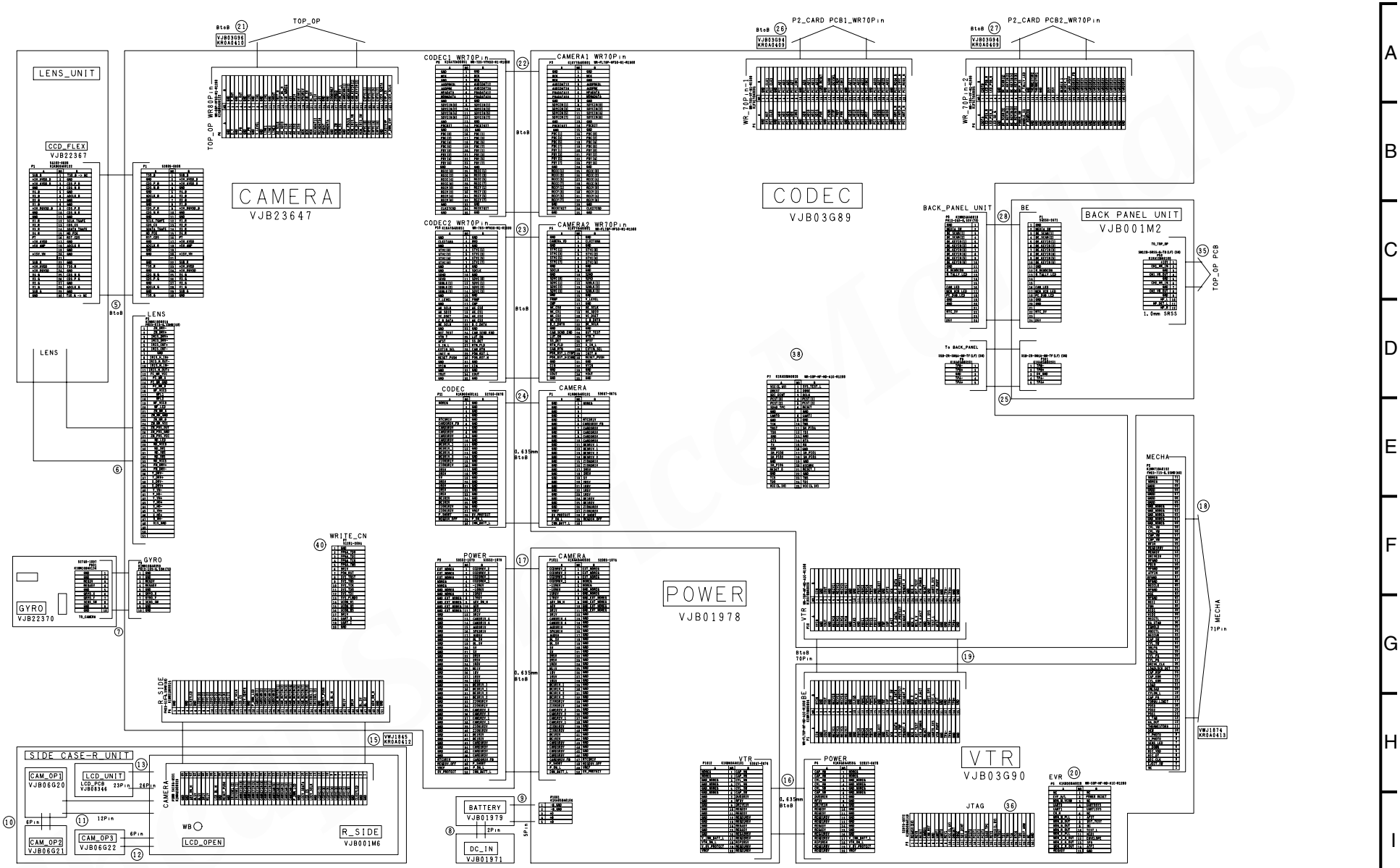
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CAMERA R SIDE FPC (1/1) SCM089

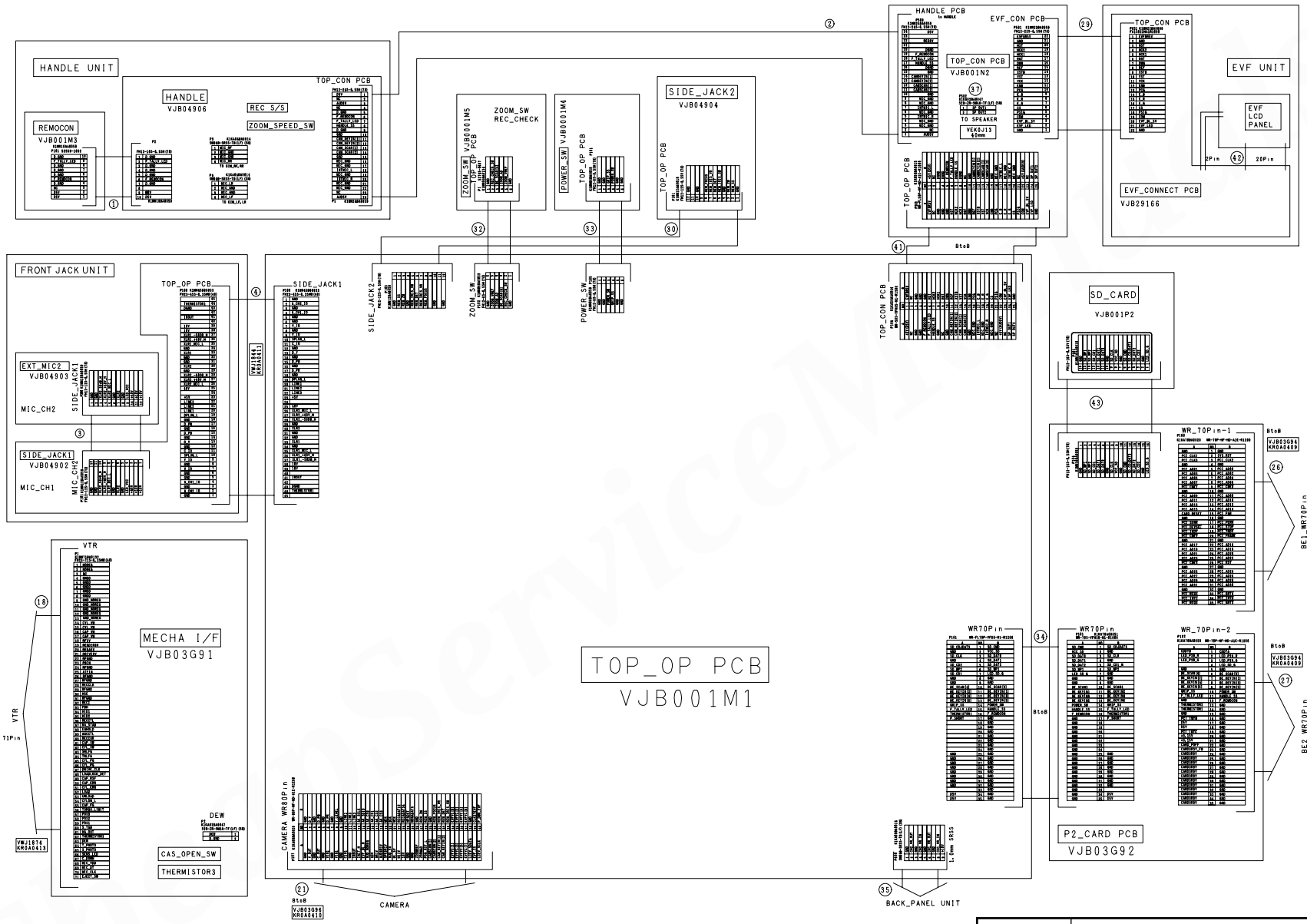
VTR MECHA IF FPC

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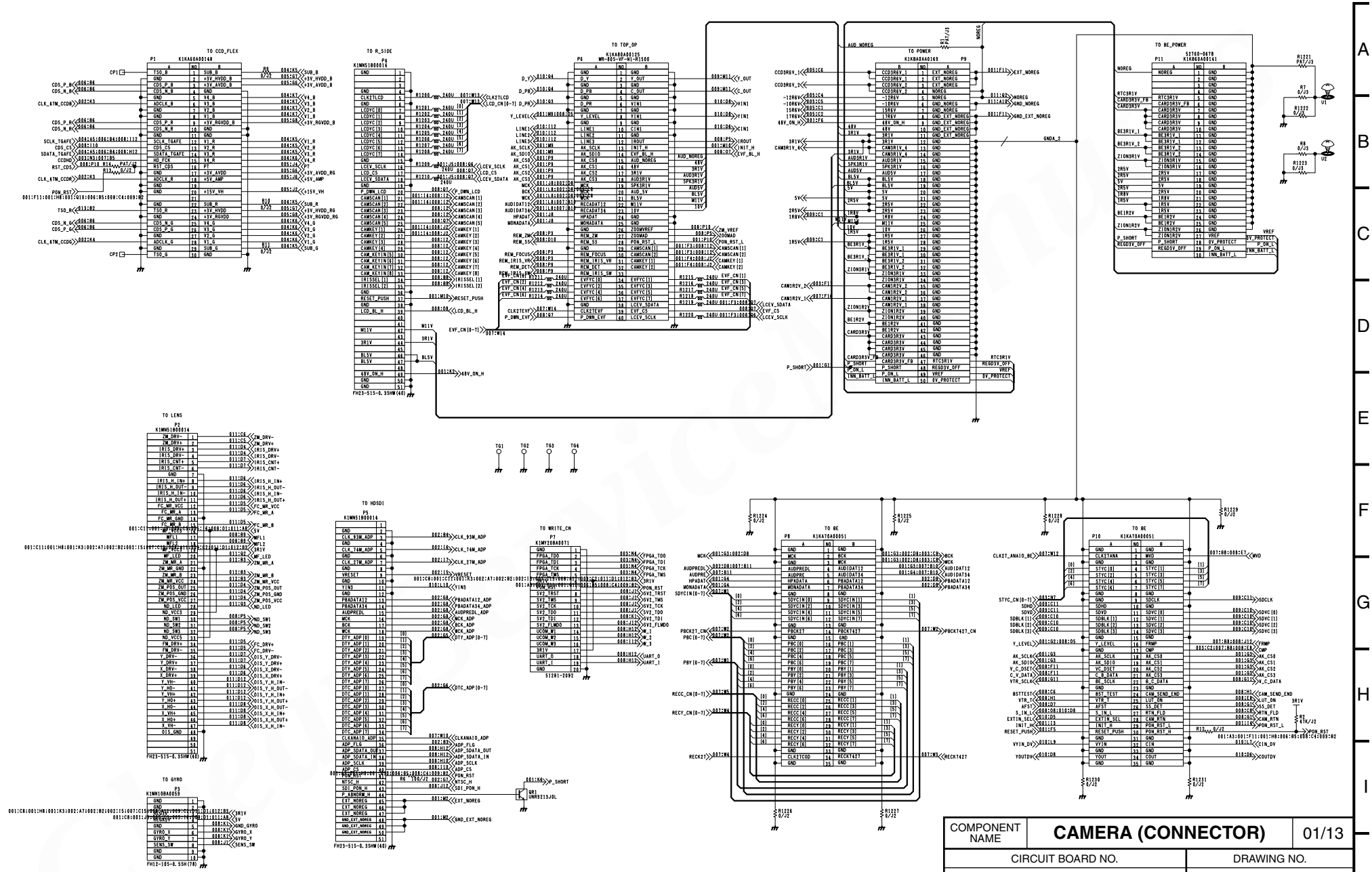
manuals



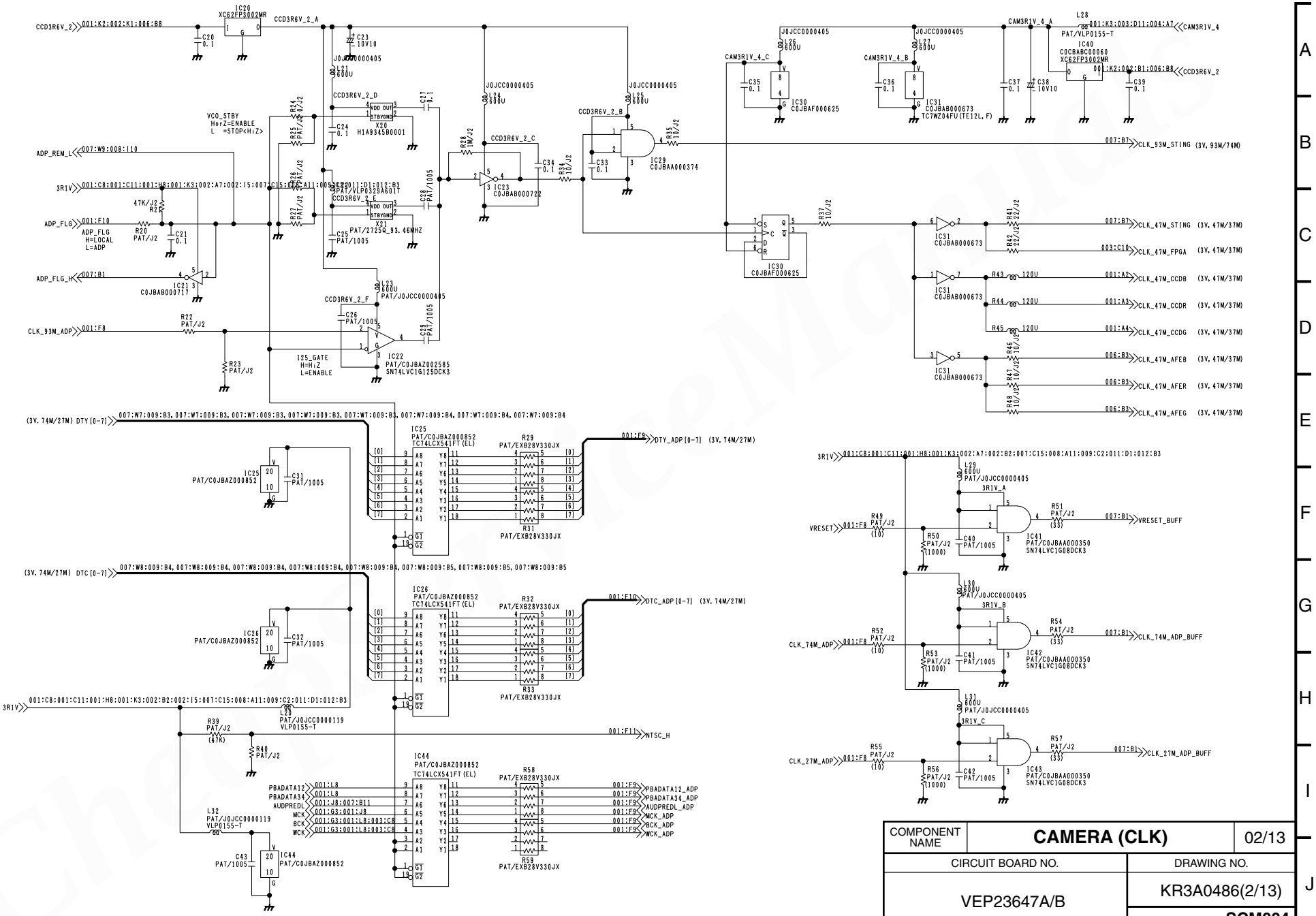
COMPONENT NAME	INTERCONNECTION	01/02
CIRCUIT BOARD NO.		DRAWING NO.
		(1/2)
		SCM001



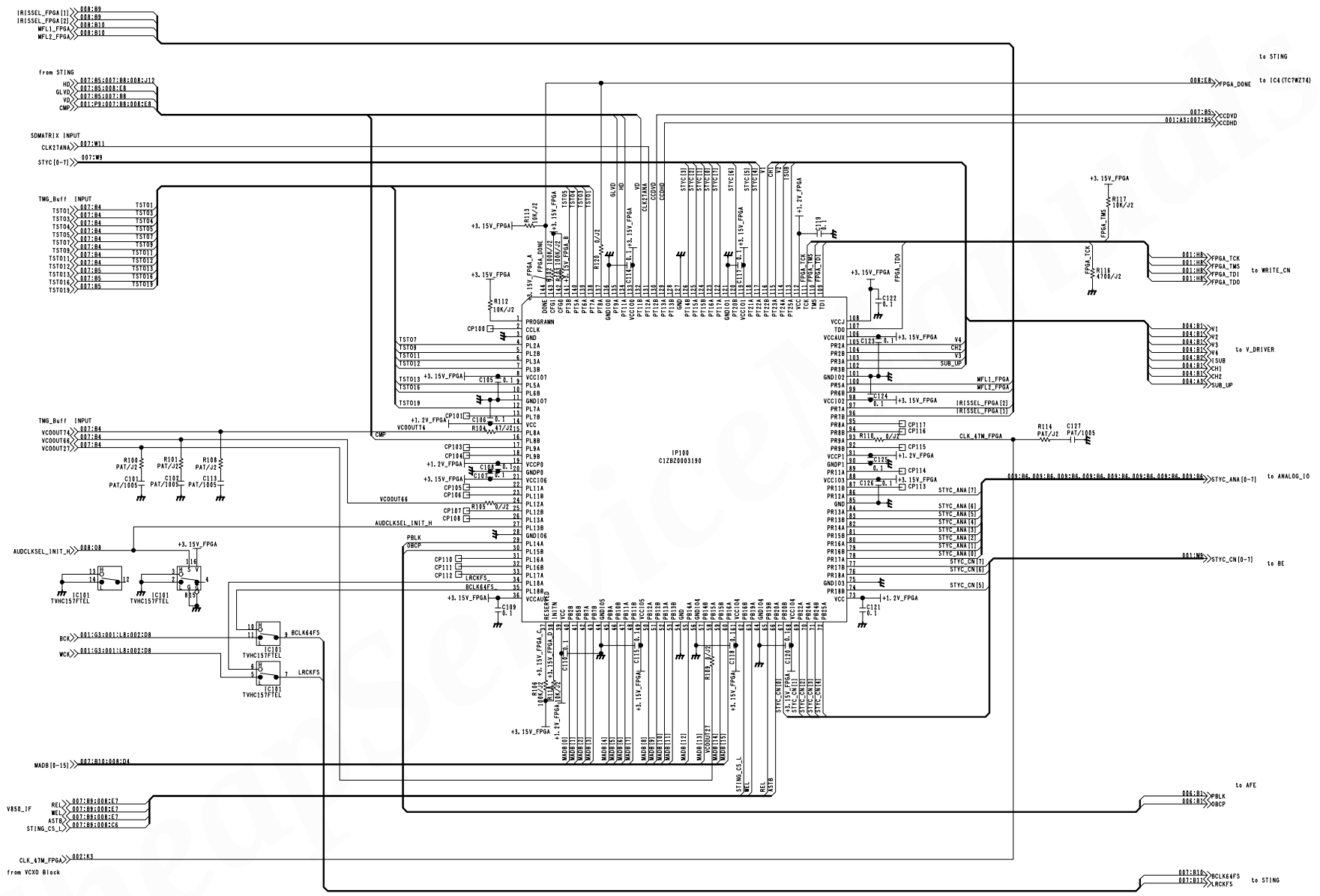
COMPONENT NAME	**INTERCONNECTION**	02/02
CIRCUIT BOARD NO.	DRAWING NO.	
	(2/2)	
	SCM002	



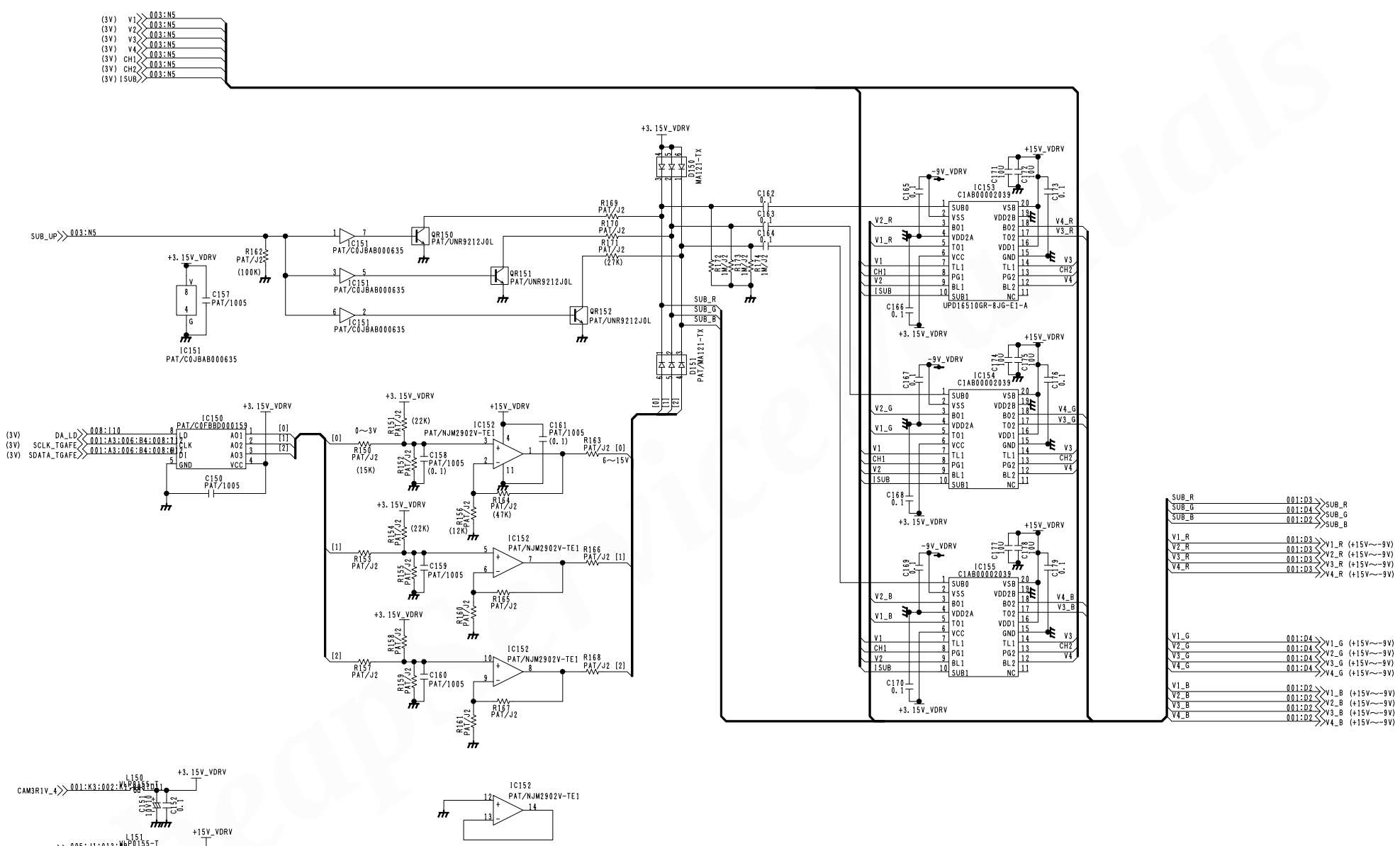
COMPONENT NAME	**CAMERA (CONNECTOR)**	01/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(1/13)
		SCM003



COMPONENT NAME	**CAMERA (CLK)**	02/13
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23647A/B	KR3A0486(2/13)	
	SCM004	

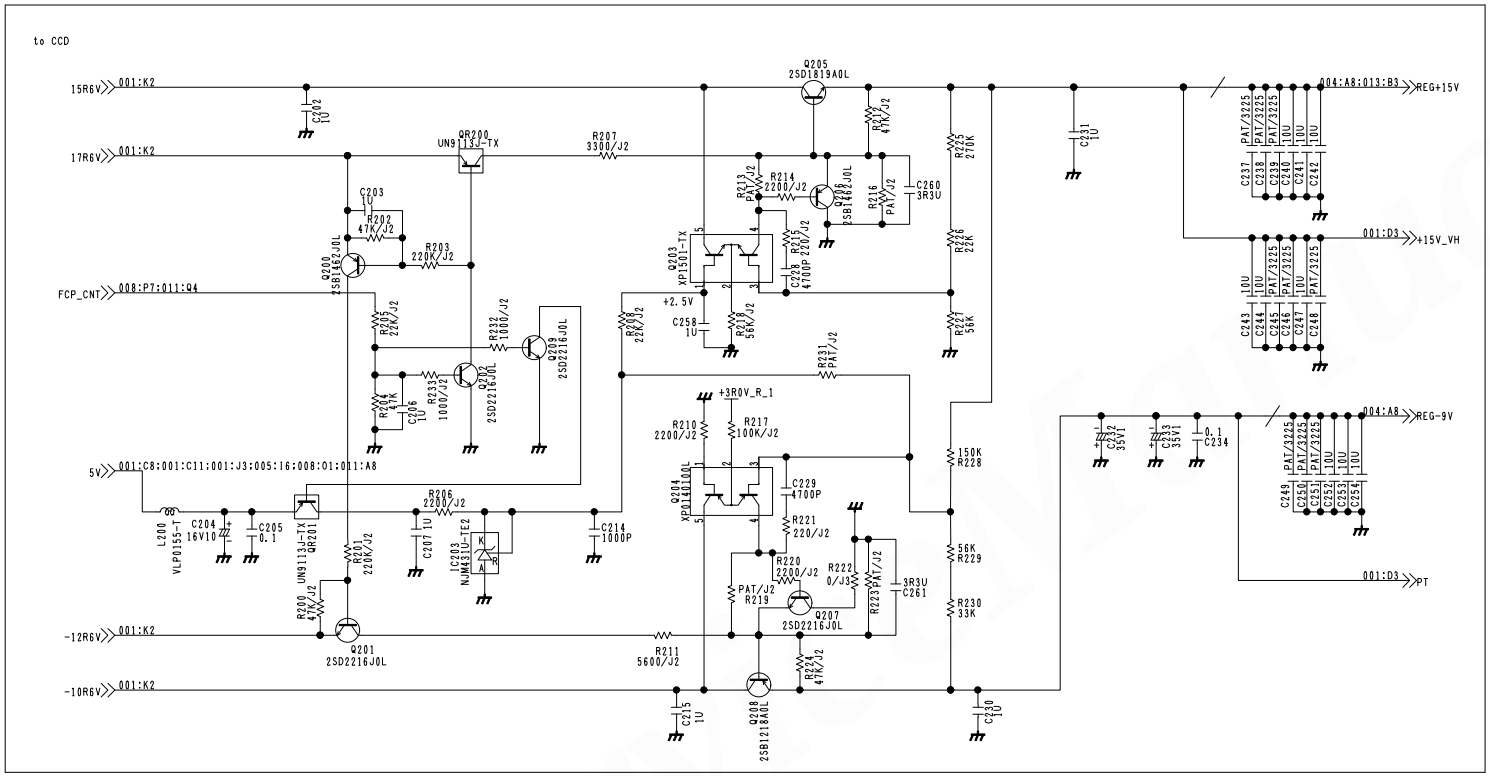


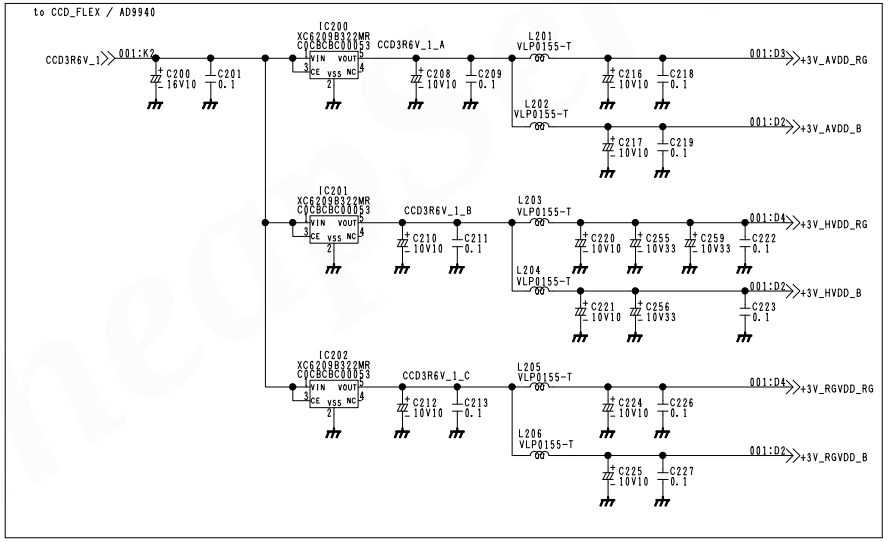
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CIRCUIT BOARD NO.		DRAWING NO.
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		SCM005

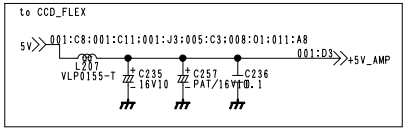


COMPONENT NAME	CAMERA (V_DRIVER)	04/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(4/13)
		SCM006

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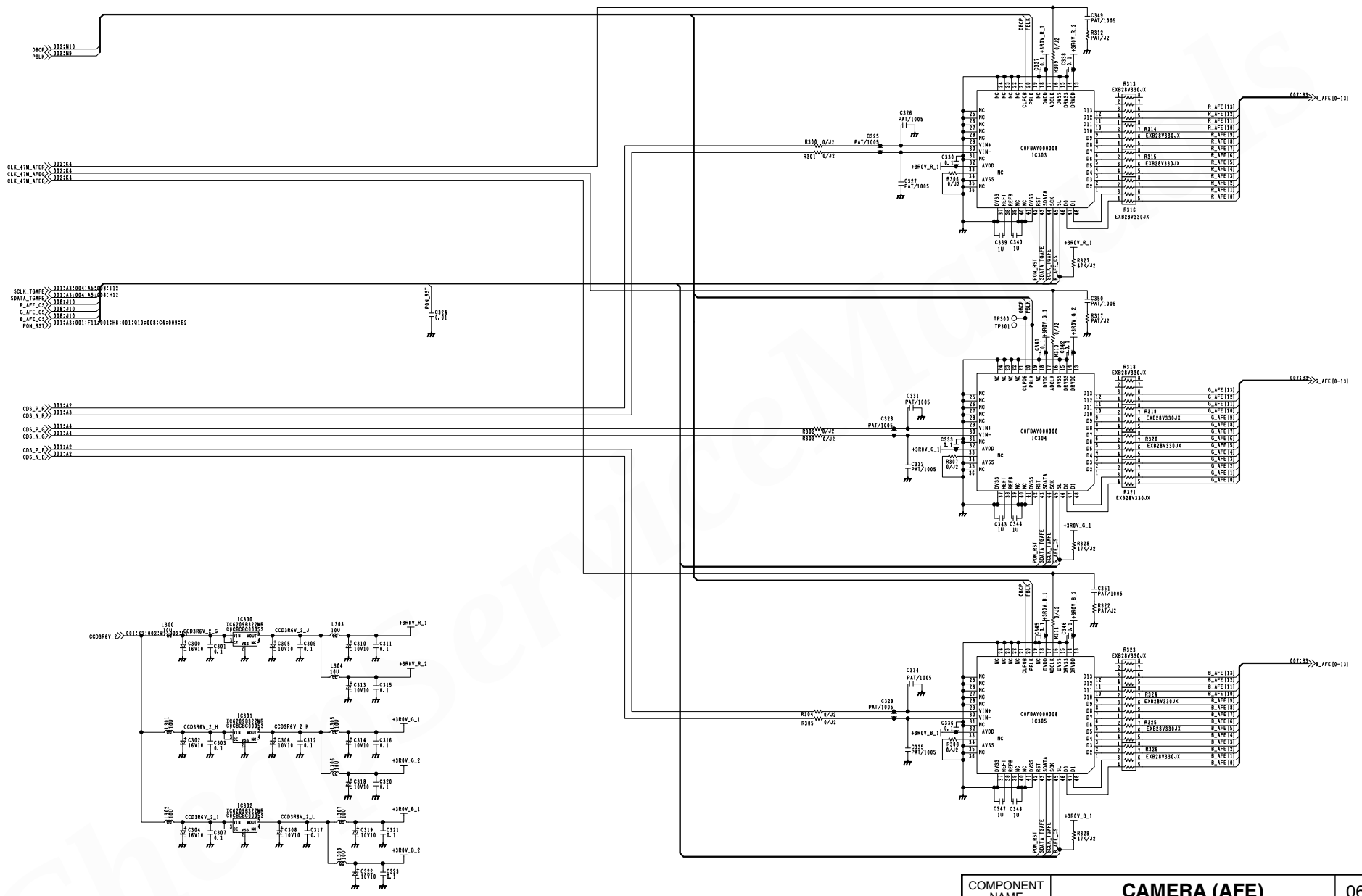




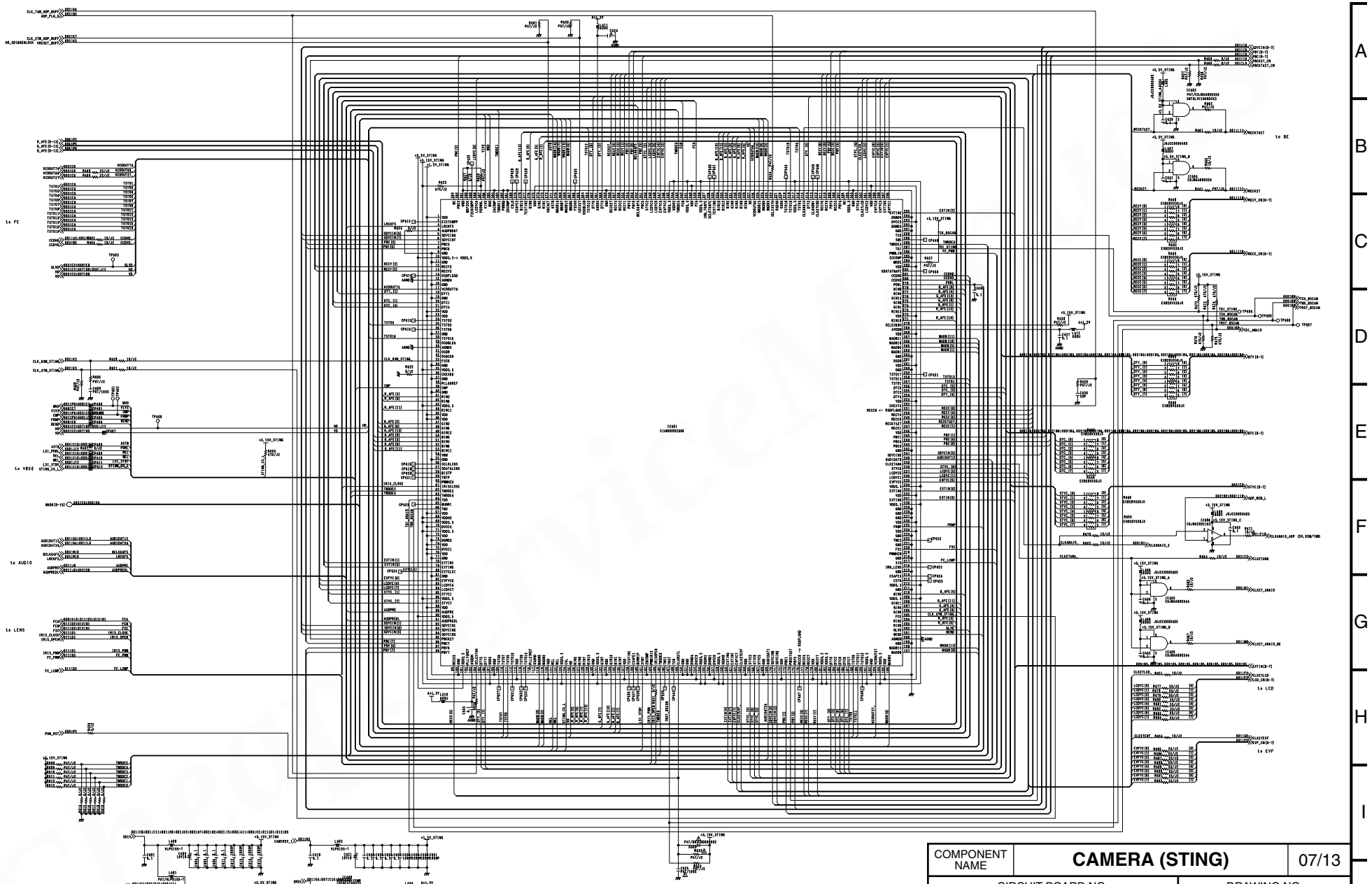


COMPONENT NAME	CAMERA (CCD_VREG)	05/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(5/13)
		SCM007

Circuit Diagrams



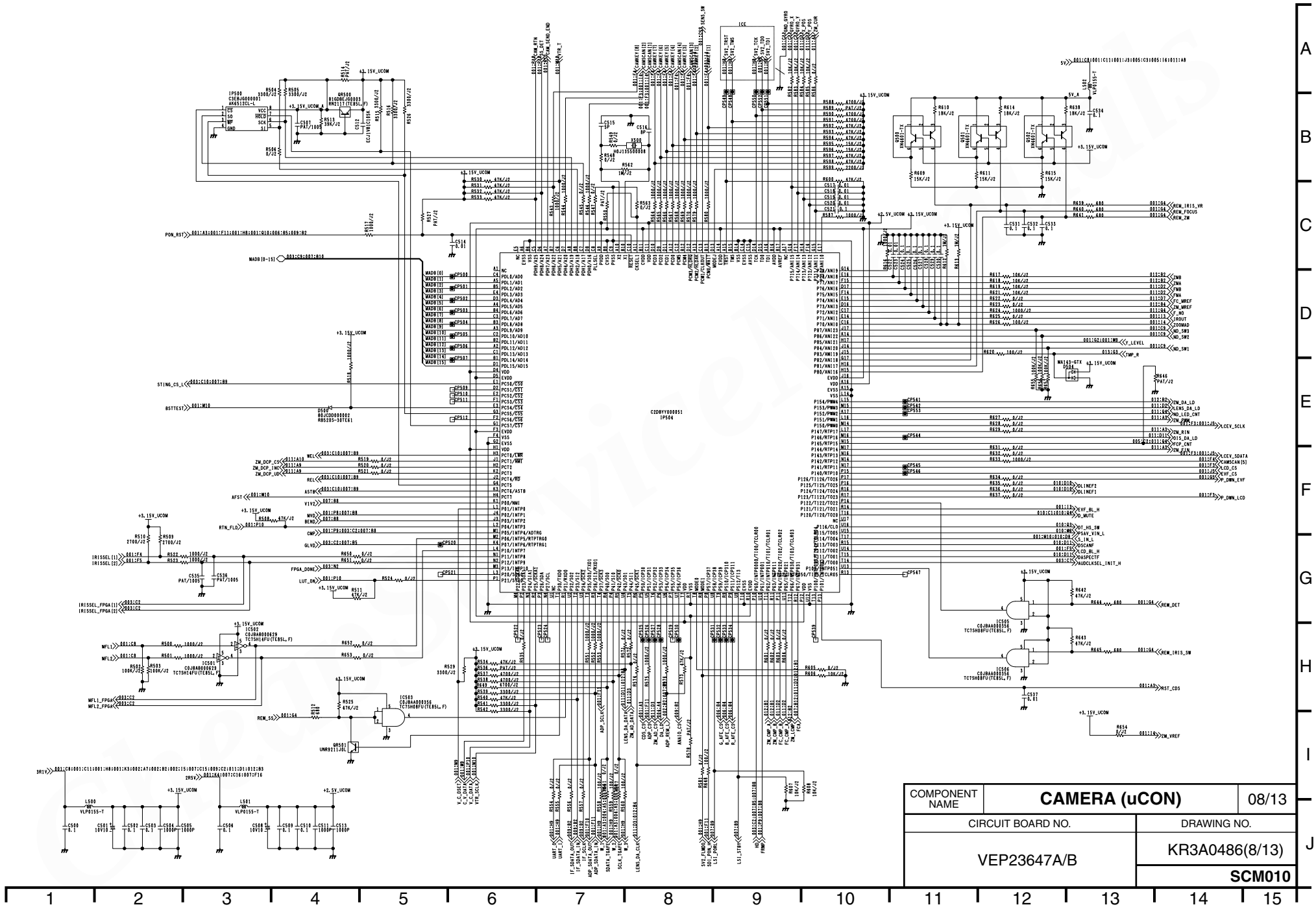
COMPONENT NAME	CAMERA (AFE)	06/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(6/13)
		SCM008



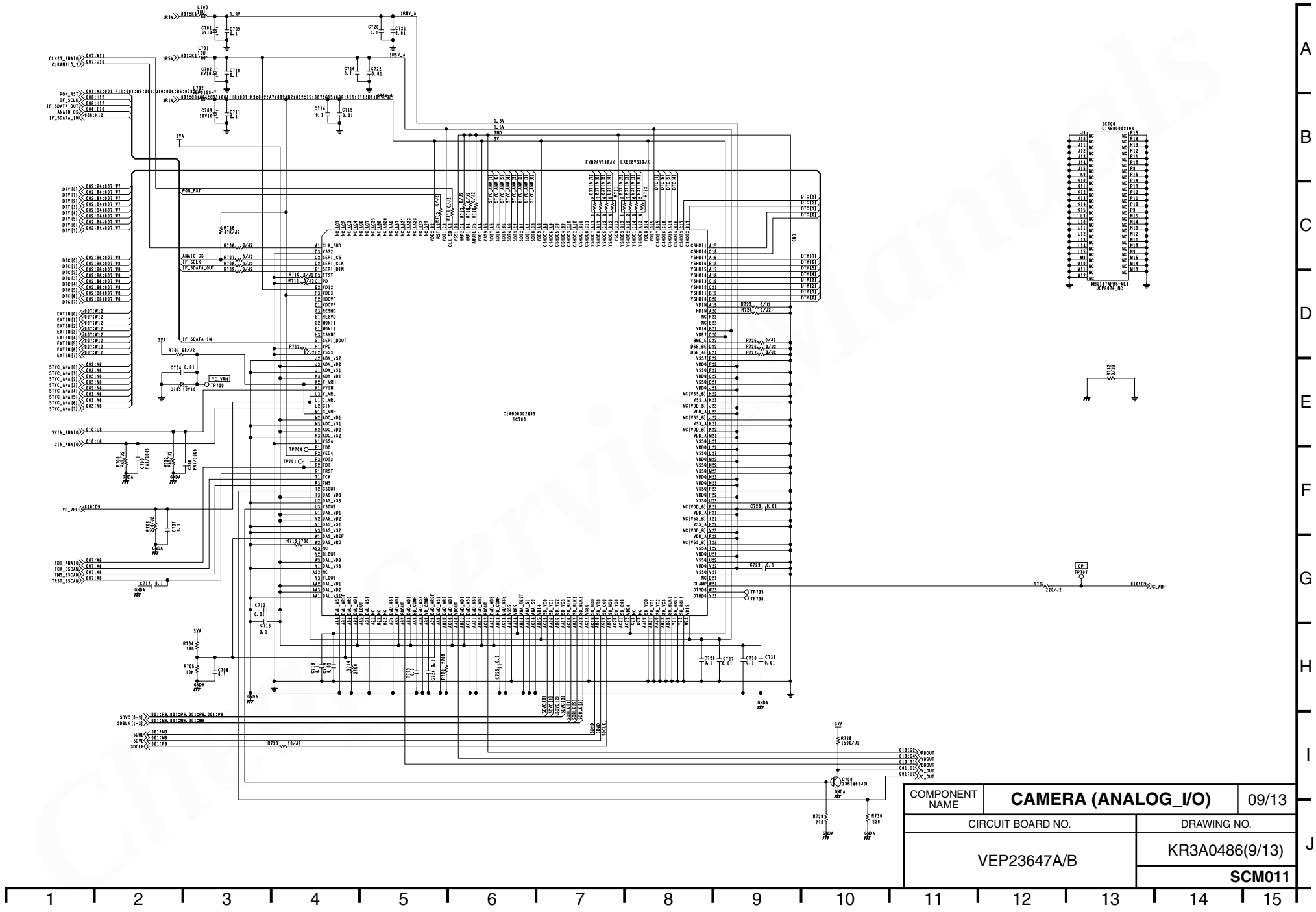
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CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(7/13)
		SCM009

A B C D E F G H I J

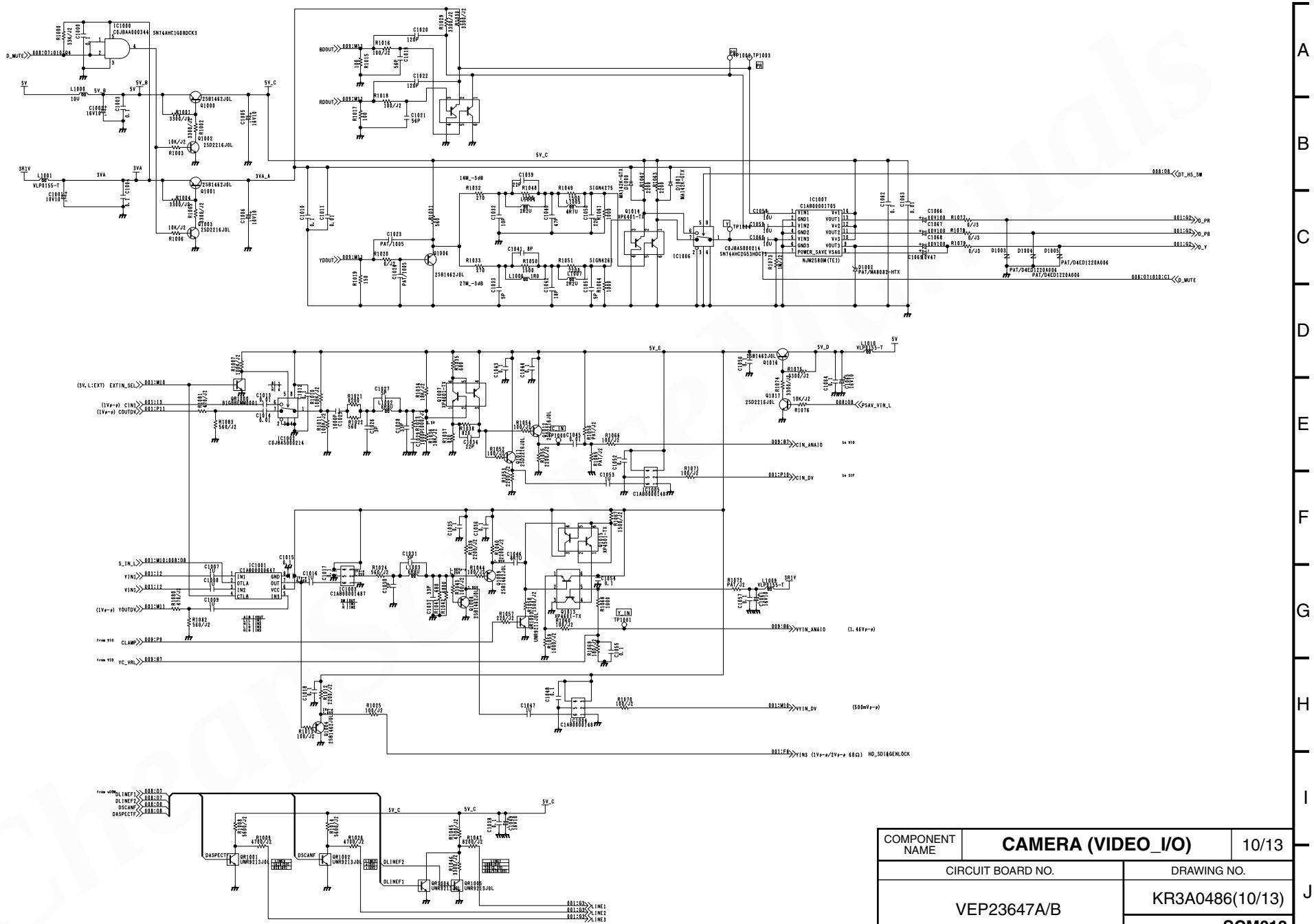
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



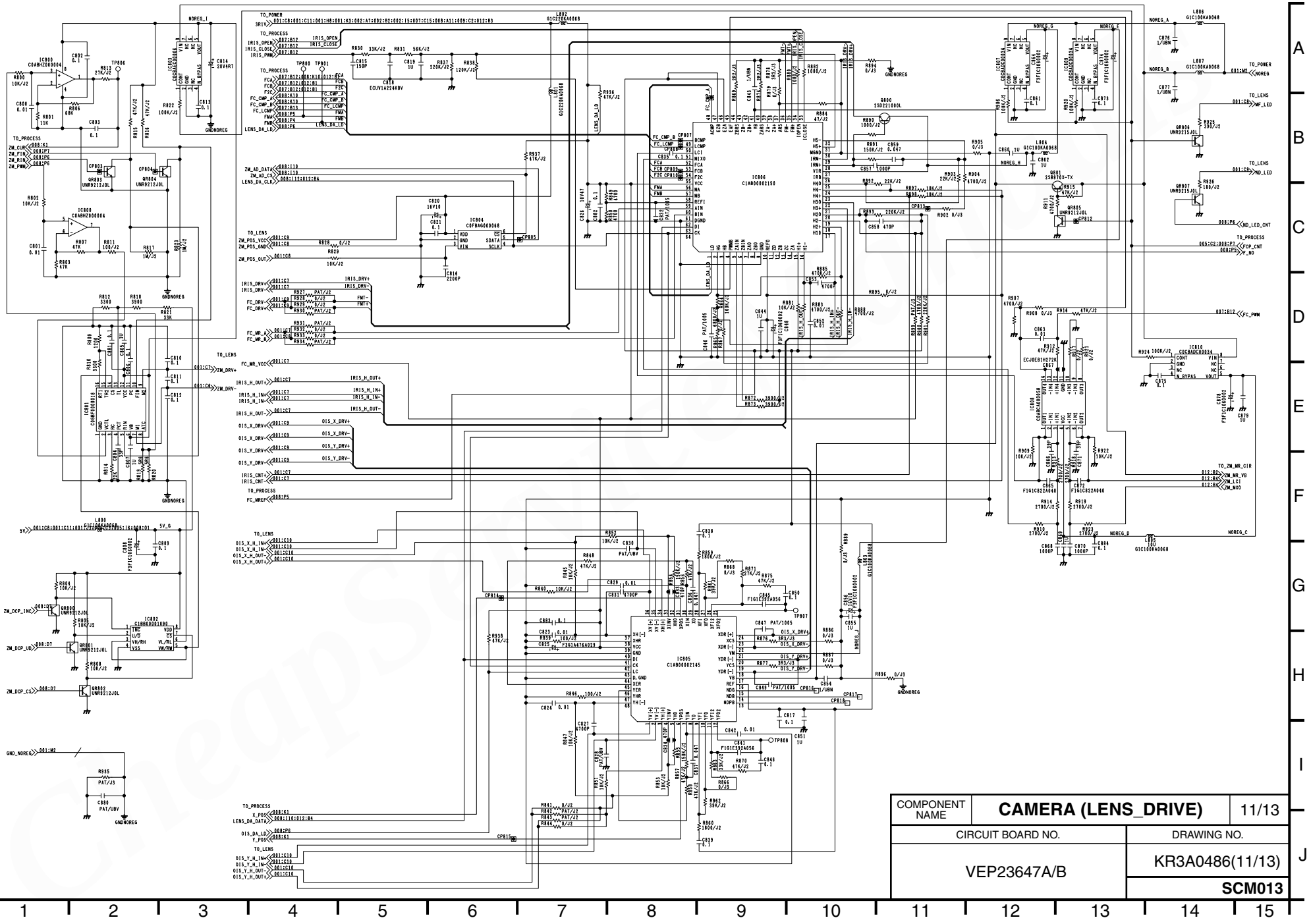
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CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(8/13)
		SCM010



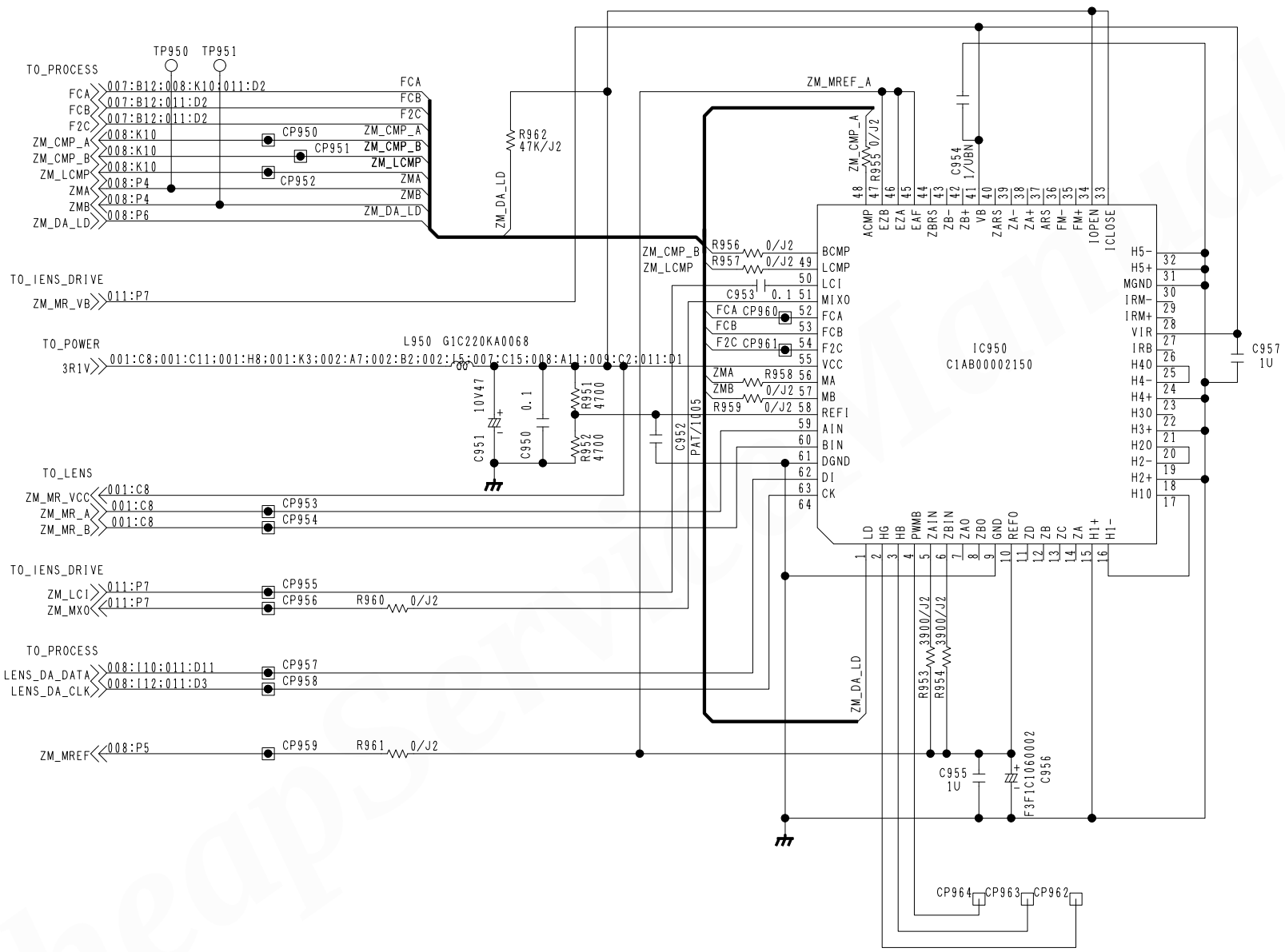
COMPONENT NAME	CAMERA (ANALOG_I/O)	09/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(9/13)
		SCM011



COMPONENT NAME	CAMERA (VIDEO_I/O)	10/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(10/13)
		SCM012

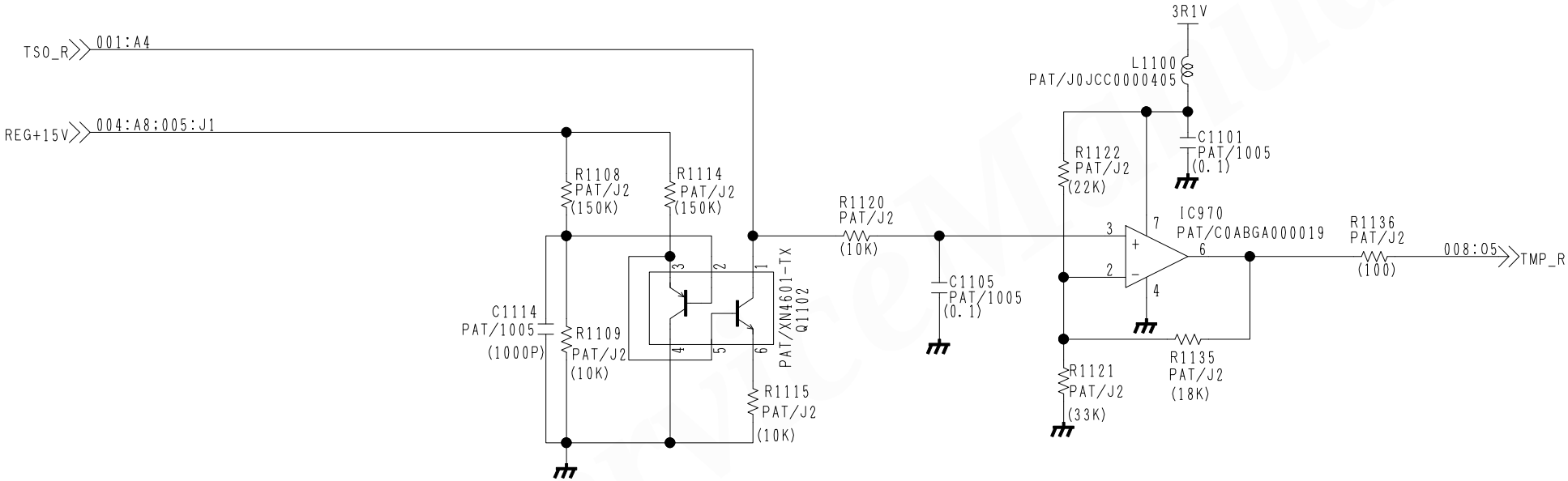


COMPONENT NAME	CAMERA (LENS_DRIVE)	11/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(11/13)
		SCM013



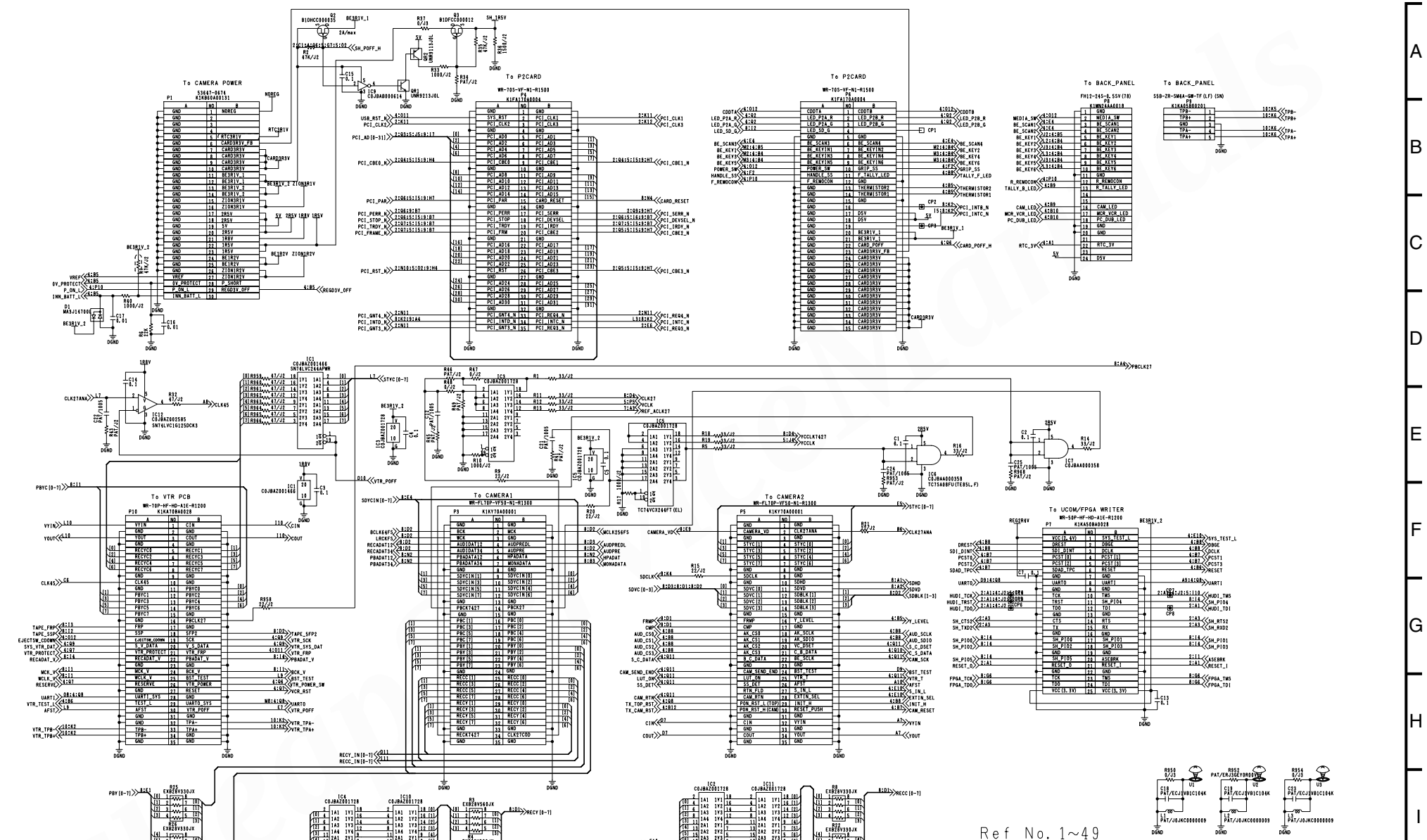
COMPONENT NAME	CAMERA (ZM_MR_IF)	12/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(12/13)
		SCM014

Chiếu sáng Thiết kế

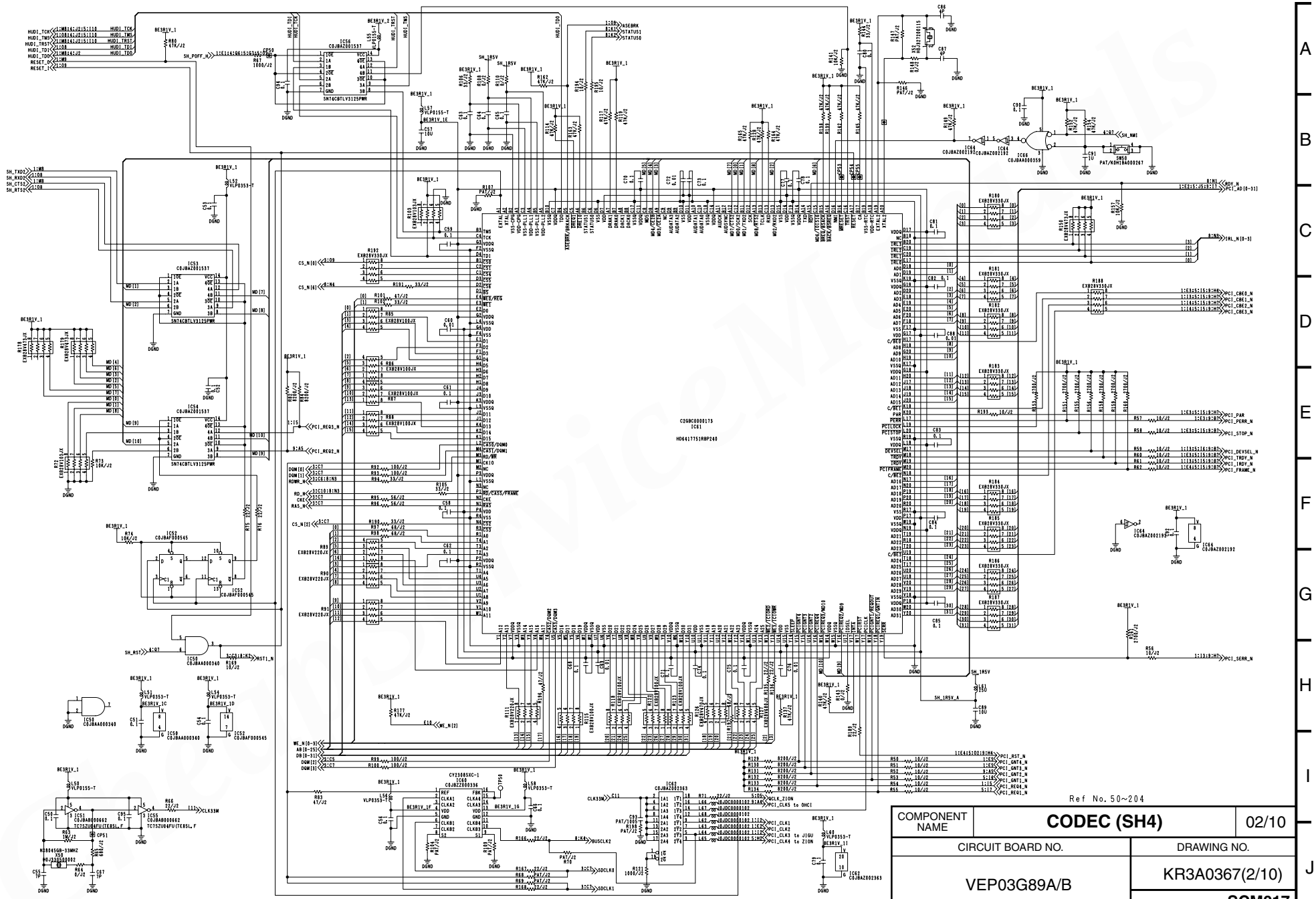


COMPONENT NAME	CAMERA (TMP_OUT)	13/13
CIRCUIT BOARD NO.		DRAWING NO.
VEP23647A/B		KR3A0486(13/13)
		SCM015

Cheapservicemanuals

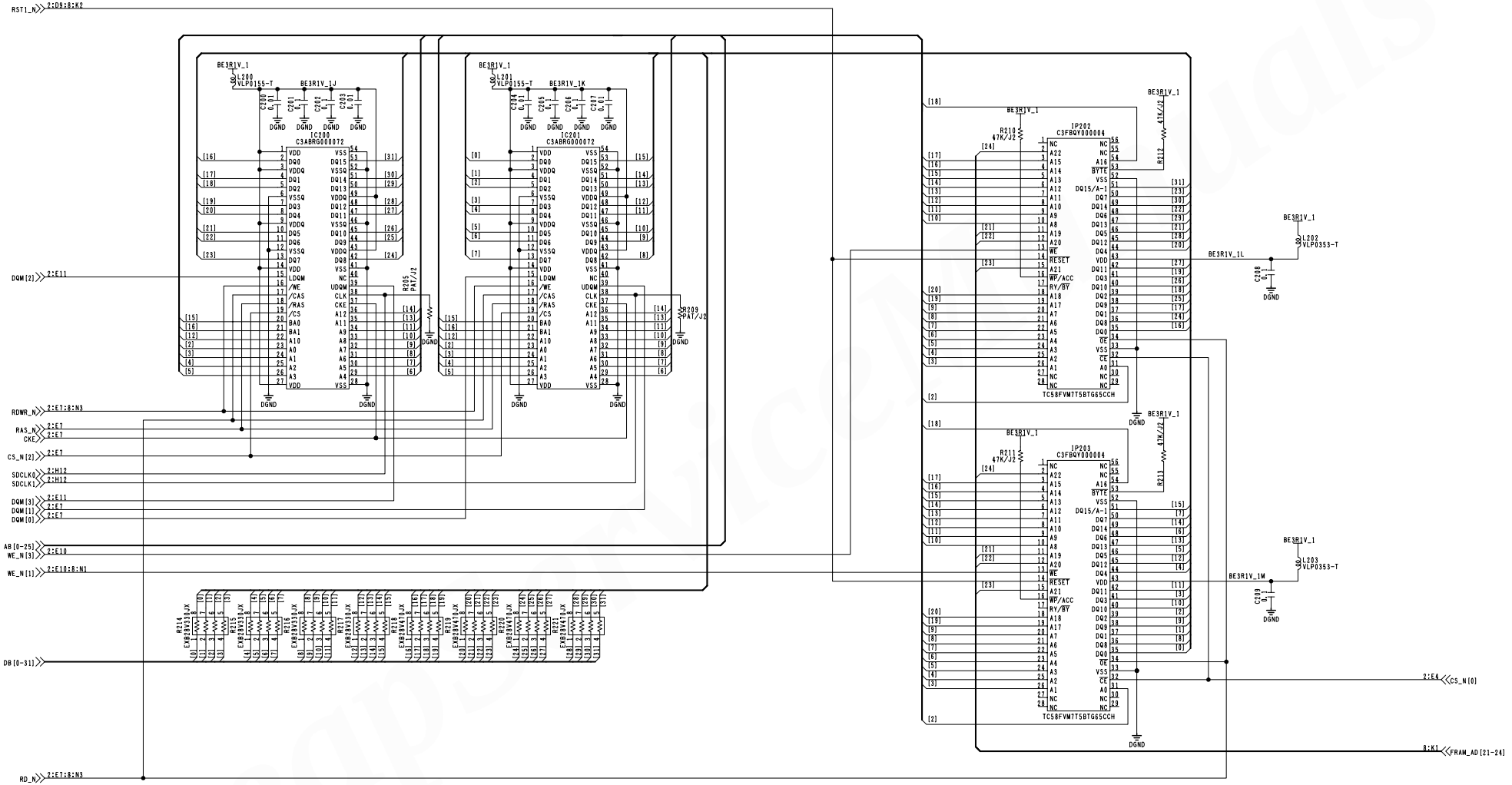


COMPONENT NAME	**CODEC (CONNECTOR)**	01/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(1/10)
		SCM016



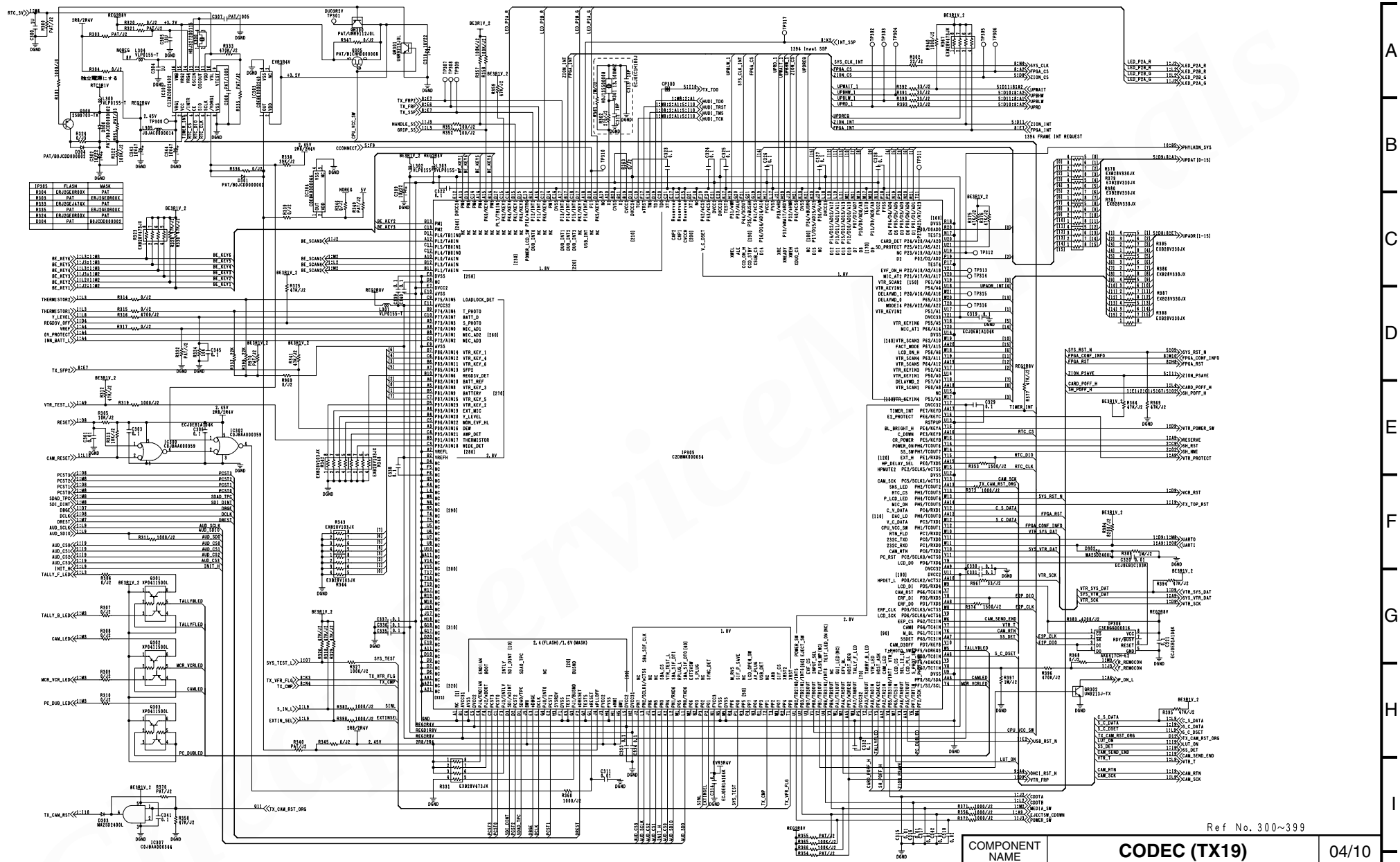
Ref No. 50~204

COMPONENT NAME	CODEC (SH4)	02/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(2/10)
		SCM017



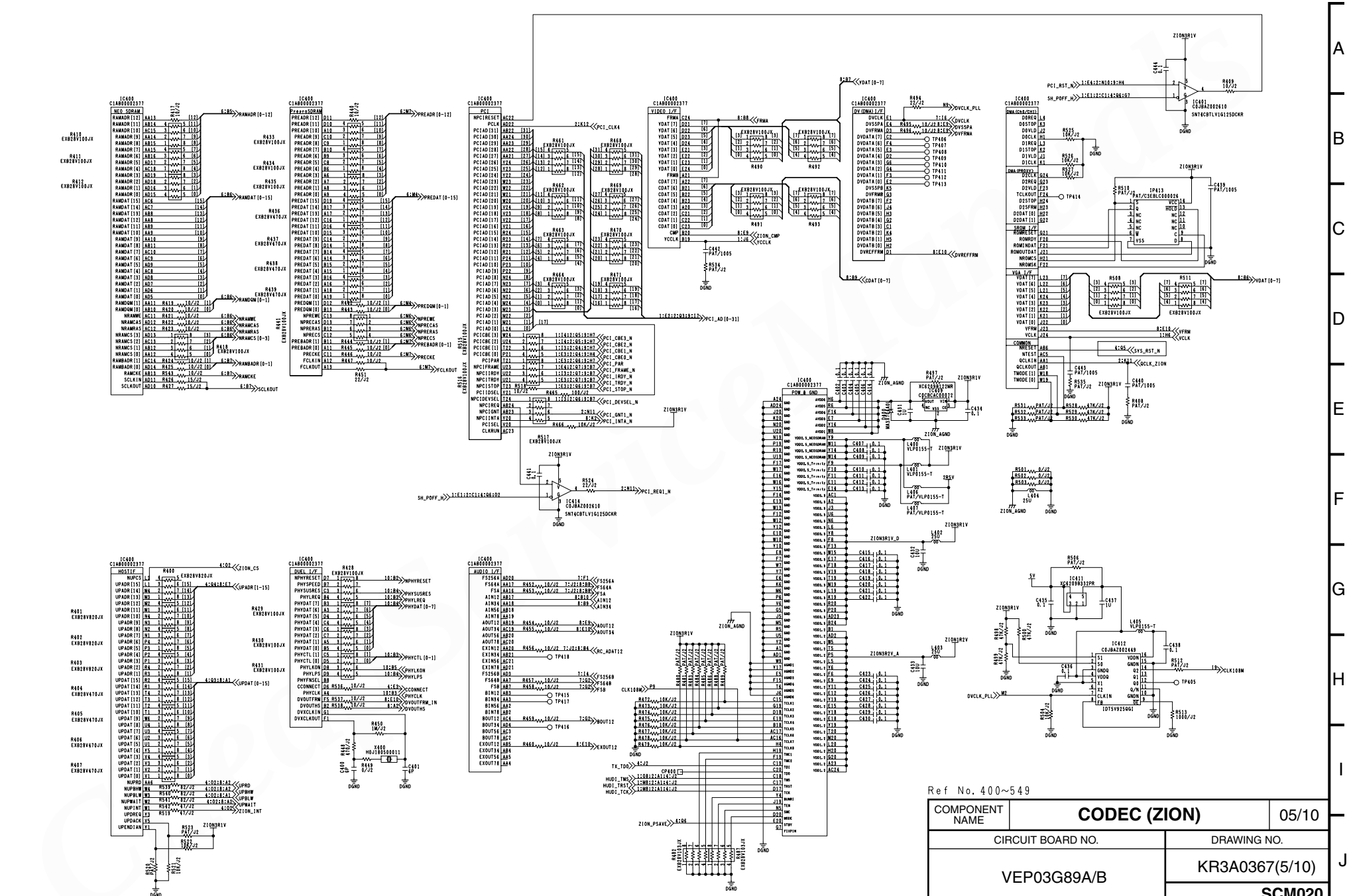
Ref No. 205~299

COMPONENT NAME	CODEC (SH4-MEMORY)	03/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(3/10)
		SCM018



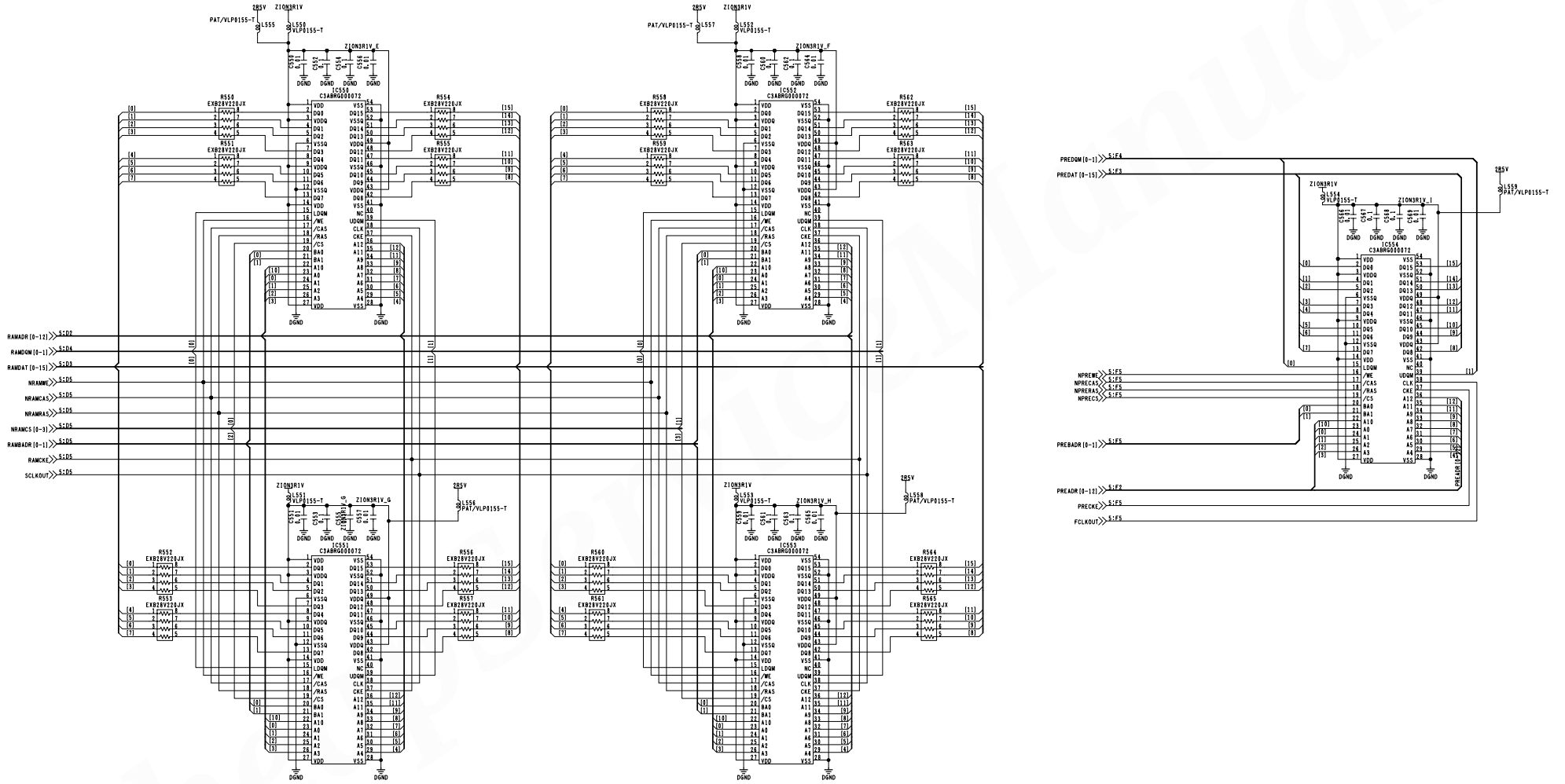
Ref No. 300~399

COMPONENT NAME	CODEC (TX19)	04/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(4/10)
		SCM019



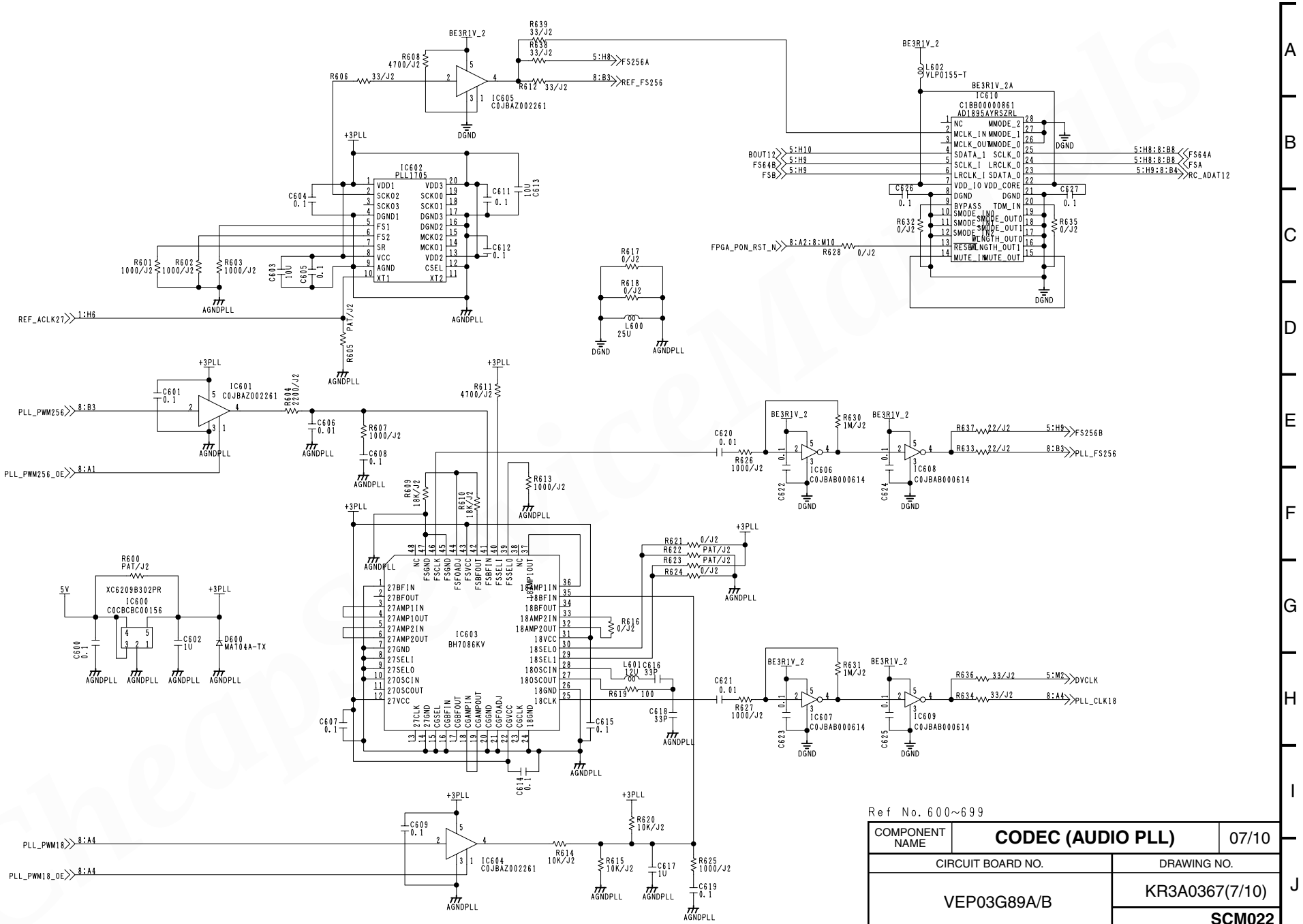
Ref No. 400~549

COMPONENT NAME	CODEC (ZION)	05/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(5/10)
		SCM020



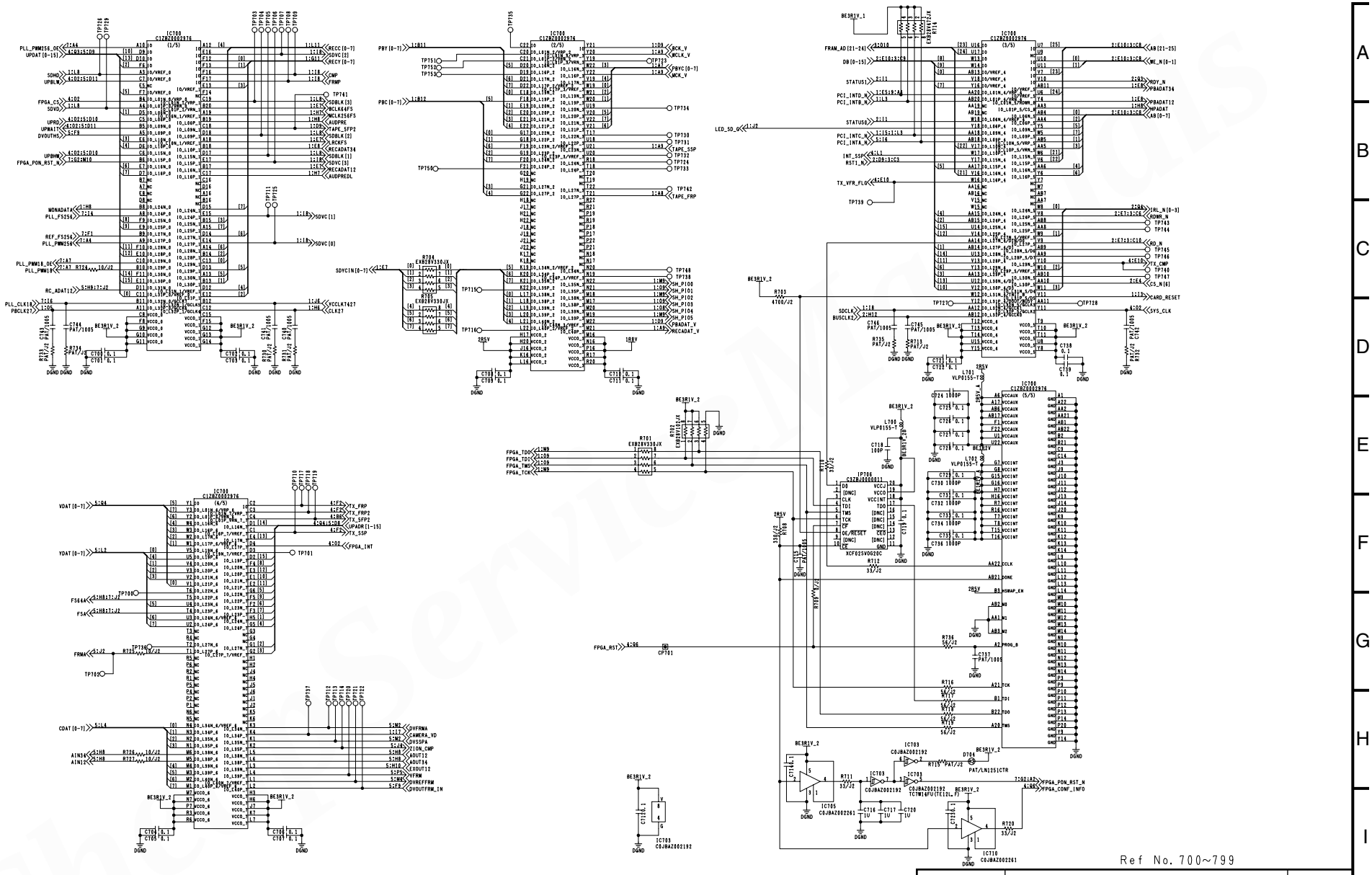
Ref No. 550~599

COMPONENT NAME	CODEC (ZION-SDRAM)	06/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(6/10)
		SCM021



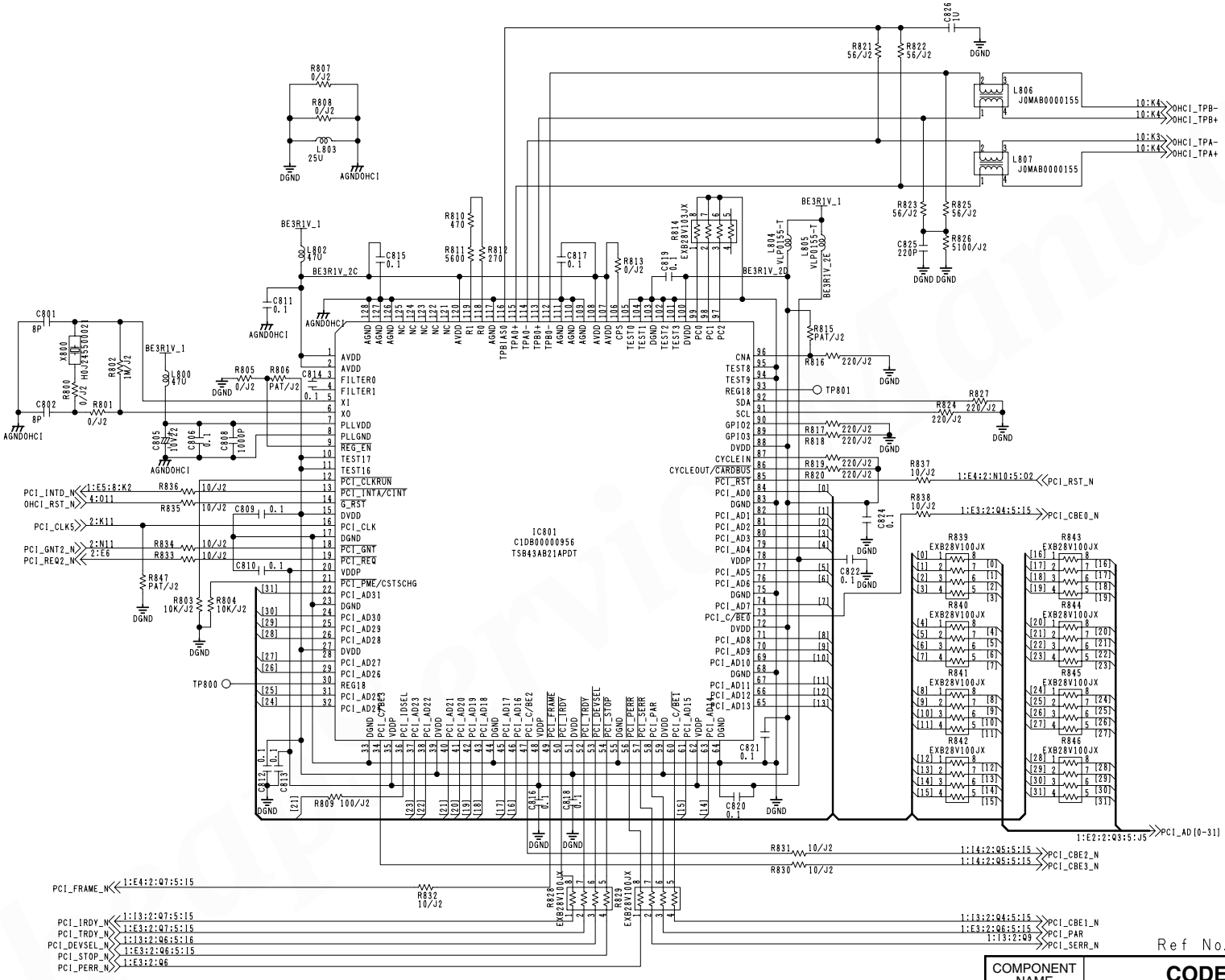
Ref No. 600~699

COMPONENT NAME	CODEC (AUDIO PLL)	07/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(7/10)
		SCM022



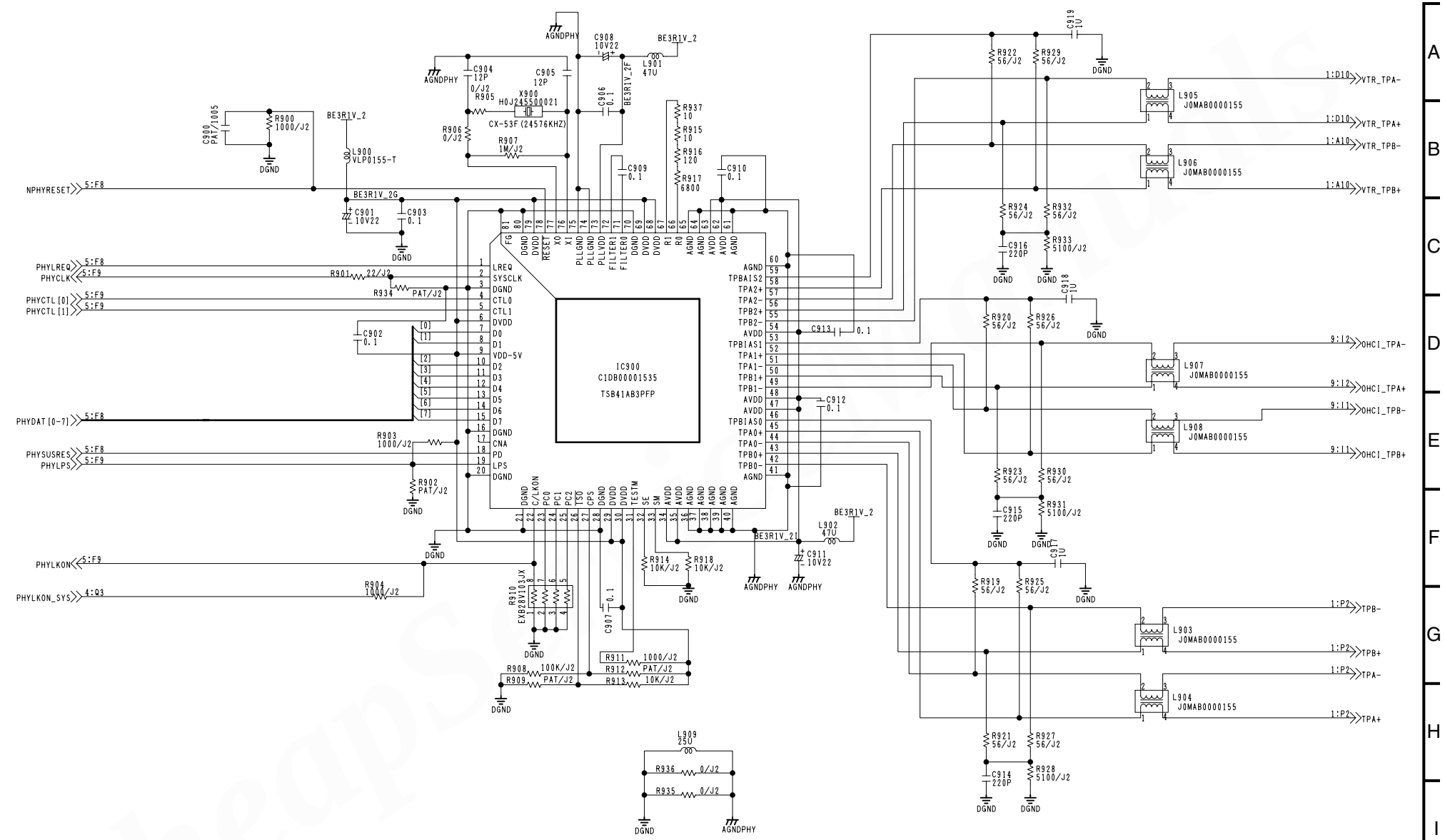
Ref No. 700~799

COMPONENT NAME	CODEC (FPGA)	08/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(8/10)
		SCM023



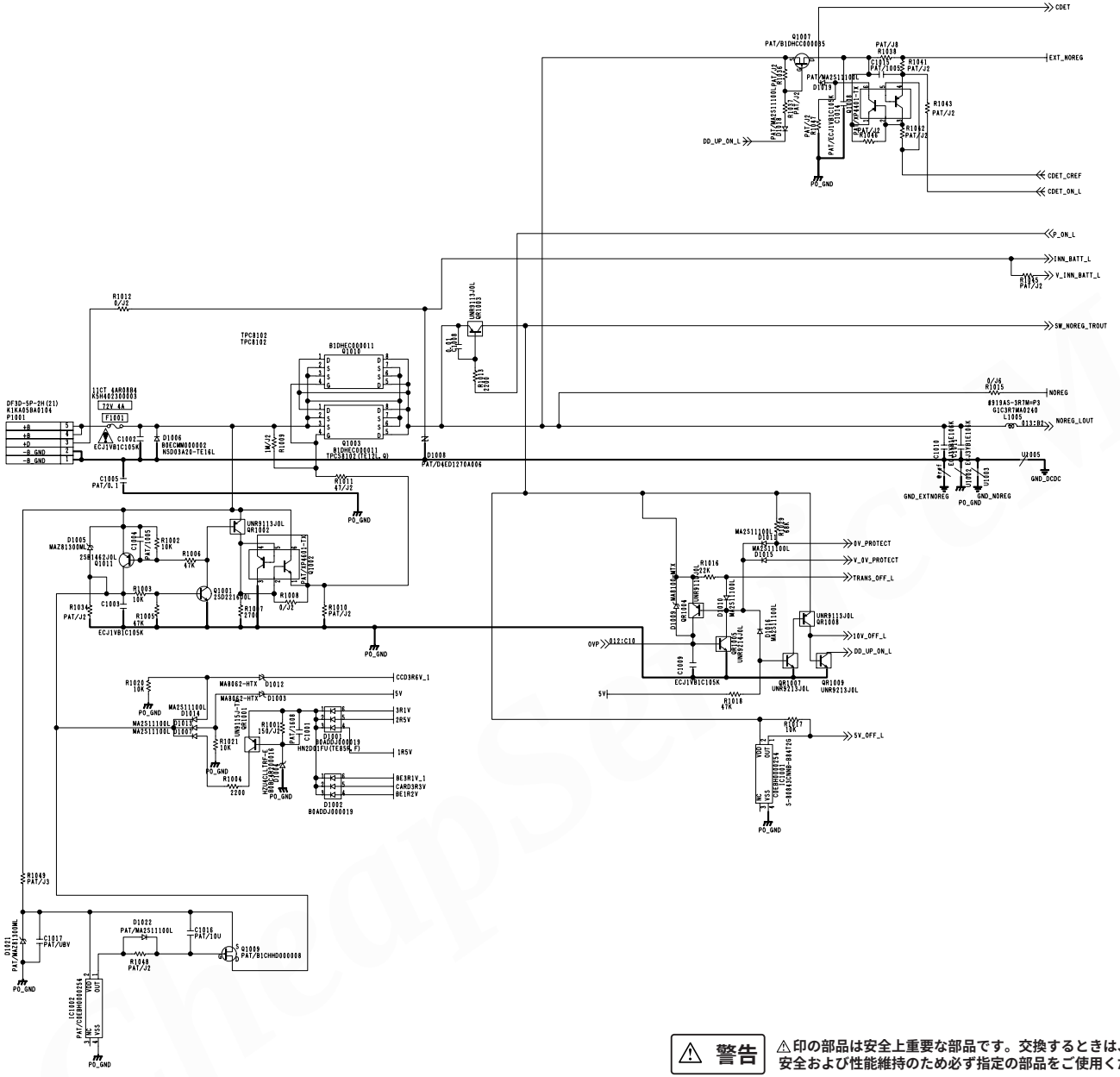
Ref No. 800~899

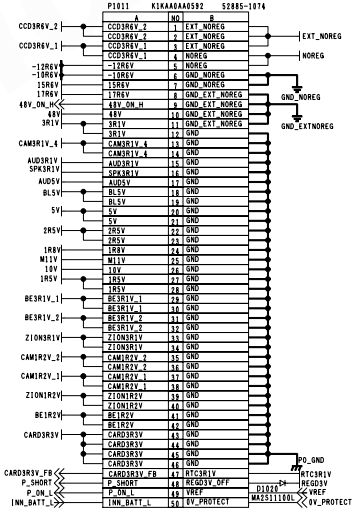
COMPONENT NAME	CODEC (OHCI)	09/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(9/10)
		SCM024

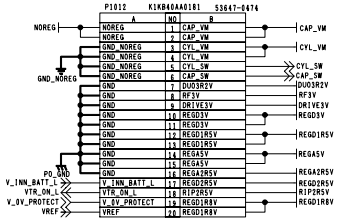


Ref No. 900~999

COMPONENT NAME	CODEC (1394 PHY)	10/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G89A/B		KR3A0367(10/10)
		SCM025





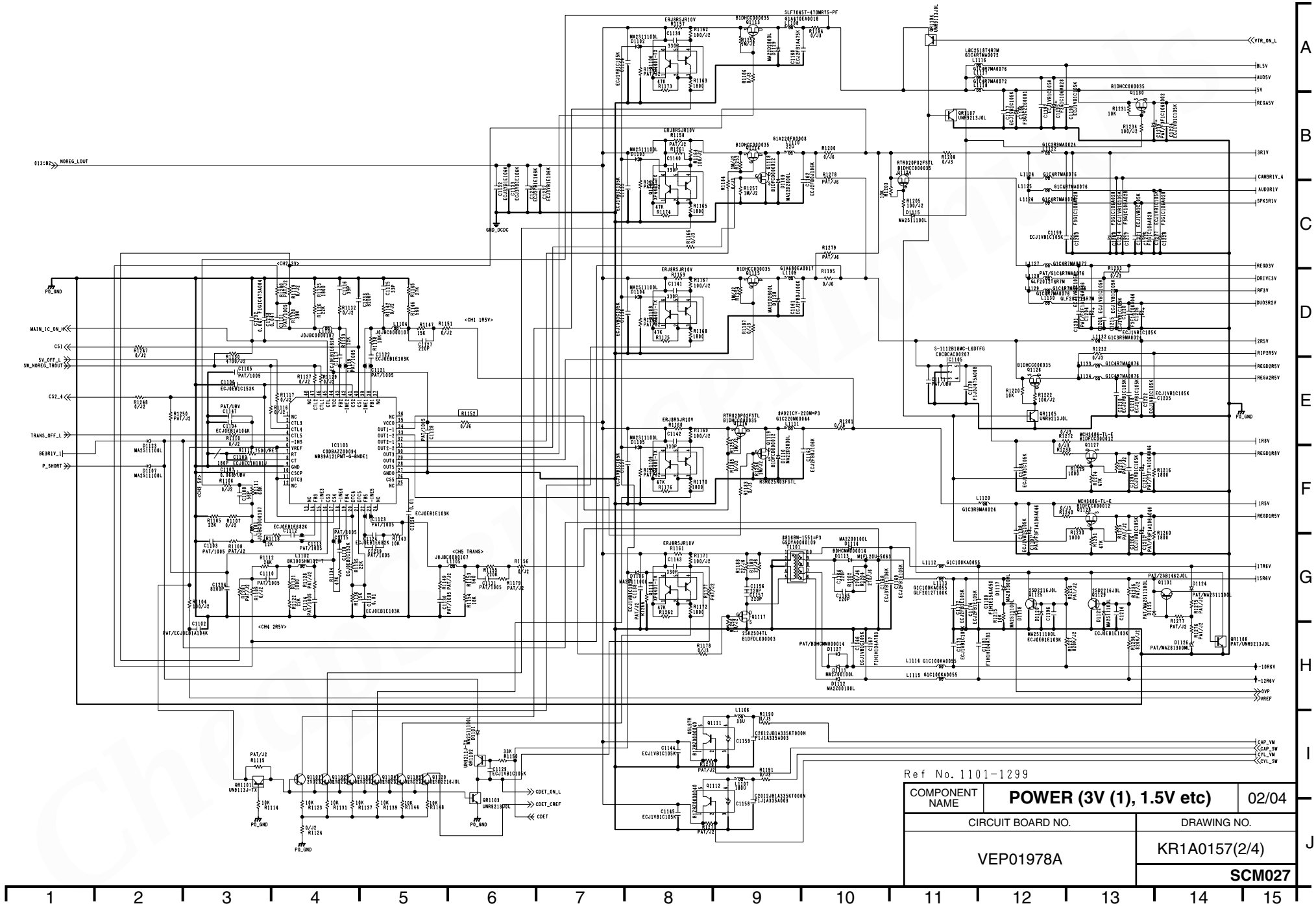


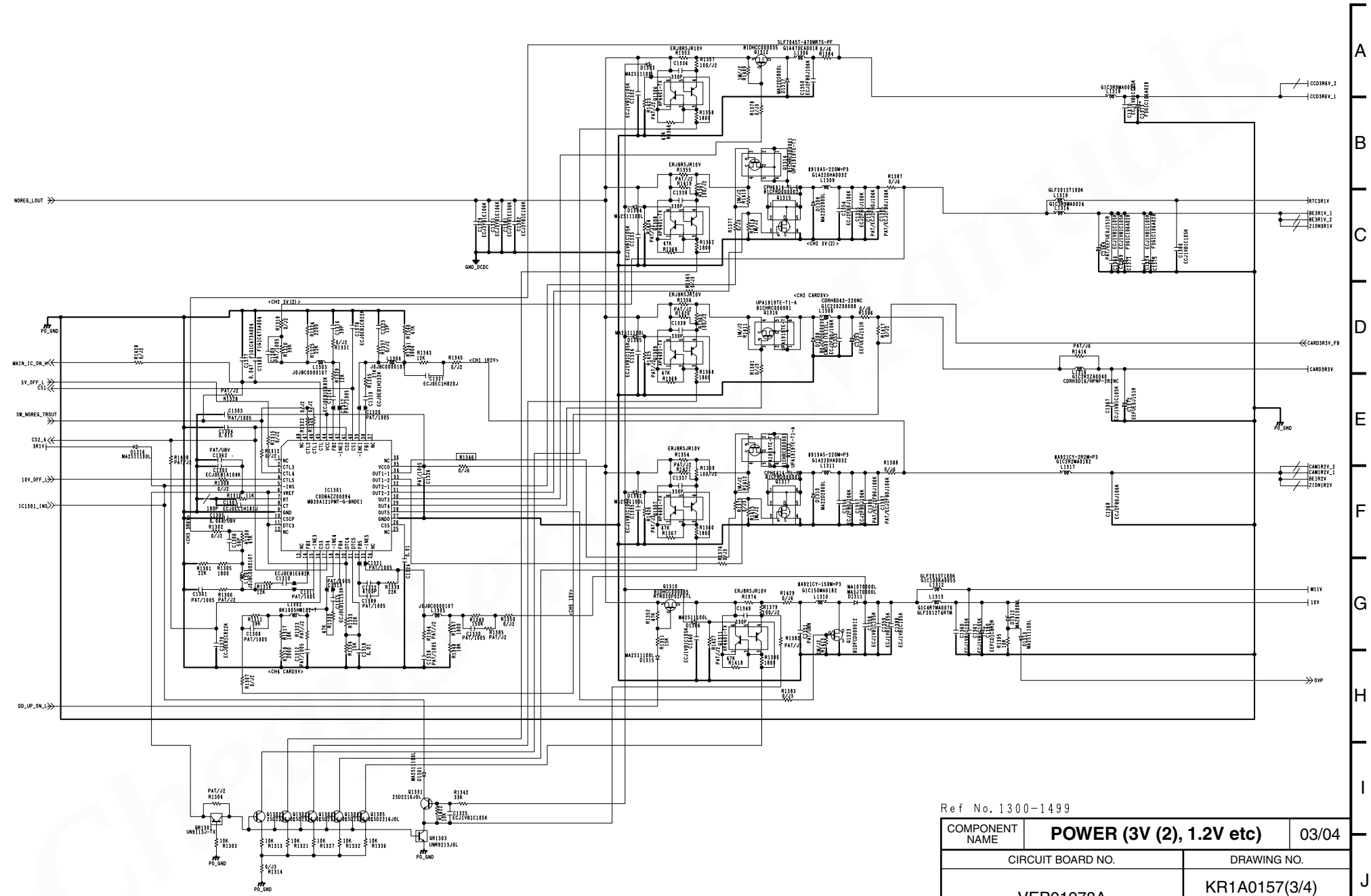
⚠ 警告 ⚠印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

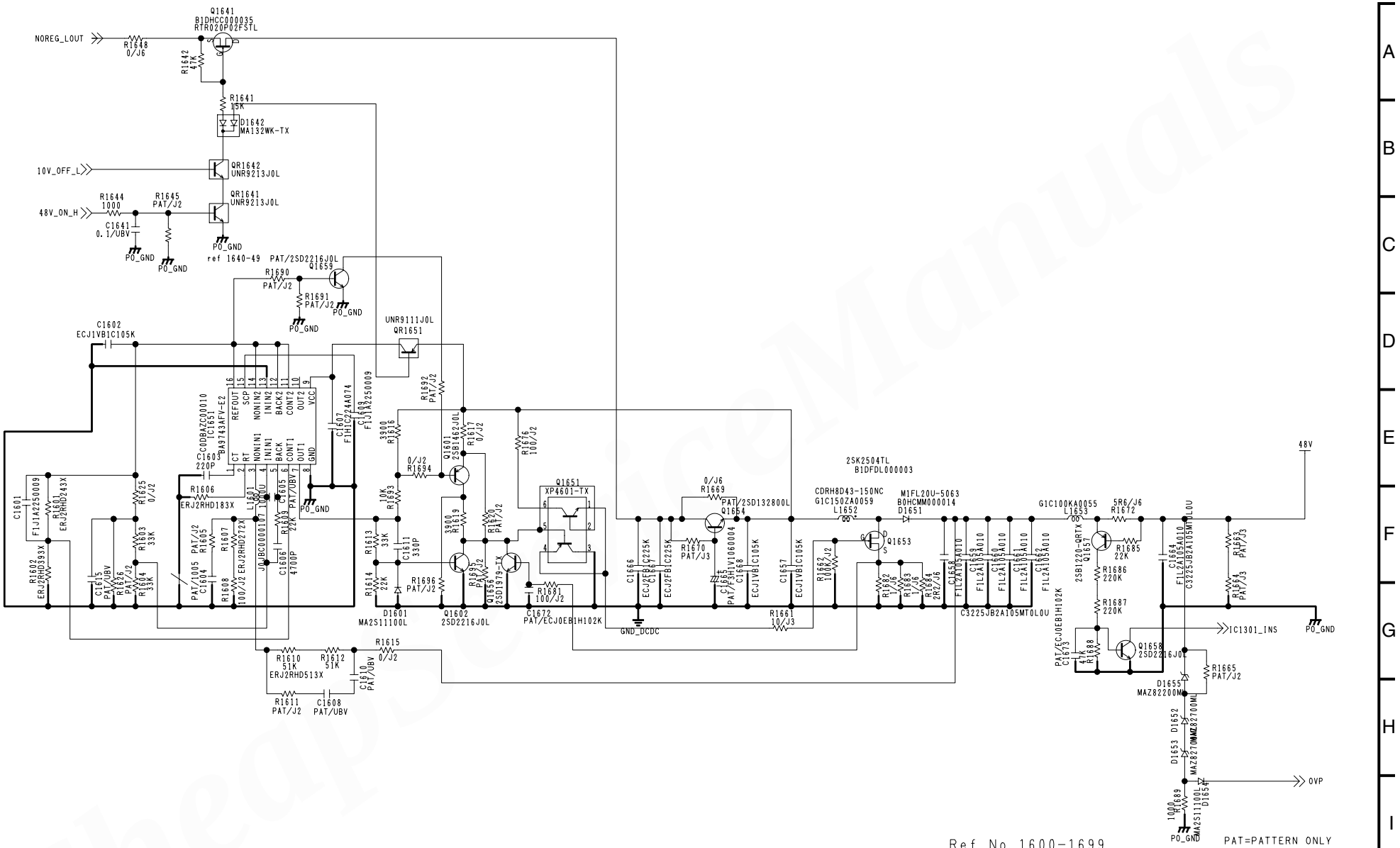
Components identified with the mark⚠have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref No. 1001-1099

COMPONENT NAME	POWER (IN/OUT etc)	01/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP01978A		KR1A0157(1/4)
		SCM026


NOREG_LOUT
GND_DCDC
MAIN_IC_ON_H
CS1
5V_OFF_L
SW_NOREG_TROUT
CS2_4
TRANS_OFF_L
BE3R1V_L
P_SHORT
IC1103
C0DBAZZ00094
MB39A121PMT-G-BNDE1
CDET_ON_L
CDET_CREF
CDET
VTR_ON_L
BL5V
AUD5V
5V
REGA5V
3R1V
CAM3R1V_4
AUD3R1V
5PK3R1V
REGD5V
DRIVE3V
RF3V
DUD3R2V
2R5V
R1P2R5V
REGD2R5V
REGA2R5V
1R8V
REGD1R8V
1R5V
REGD1R5V
17R6V
15R6V
-10R6V
-12R6V
OVP
VREF
CAP_VM
CAP_SW
CYL_VM
CYL_SW
Ref No. 1101-1299
COMPONENT NAME
POWER (3V (1), 1.5V etc)
02/04
CIRCUIT BOARD NO.
VEP01978A
DRAWING NO.
KR1A0157(2/4)
SCM027

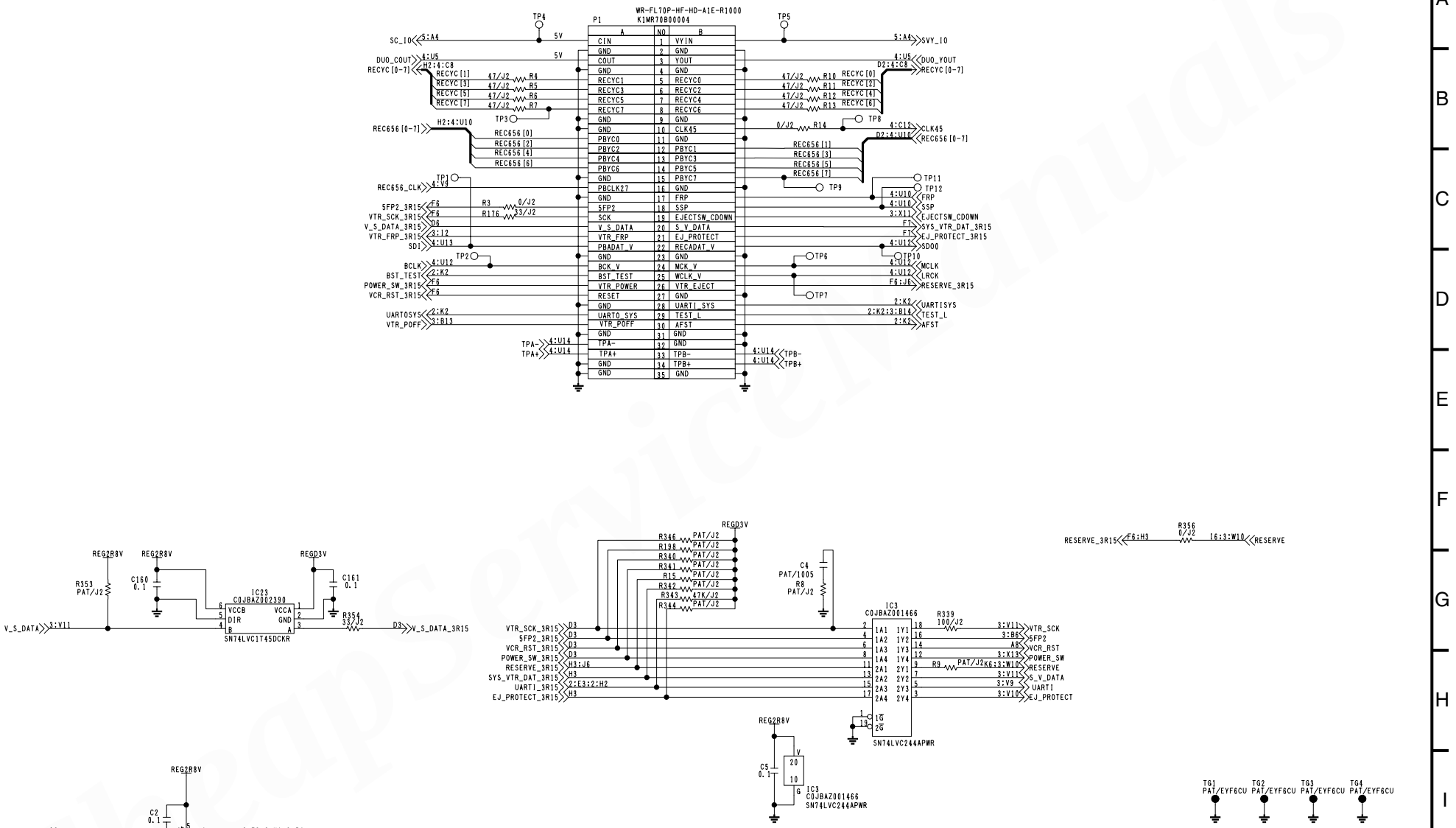

NOREG_LOUT
MAIN_IC_ON_H
5V_OFF_L
CS1
SW_NOREG_TROUT
CS2_4
3R1V
10V_OFF_L
IC1301_INS
DD_UP_ON_L
PO_GND
GND_DCDC
IC1301
C0DBAZZ00094
MB39A121PMT-G-BNDE1
CCD3R6V_2
CCD3R6V_1
RTC3R1V
BE3R1V_1
BE3R1V_2
Z10N3R1V
CARD3R3V_FB
CARD3R3V
CAM1R2V_2
CAM1R2V_1
BE1R2V
Z10N1R2V
M11V
10V
OVP
Ref No. 1300-1499
COMPONENT NAME
POWER (3V (2), 1.2V etc)
03/04
CIRCUIT BOARD NO.
VEP01978A
DRAWING NO.
KR1A0157(3/4)
SCM028



COMPONENT NAME	POWER (48V)	04/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP01978A		KR1A0157(4/4)
		SCM029

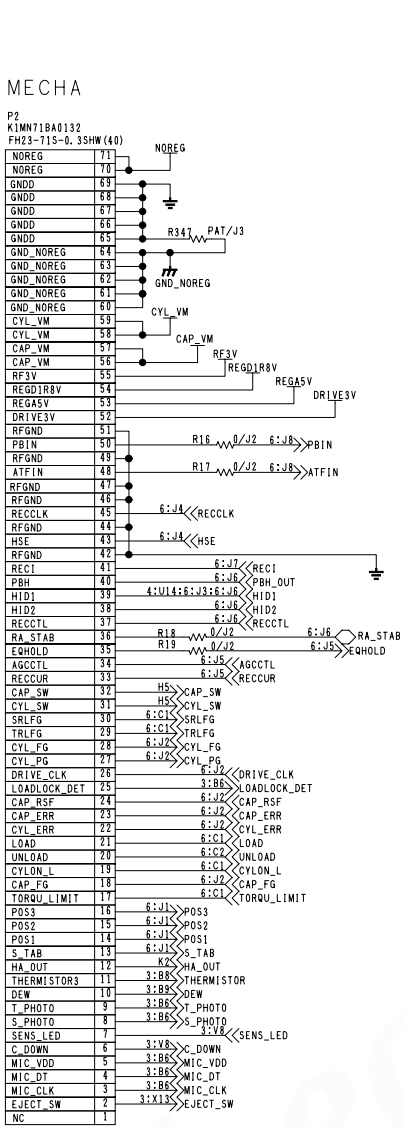
Circuit Diagram Manuals

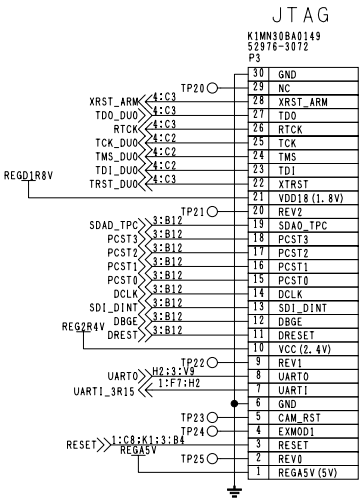
BE Main Board

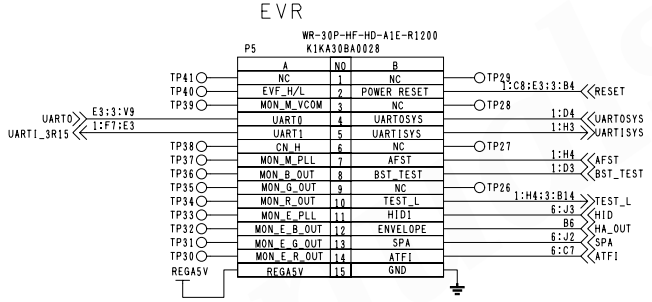


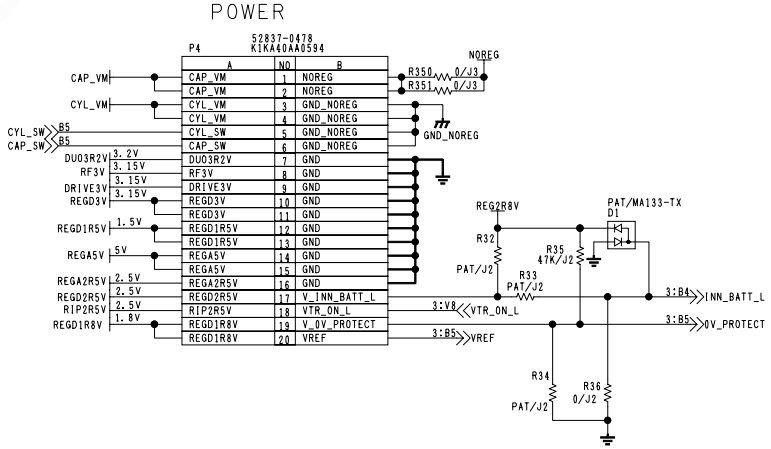
COMPONENT NAME	VTR (CONNECTOR1_BE)	01/06
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G90A/B		KR3A0368(1/6)
		SCM030

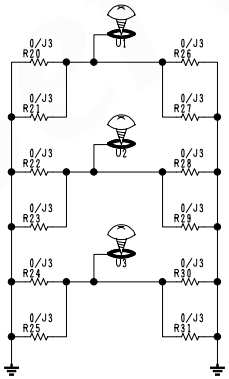
Circuit Diagrams





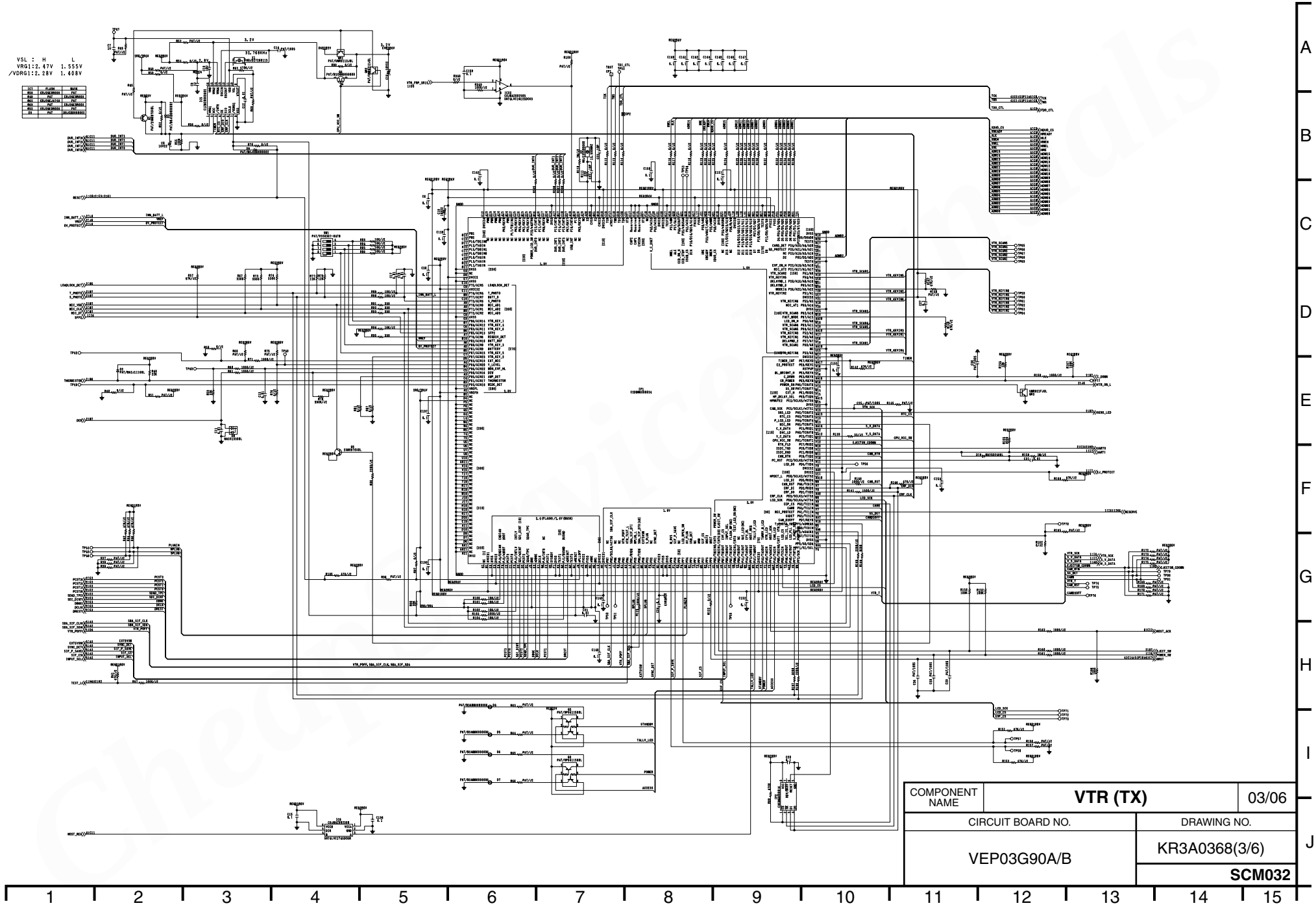




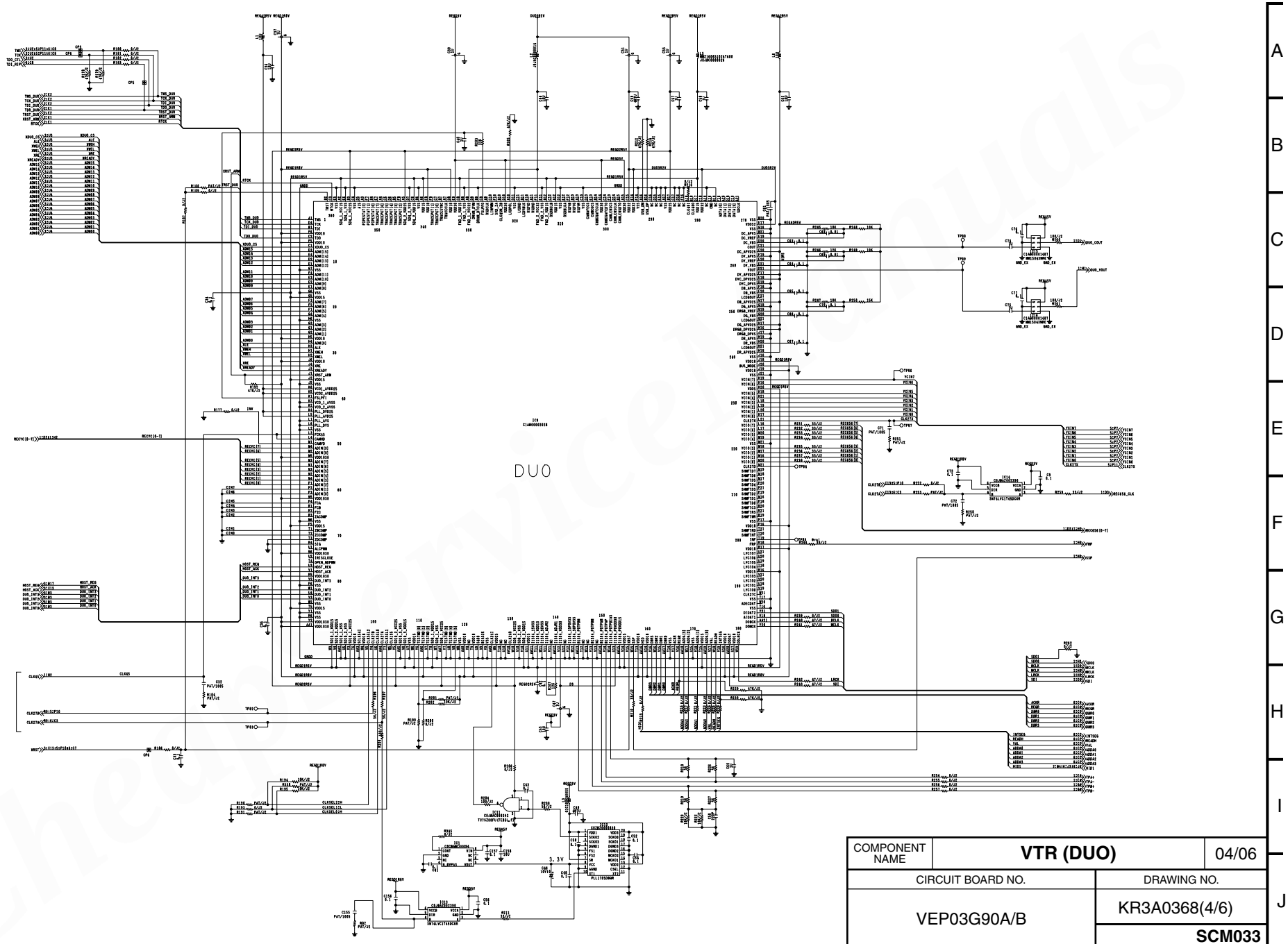


COMPONENT NAME	**VTR (CONNECTOR2_MECHA)**	02/06
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G90A/B		KR3A0368(2/6)
		SCM031

Confidential Material

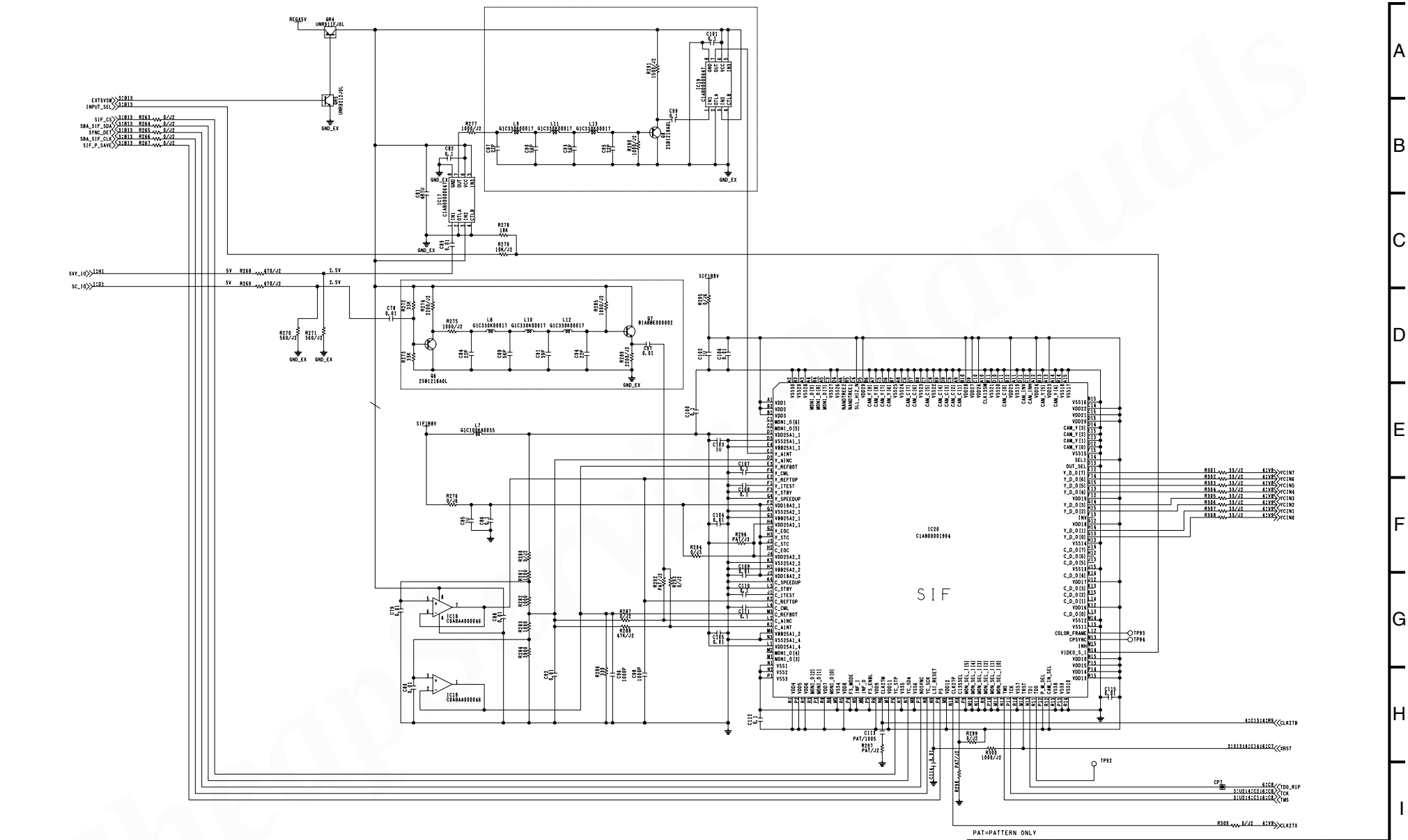


COMPONENT NAME	VTR (TX)	03/06
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G90A/B		KR3A0368(3/6)
		SCM032



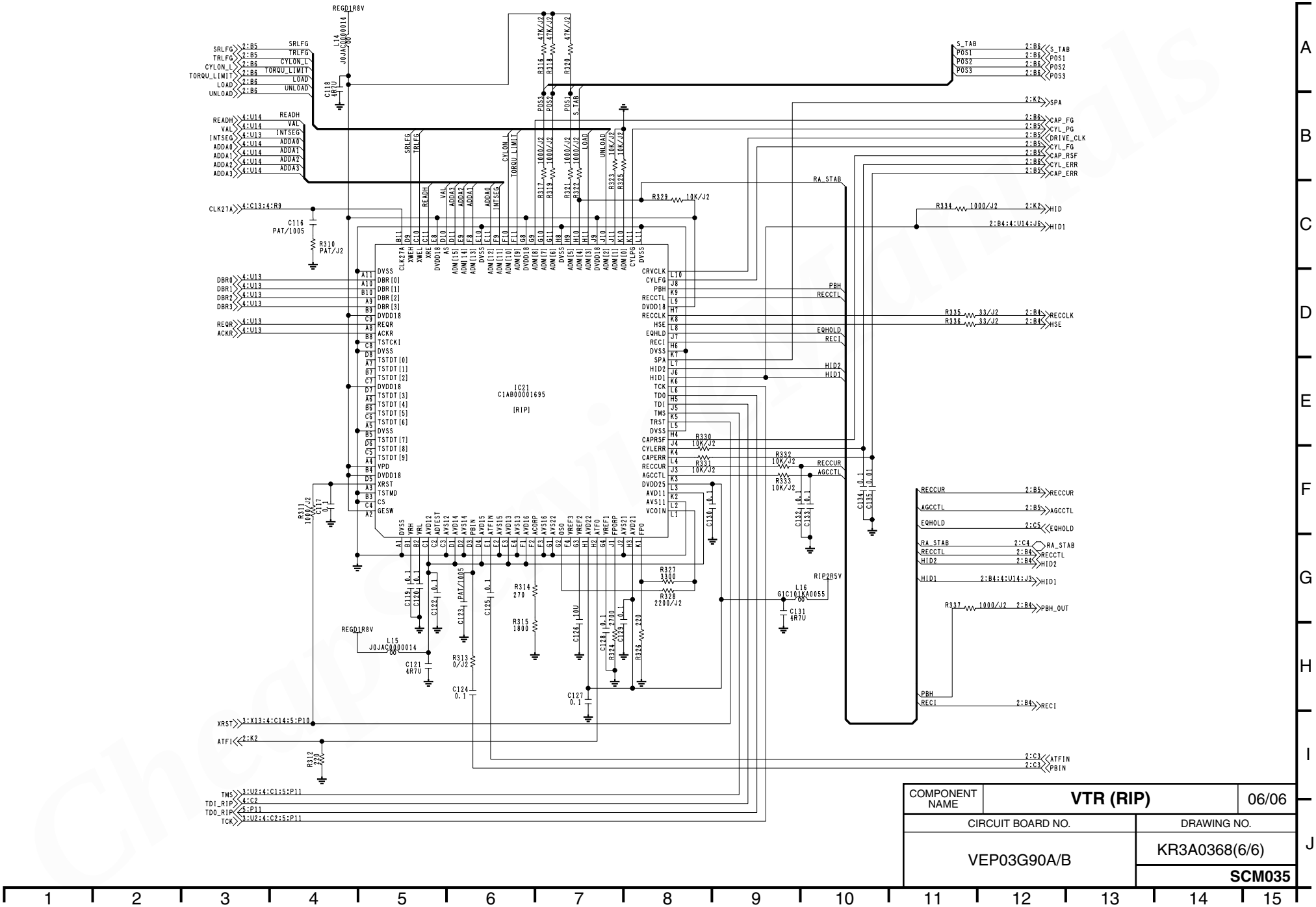
COMPONENT NAME	VTR (DUO)	04/06
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G90A/B		KR3A0368(4/6)
		SCM033

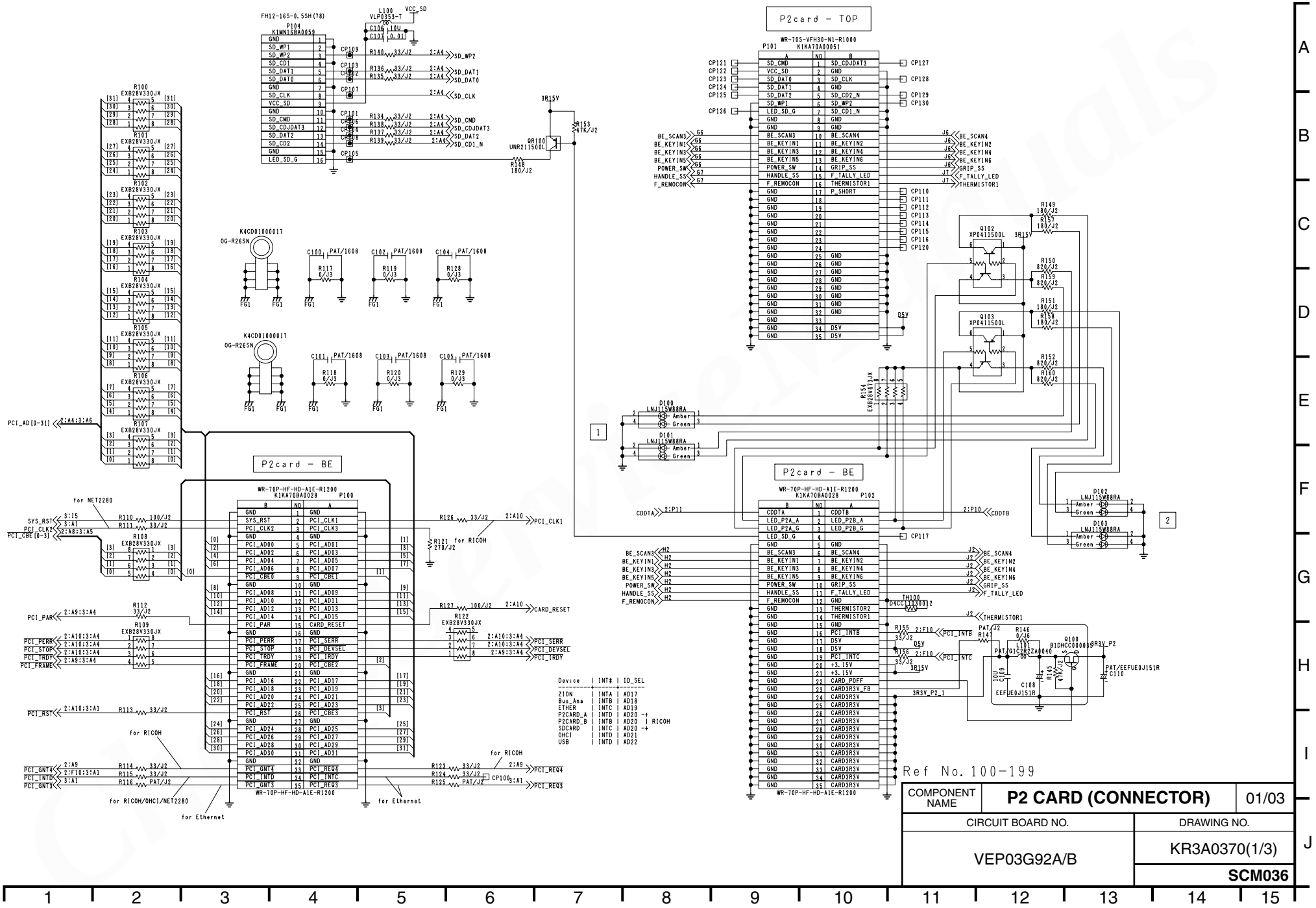
Circuit Diagrams

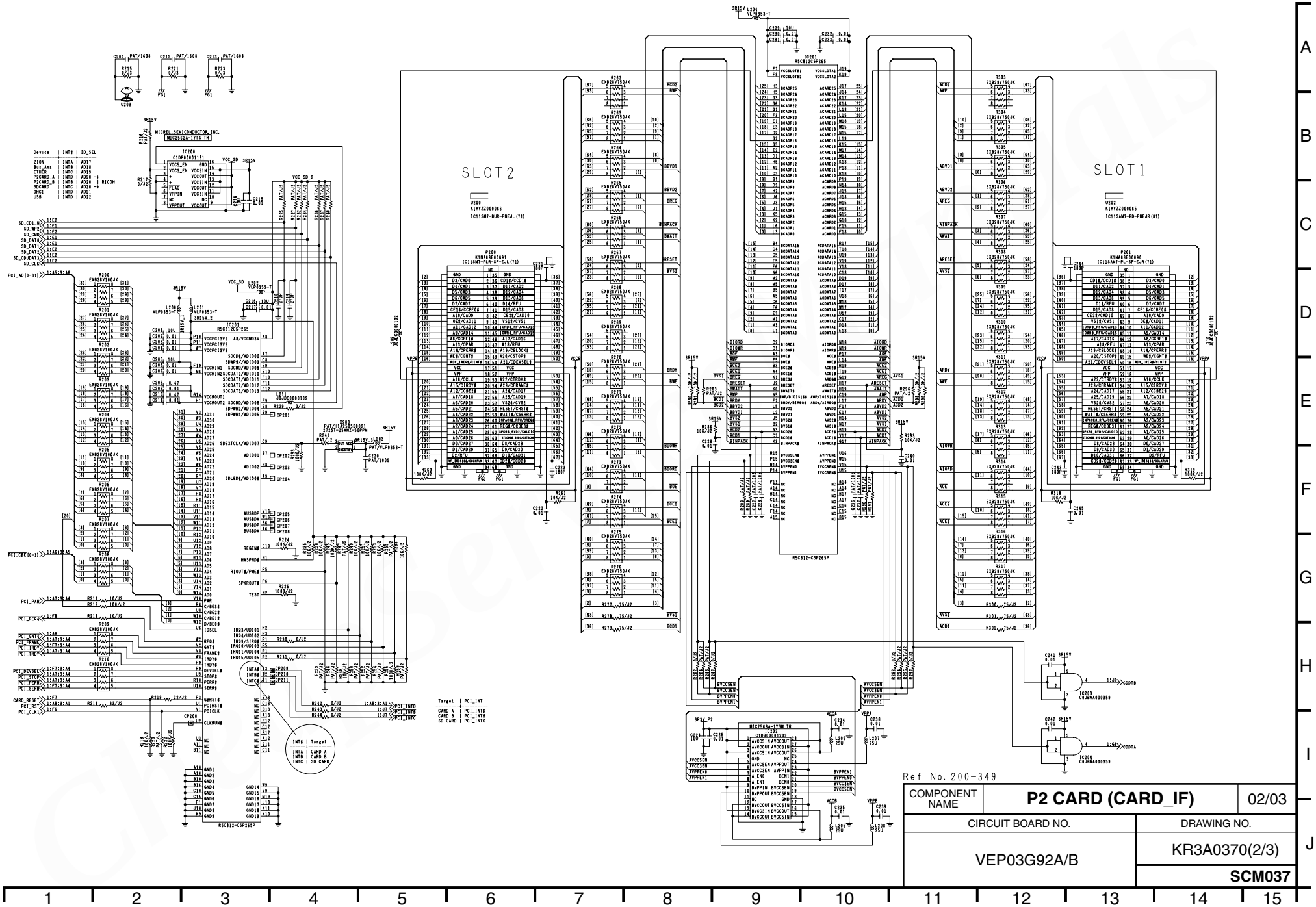


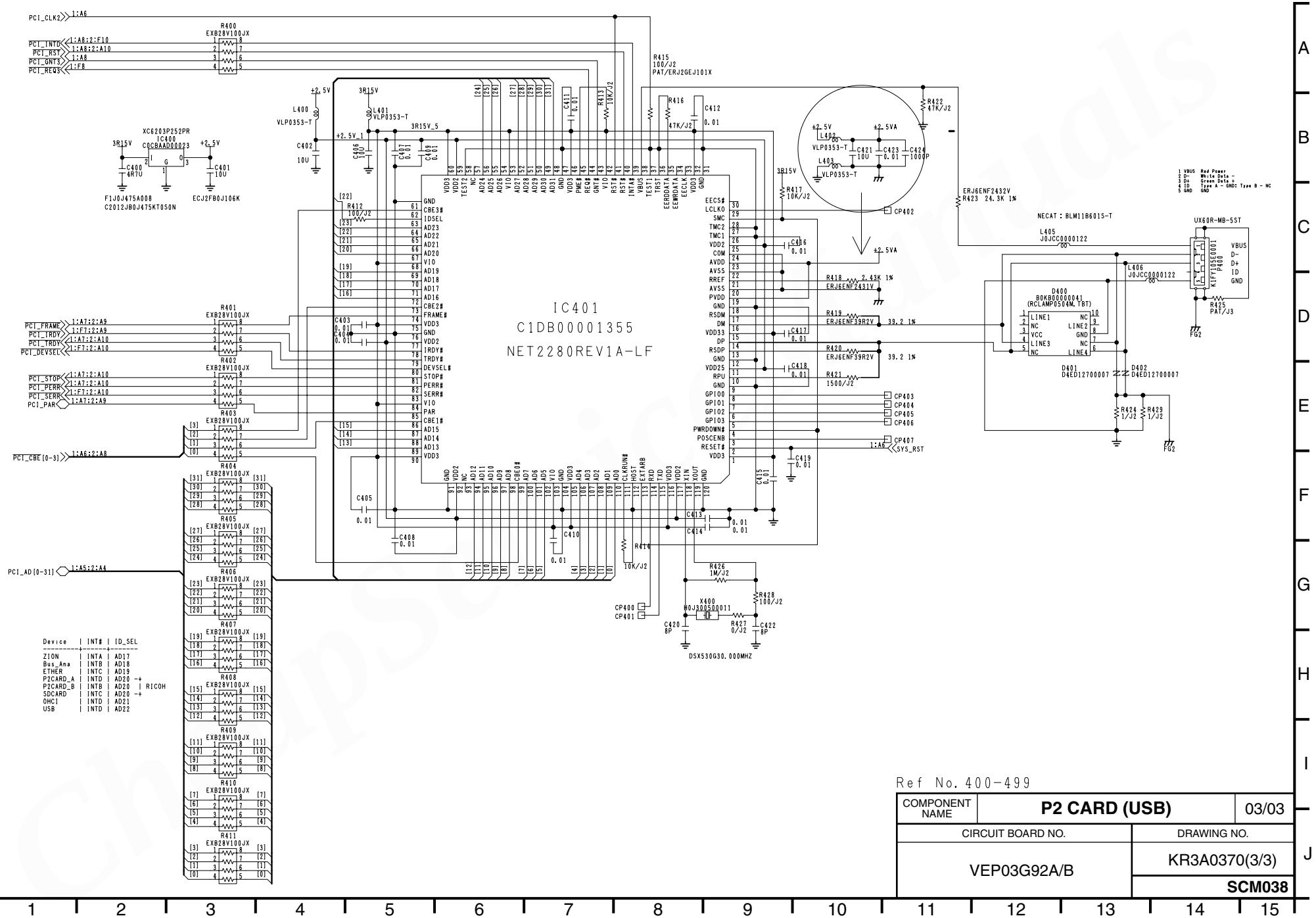
COMPONENT NAME	VTR (SIF)	05/06
CIRCUIT BOARD NO.	DRAWING NO.	
VEP03G90A/B	KR3A0368(5/6)	
	SCM034	

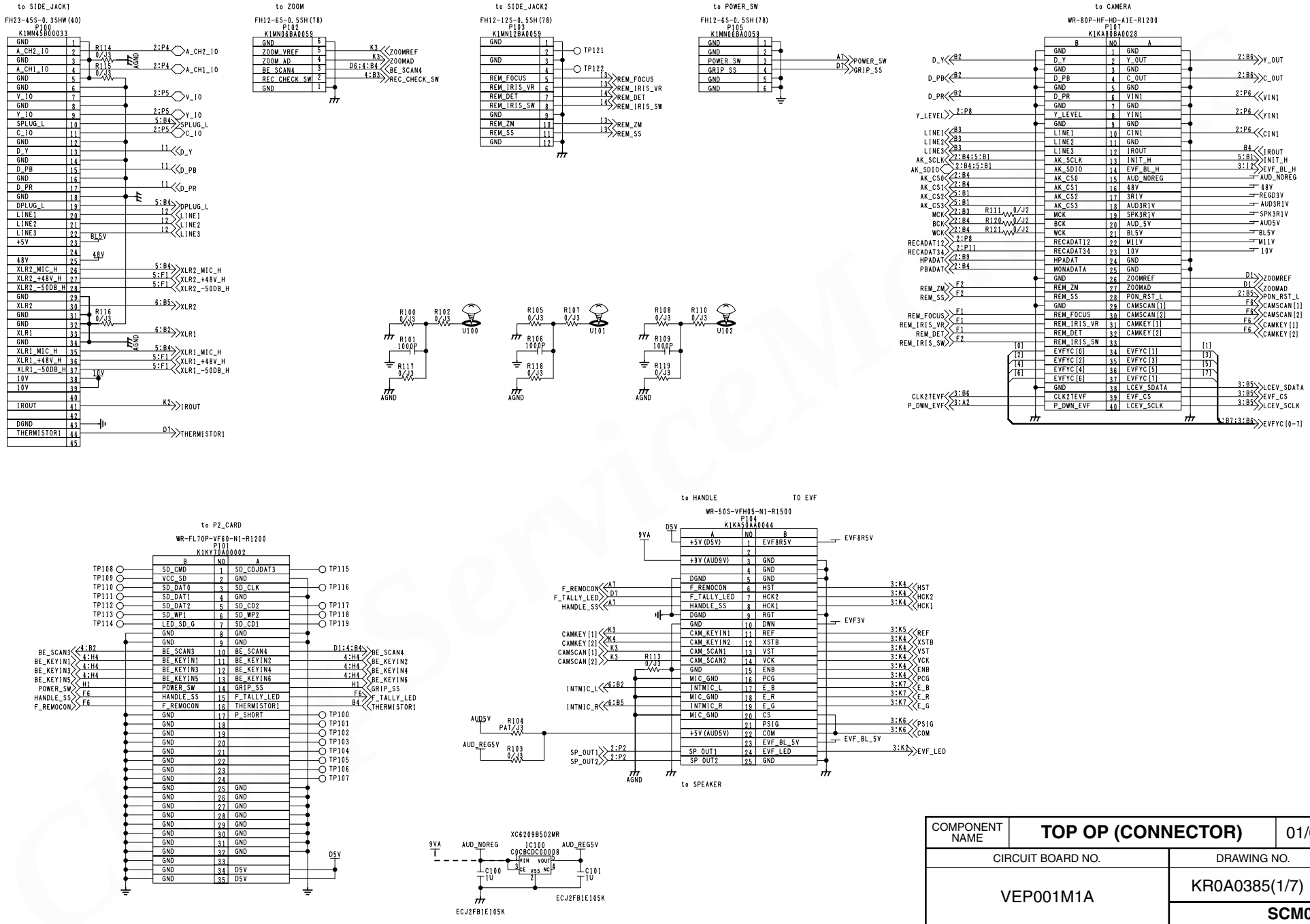
Circuit Diagrams


IC21
C1AB00001695
[RIP]
REGD1R8V
L14
JOJAC1000014
C118
4R7U
SRLFG
TRLFG
CYLON_L
TORQU_LIMIT
LOAD
UNLOAD
READH
VAL
INTSEG
ADDA0
ADDA1
ADDA2
ADDA3
CLK27A
C116
PAT/1005
R310
PAT/J2
DBR0
DBR1
DBR2
DBR3
REQR
ACKR
TSTCK1
TSTDT [0]
TSTDT [1]
TSTDT [2]
TSTDT [3]
TSTDT [4]
TSTDT [5]
TSTDT [6]
TSTDT [7]
TSTDT [8]
TSTDT [9]
VPD
XRST
TSTMD
CS
GESW
R316 47K/J2
R318 47K/J2
R320 47K/J2
R317 1000/J2
R319 1000/J2
R321 1000/J2
R322 1000/J2
R323 10K/J2
R325 10K/J2
R329 10K/J2
S_TAB
POS1
POS2
POS3
SPA
CAP_FG
CYL_PG
DRIVE_CLK
CYL_FG
CAP_RSF
CYL_ERR
CAP_ERR
RA_STAB
R334 1000/J2
HID
HID1
R335 33/J2
R336 33/J2
RECCLK
HSE
PBH
RECCTL
EQHOLD
RECI
HID2
CRVCLK
CYLFG
DVDD18
DVDD25
CAPRSF
CYLERR
CAPERR
RECCUR
AGCCTL
AVD11
AVS11
VCOIN
R330 10K/J2
R331 10K/J2
R332 10K/J2
R333 10K/J2
C134 0.1
C135 0.1
C132 0.1
C133 0.1
C130 0.1
R327 3300
R328 2200/J2
L16
G1C101KA0055
C131
4R7U
R337 1000/J2
PBH_OUT
R311 100/J2
C117
R314 270
R315 1800
C125 0.1
C126 10U
C127 0.1
C128 0.1
R324 2700
C129 0.1
R326 220
C119 0.1
C120 0.1
C122 0.1
C123 PAT/1005
C124 0.1
R313 0/J2
L15
JOJAC1000014
C121
4R7U
R312 22
ATFI
ATFIN
PBIN
TMS
TDI_RIP
TDO_RIP
TCK
COMPONENT NAME
VTR (RIP)
06/06
CIRCUIT BOARD NO.
VEP03G90A/B
DRAWING NO.
KR3A0368(6/6)
SCM035

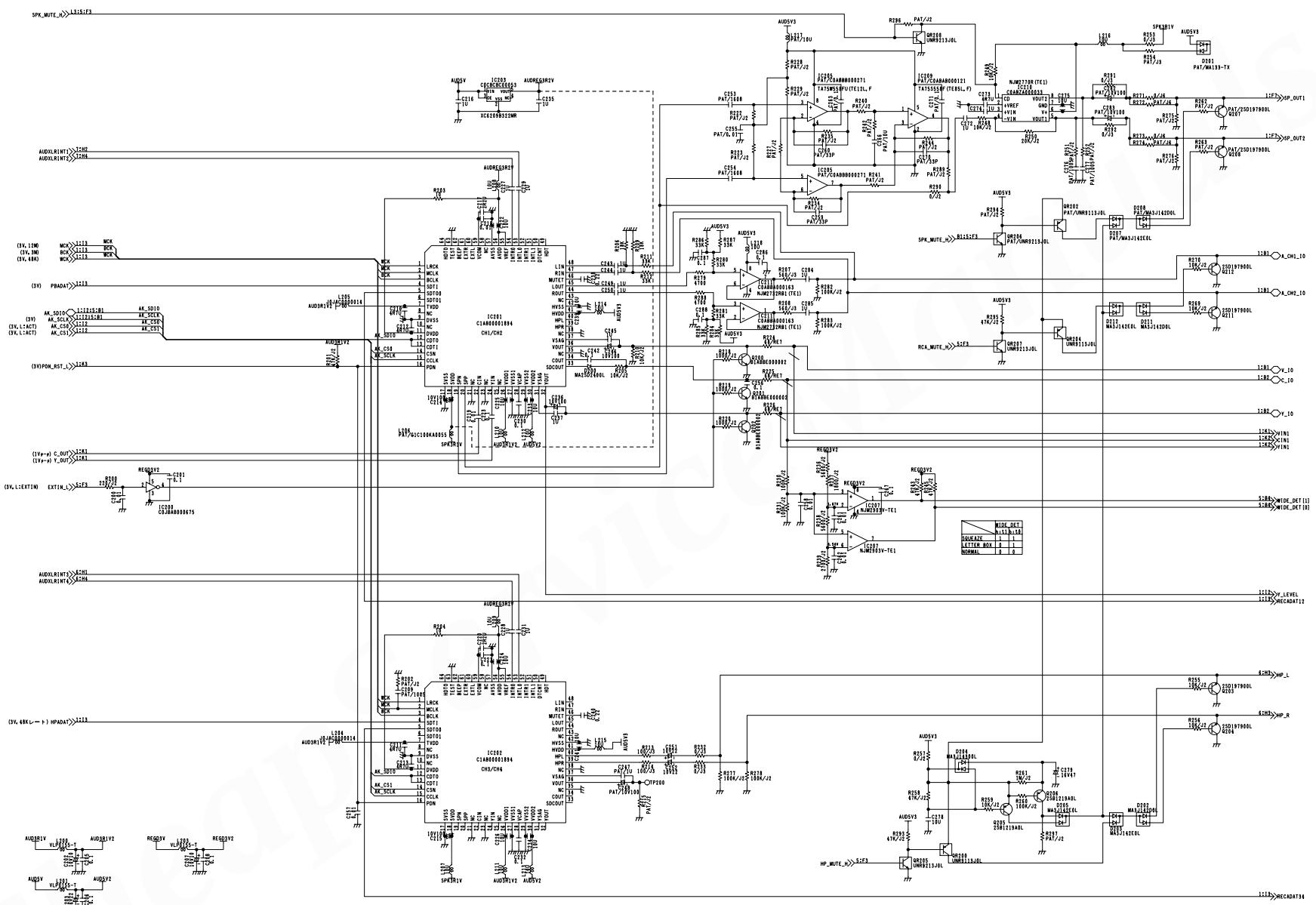

P2card - TOP
P2card - BE
P2card - BE
WR-70S-VFH30-N1-R1000
WR-70P-HF-HD-A1E-R1200
WR-70P-HF-HD-A1E-R1200
WR-70P-HF-HD-A1E-R1200
FH12-16S-0.5SH(78)
Ref No. 100-199
COMPONENT NAME
P2 CARD (CONNECTOR)
01/03
CIRCUIT BOARD NO.
VEP03G92A/B
DRAWING NO.
KR3A0370(1/3)
SCM036


SLOT2
SLOT1
MICREL_SEMICONDUCTOR, INC.
MIC2562A-1YTS TR
R5C812CSP265
R5C812-CSP265P
Ref No. 200-349
COMPONENT NAME
P2 CARD (CARD_IF)
02/03
CIRCUIT BOARD NO.
VEP03G92A/B
DRAWING NO.
KR3A0370(2/3)
SCM037

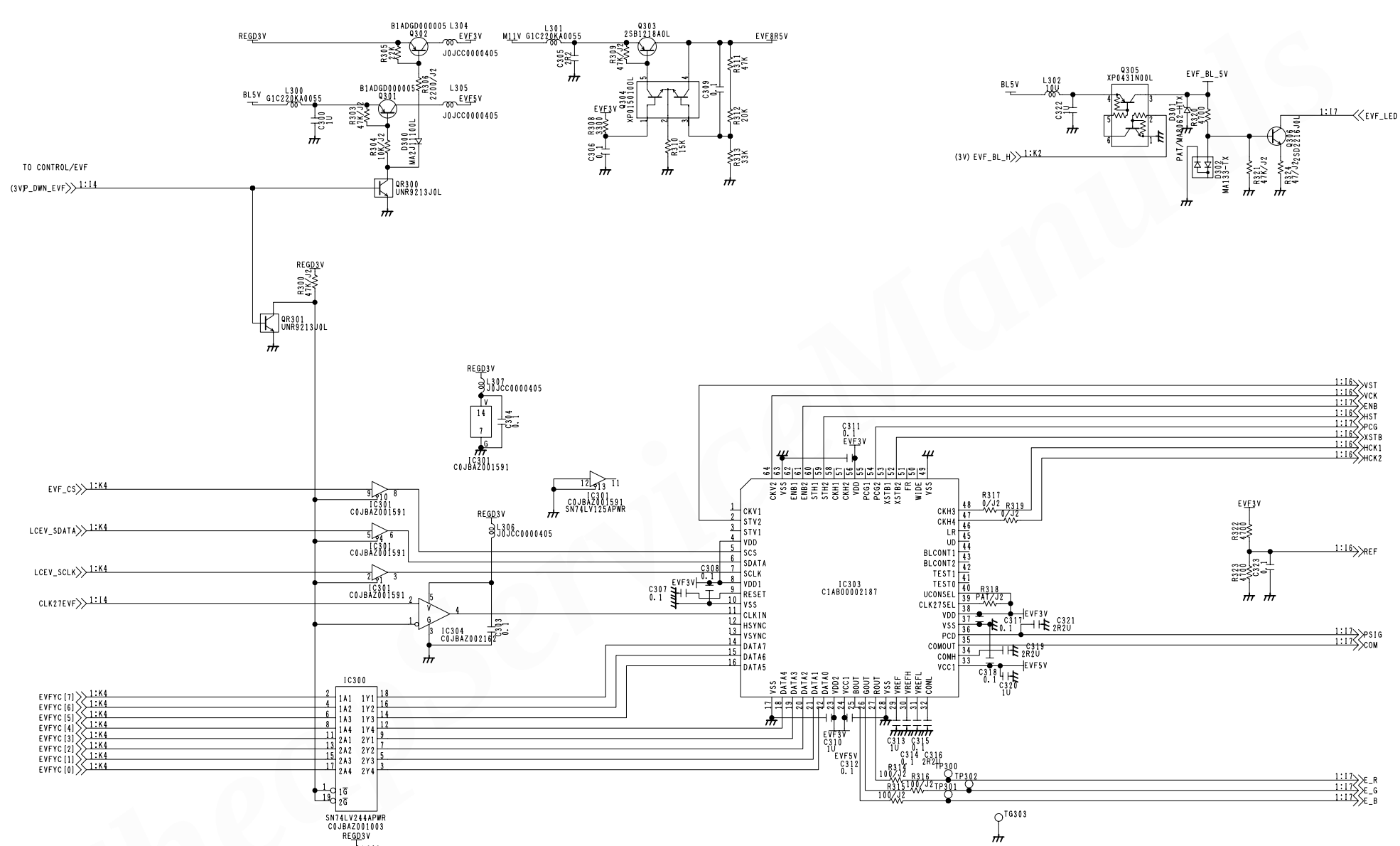

IC401
C1DB00001355
NET2280REV1A-LF
Device | INT# | ID_SEL
ZION | INTA | AD17
Bus_Ana | INTB | AD18
ETHER | INTC | AD19
P2CARD_A | INTD | AD20 -+
P2CARD_B | INTB | AD20 | RICOH
SDCARD | INTC | AD20 -+
OHCI | INTD | AD21
USB | INTD | AD22
Ref No. 400-499
COMPONENT NAME
P2 CARD (USB)
03/03
CIRCUIT BOARD NO.
VEP03G92A/B
DRAWING NO.
KR3A0370(3/3)
SCM038



COMPONENT NAME	**TOP OP (CONNECTOR)**		01/07
CIRCUIT BOARD NO.		DRAWING NO.	
VEP001M1A		KR0A0385(1/7)	
		SCM039	

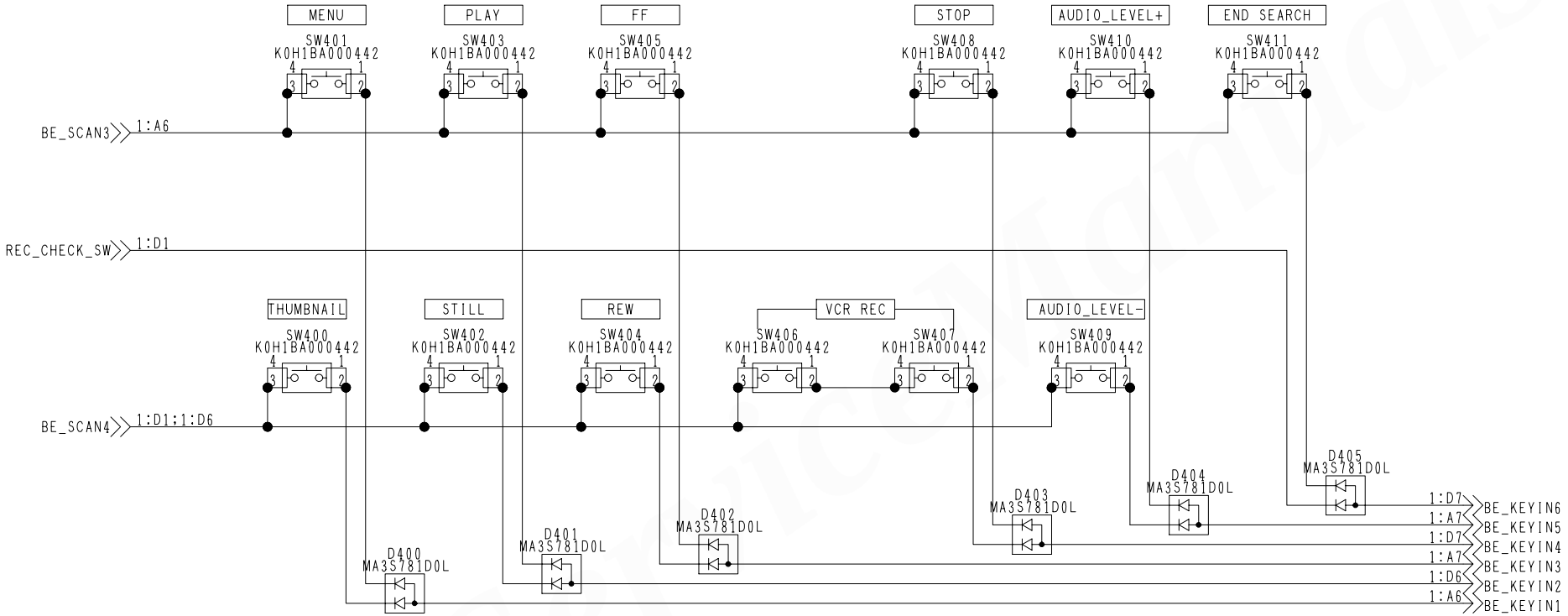


COMPONENT NAME	TOP OP (AVIO)	02/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M1A		KR0A0385(2/7)
		SCM040



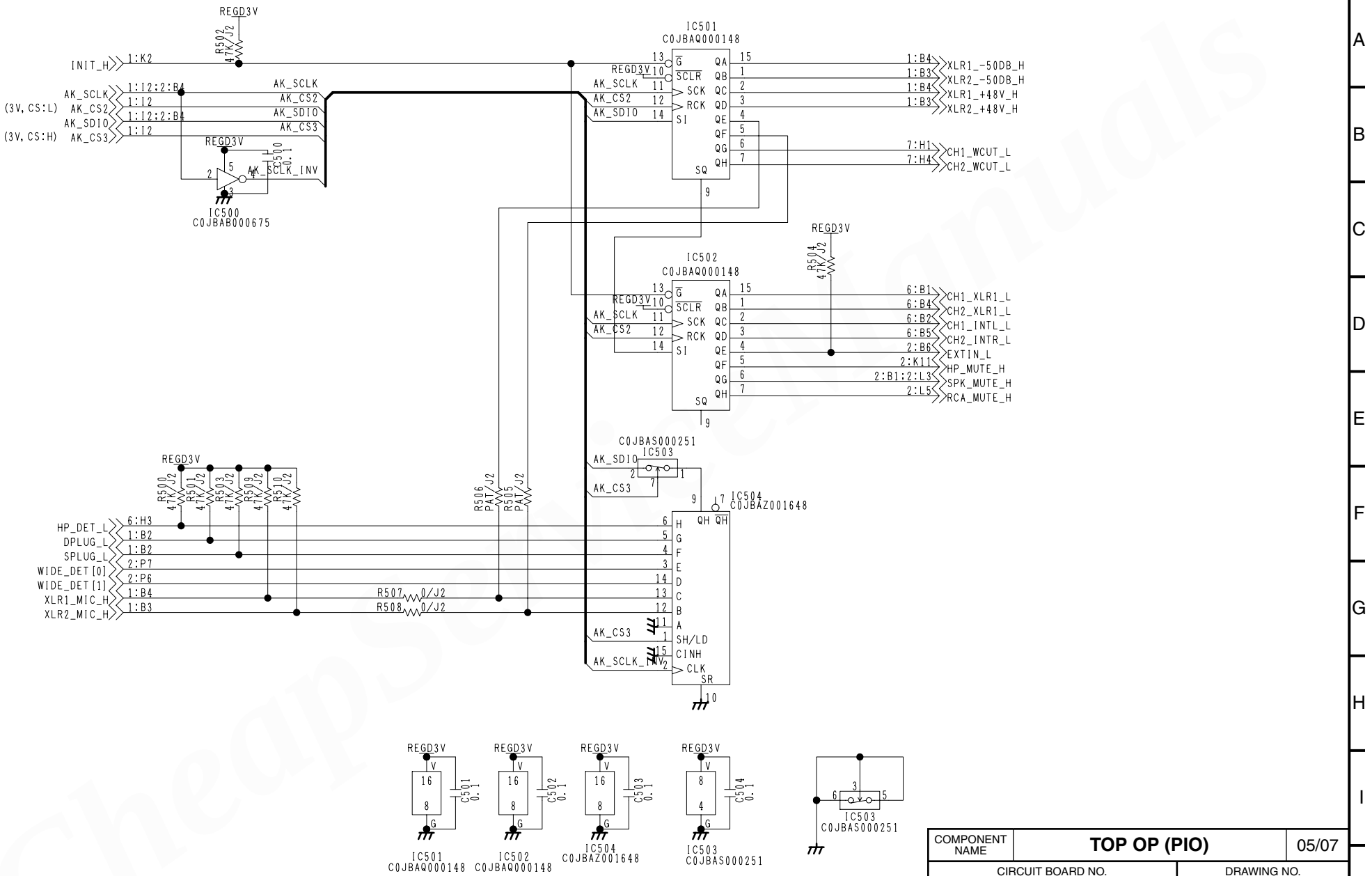
COMPONENT NAME	TOP OP (EVF DRIVER)	03/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M1A		KR0A0385(3/7)
		SCM041

Circuit Diagram Manuals



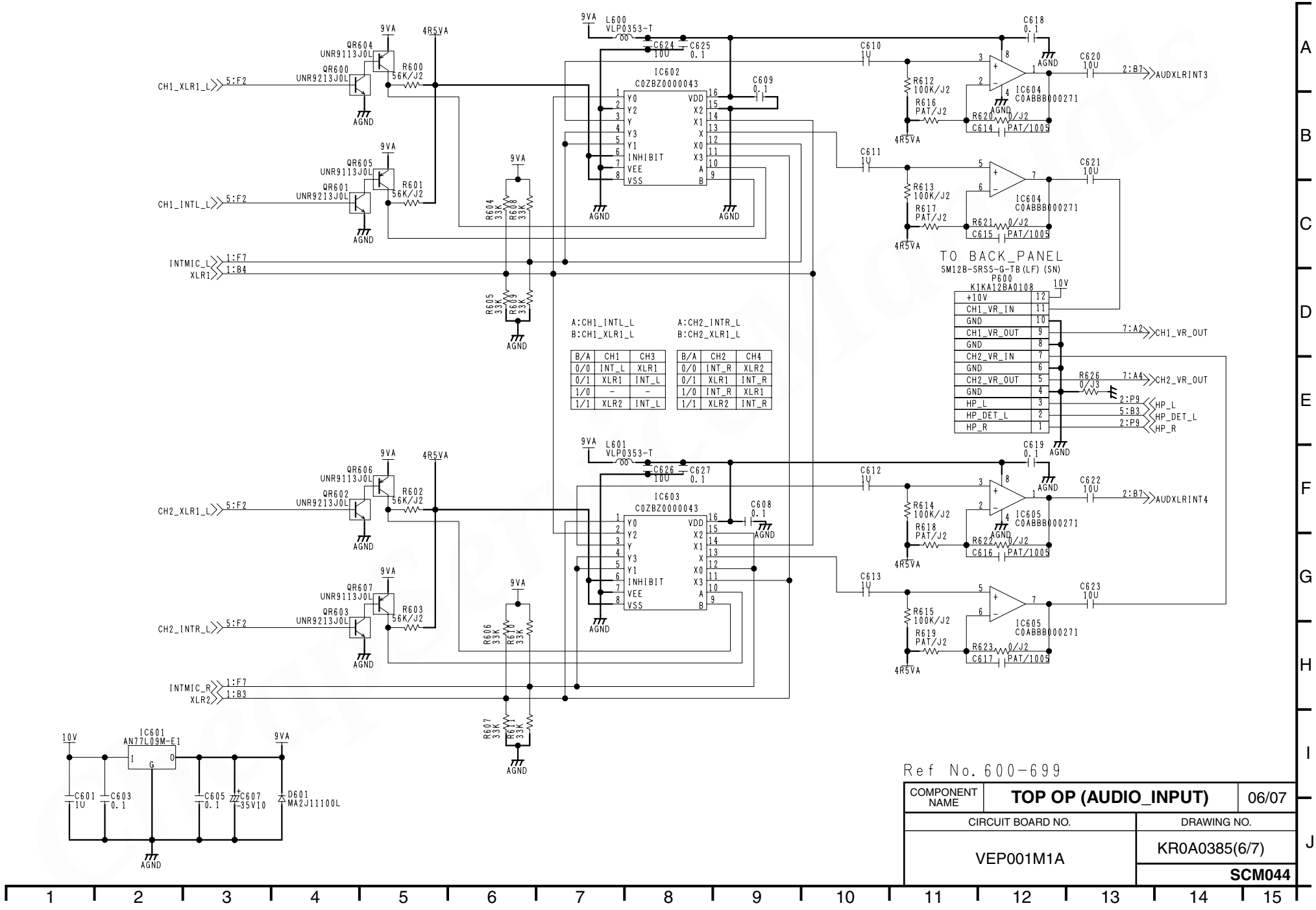
COMPONENT NAME	TOP OP (OPERATION SW)	04/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M1A		KR0A0385(4/7)
		SCM042

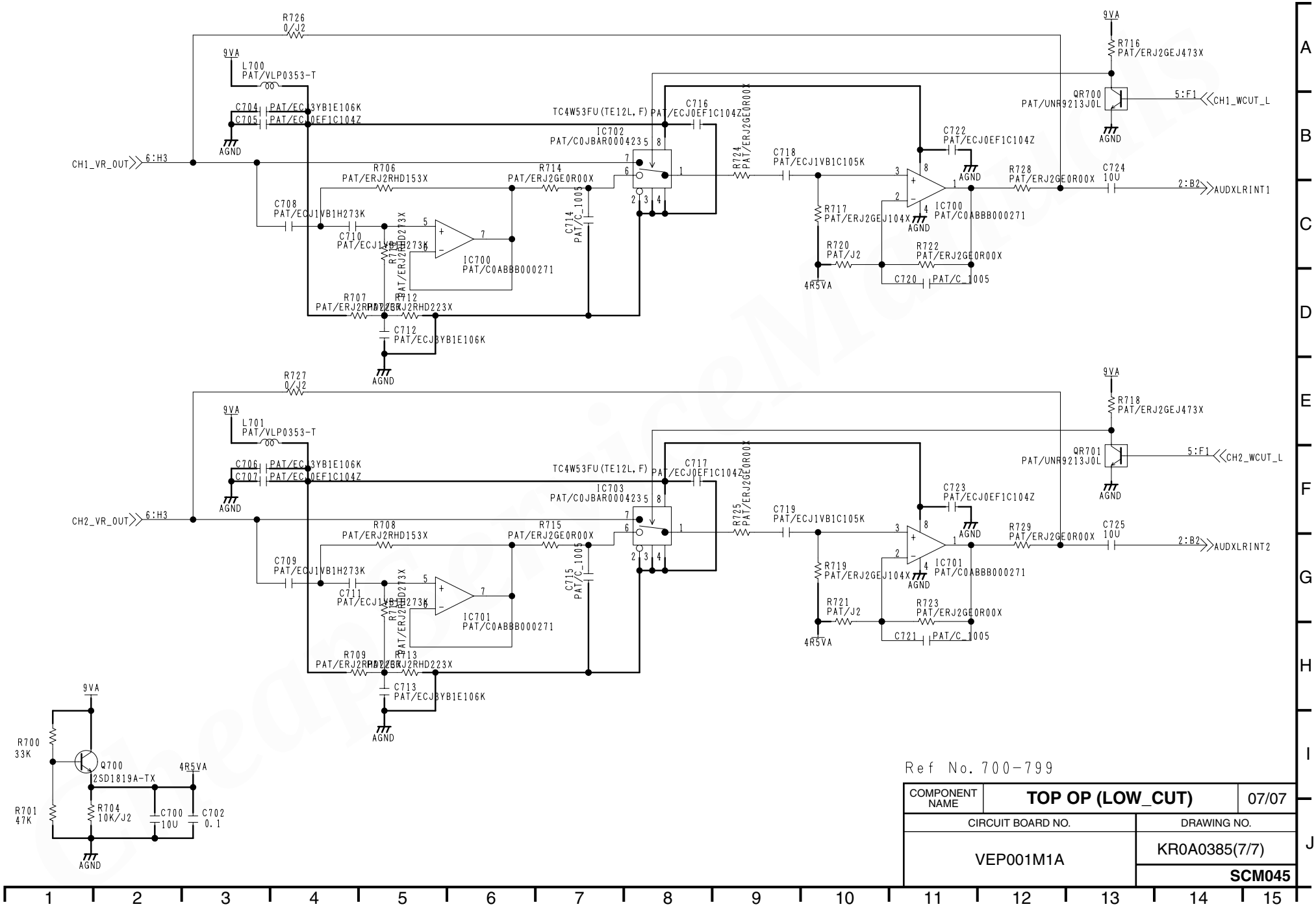
Onepservicemanuals

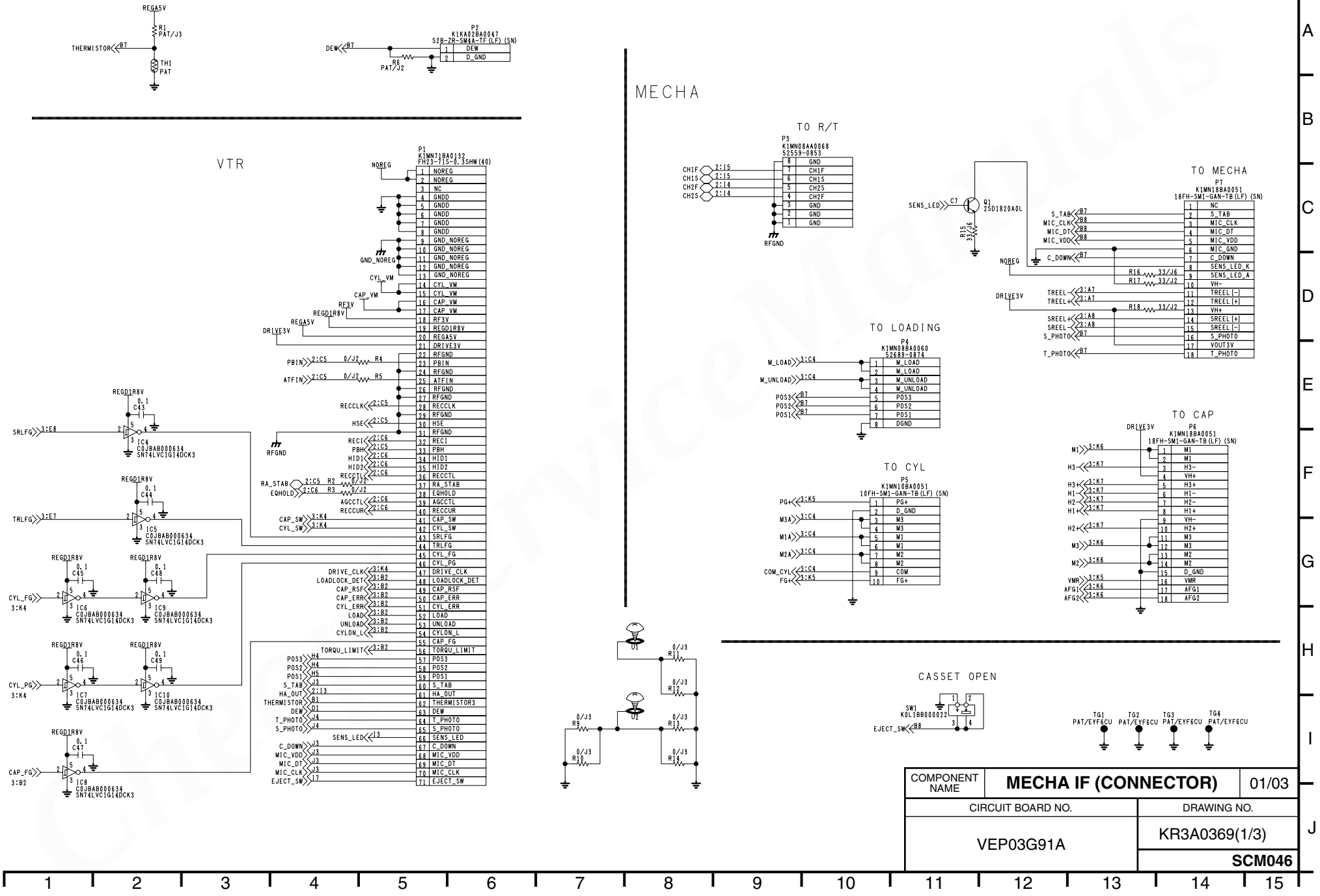


COMPONENT NAME	TOP OP (PIO)	05/07
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M1A		KR0A0385(5/7)
		SCM043

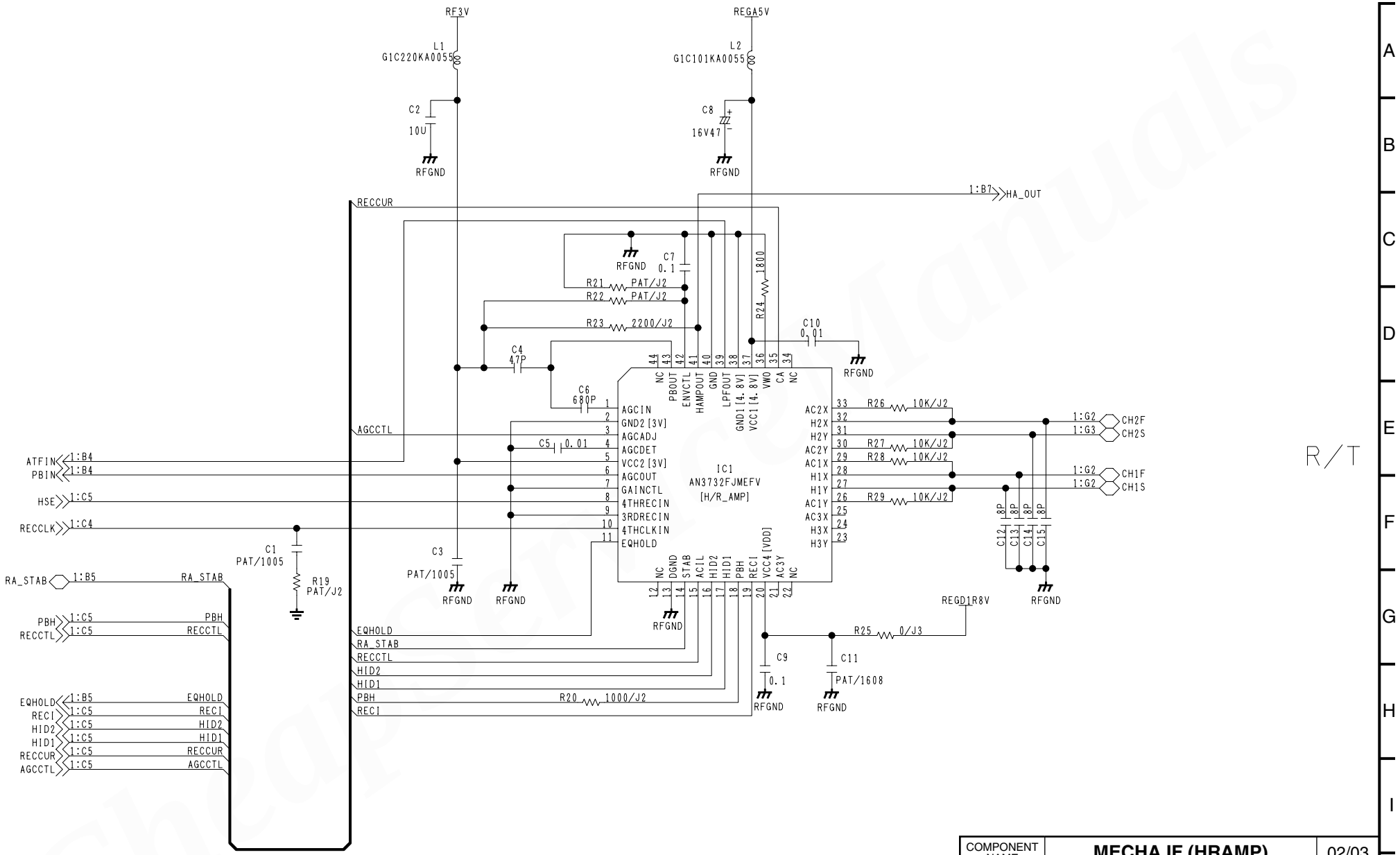
Cnepsservicemanuals


CH1_XLR1_L
CH1_INTL_L
INTMIC_L
XLR1
CH2_XLR1_L
CH2_INTR_L
INTMIC_R
XLR2
IC602 C0ZBZ0000043
IC603 C0ZBZ0000043
IC604 C0ABBB000271
IC605 C0ABBB000271
IC601 AN77L09M-E1
TO BACK_PANEL
SM12B-SRSS-G-TB(LF) (SN)
P600 K1KA12BA0108
CH1_VR_IN
CH1_VR_OUT
CH2_VR_IN
CH2_VR_OUT
HP_L
HP_DET_L
HP_R
AUDXLRINT3
AUDXLRINT4
A:CH1_INTL_L
B:CH1_XLR1_L
A:CH2_INTR_L
B:CH2_XLR1_L
B/A CH1 CH3
0/0 INT_L XLR1
0/1 XLR1 INT_L
1/0 – –
1/1 XLR2 INT_L
B/A CH2 CH4
0/0 INT_R XLR2
0/1 XLR1 INT_R
1/0 INT_R XLR1
1/1 XLR2 INT_R
Ref No. 600-699
COMPONENT NAME
TOP OP (AUDIO_INPUT)
06/07
CIRCUIT BOARD NO.
VEP001M1A
DRAWING NO.
KR0A0385(6/7)
SCM044


R726
0/J2
9VA
L700
PAT/VLP0353-T
C704 PAT/ECJ3YB1E106K
C705 PAT/ECJ0EF1C104Z
AGND
CH1_VR_OUT
6:H3
TC4W53FU(TE12L,F)
IC702
PAT/C0JBAR000423 5
C716 PAT/ECJ0EF1C104Z
R724 PAT/ERJ2GE0R00X
R706 PAT/ERJ2RHD153X
R714 PAT/ERJ2GE0R00X
C708 PAT/ECJ1VB1H273K
C710 PAT/ECJ1VB1H273K
R710 PAT/ERJ2RHD273X
IC700
PAT/C0ABBB000271
C714 PAT/C_1005
R707 PAT/ERJ2RHD223X
R712 PAT/ERJ2RHD223X
C712 PAT/ECJ3YB1E106K
C718 PAT/ECJ1VB1C105K
R717 PAT/ERJ2GEJ104X
R720 PAT/J2
4R5VA
C722 PAT/ECJ0EF1C104Z
R722 PAT/ERJ2GE0R00X
C720 PAT/C_1005
R728 PAT/ERJ2GE0R00X
C724 10U
2:B2
AUDXLRINT1
R716 PAT/ERJ2GEJ473X
QR700 PAT/UNR9213J0L
5:F1
CH1_WCUT_L
R727
0/J2
L701
PAT/VLP0353-T
C706 PAT/ECJ3YB1E106K
C707 PAT/ECJ0EF1C104Z
CH2_VR_OUT
IC703
PAT/C0JBAR000423 5
C717 PAT/ECJ0EF1C104Z
R725 PAT/ERJ2GE0R00X
R708 PAT/ERJ2RHD153X
R715 PAT/ERJ2GE0R00X
C709 PAT/ECJ1VB1H273K
C711 PAT/ECJ1VB1H273K
R711 PAT/ERJ2RHD273X
IC701
PAT/C0ABBB000271
C715 PAT/C_1005
R709 PAT/ERJ2RHD223X
R713 PAT/ERJ2RHD223X
C713 PAT/ECJ3YB1E106K
C719 PAT/ECJ1VB1C105K
R719 PAT/ERJ2GEJ104X
R721 PAT/J2
4R5VA
C723 PAT/ECJ0EF1C104Z
R723 PAT/ERJ2GE0R00X
C721 PAT/C_1005
R729 PAT/ERJ2GE0R00X
C725 10U
2:B2
AUDXLRINT2
R718 PAT/ERJ2GEJ473X
QR701 PAT/UNR9213J0L
5:F1
CH2_WCUT_L
R700
33K
Q700
2SD1819A-TX
R701
47K
R704
10K/J2
C700
10U
C702
0.1
Ref No. 700-799
COMPONENT NAME
TOP OP (LOW_CUT)
07/07
CIRCUIT BOARD NO.
VEP001M1A
DRAWING NO.
KR0A0385(7/7)
SCM045



COMPONENT NAME	**MECHA IF (CONNECTOR)** 01/03
CIRCUIT BOARD NO.	DRAWING NO.
VEP03G91A	KR3A0369(1/3)
	SCM046

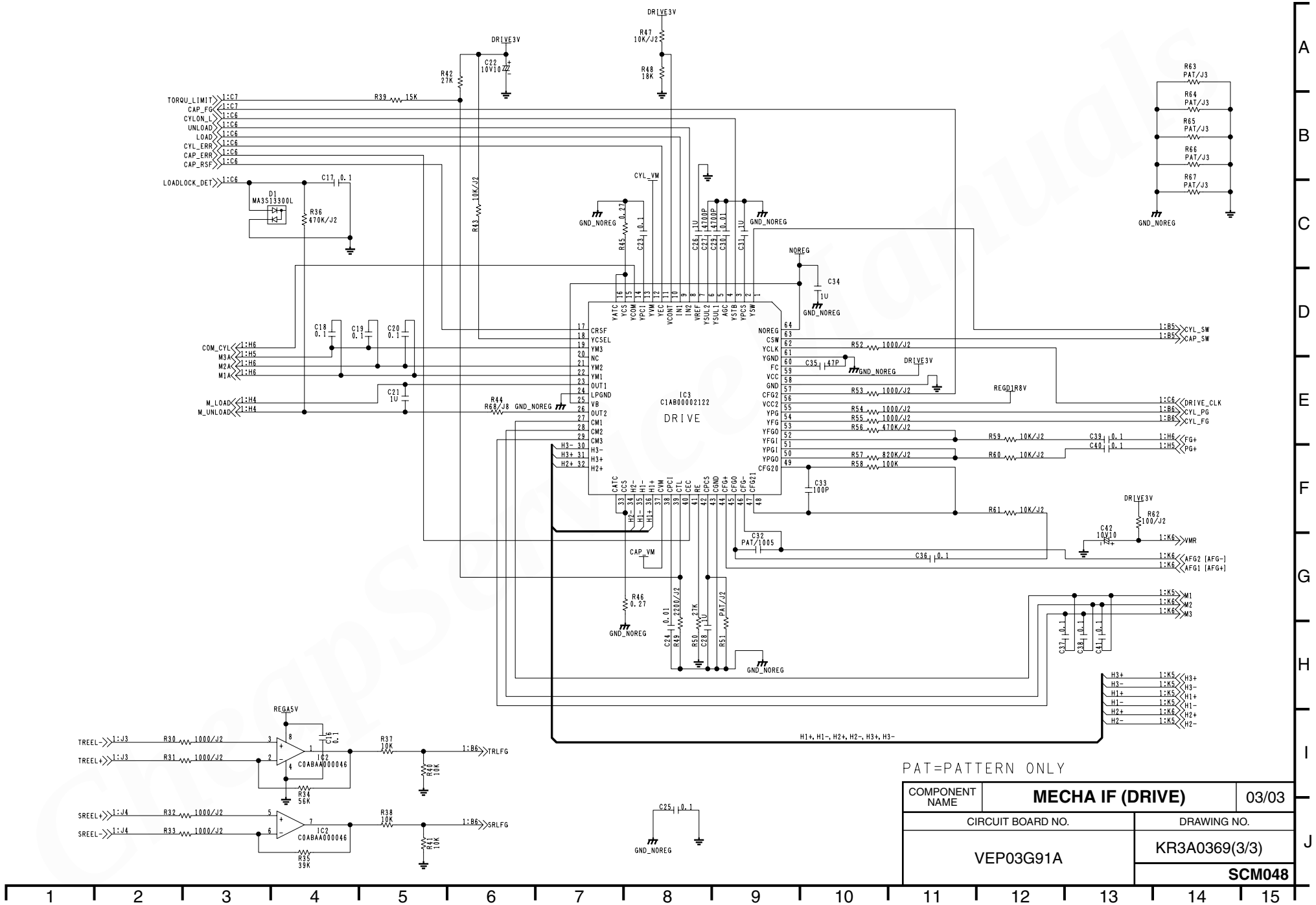


R/T

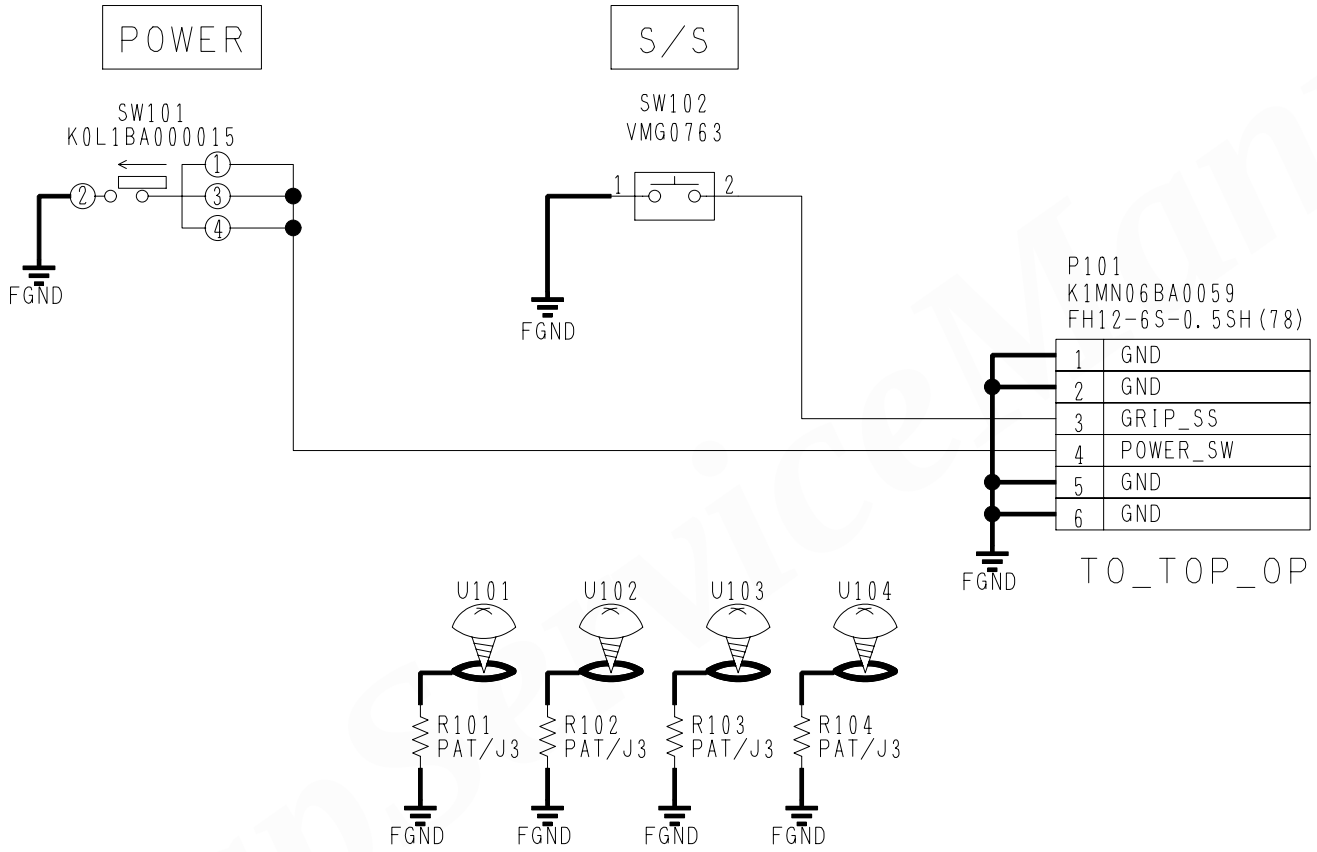
[H/R_AMP]

COMPONENT NAME	MECHA IF (HRAMP)	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G91A		KR3A0369(2/3)
		SCM047

Circuit Diagram Manuals

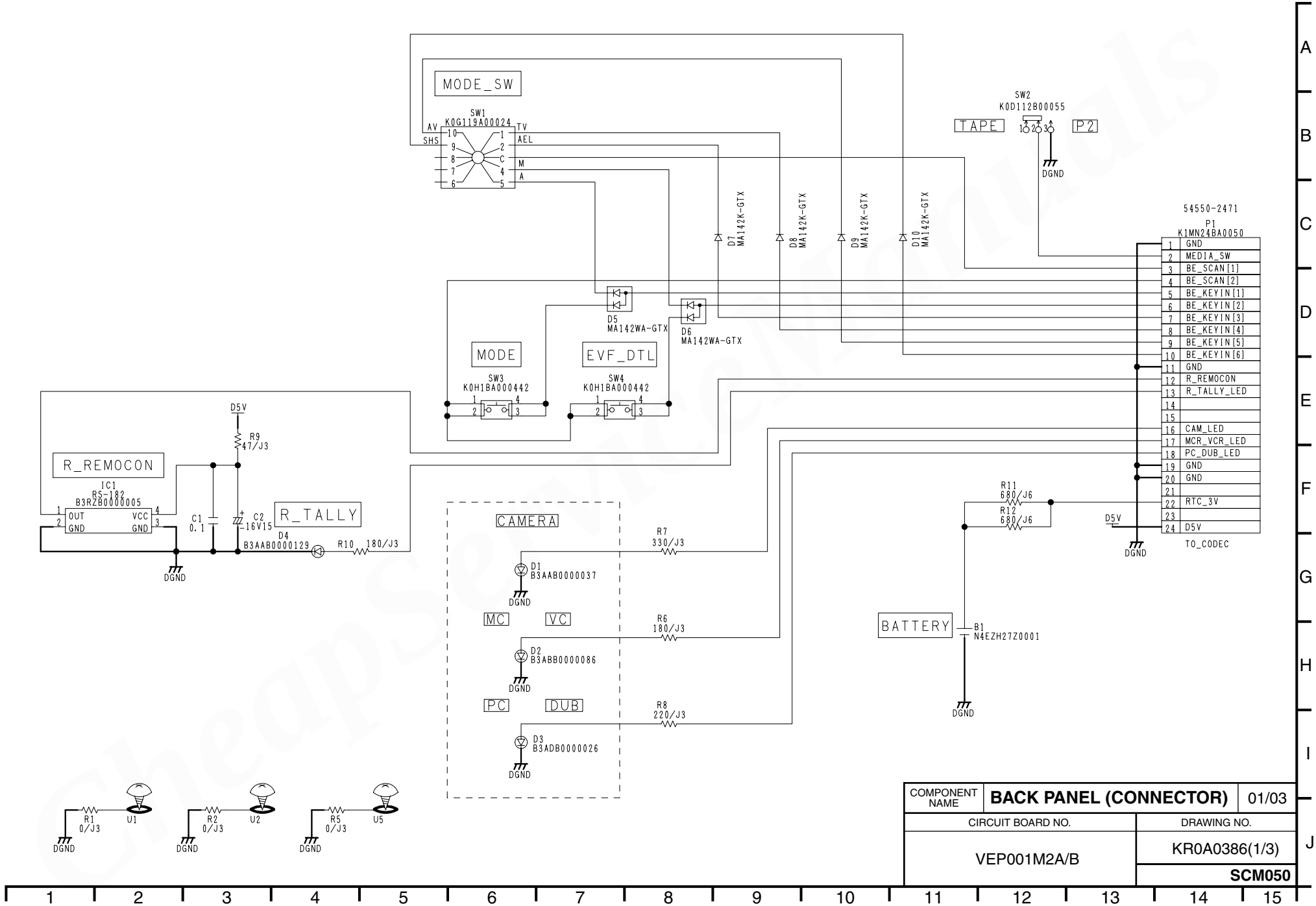


COMPONENT NAME	**MECHA IF (DRIVE)**	03/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G91A		KR3A0369(3/3)
		SCM048



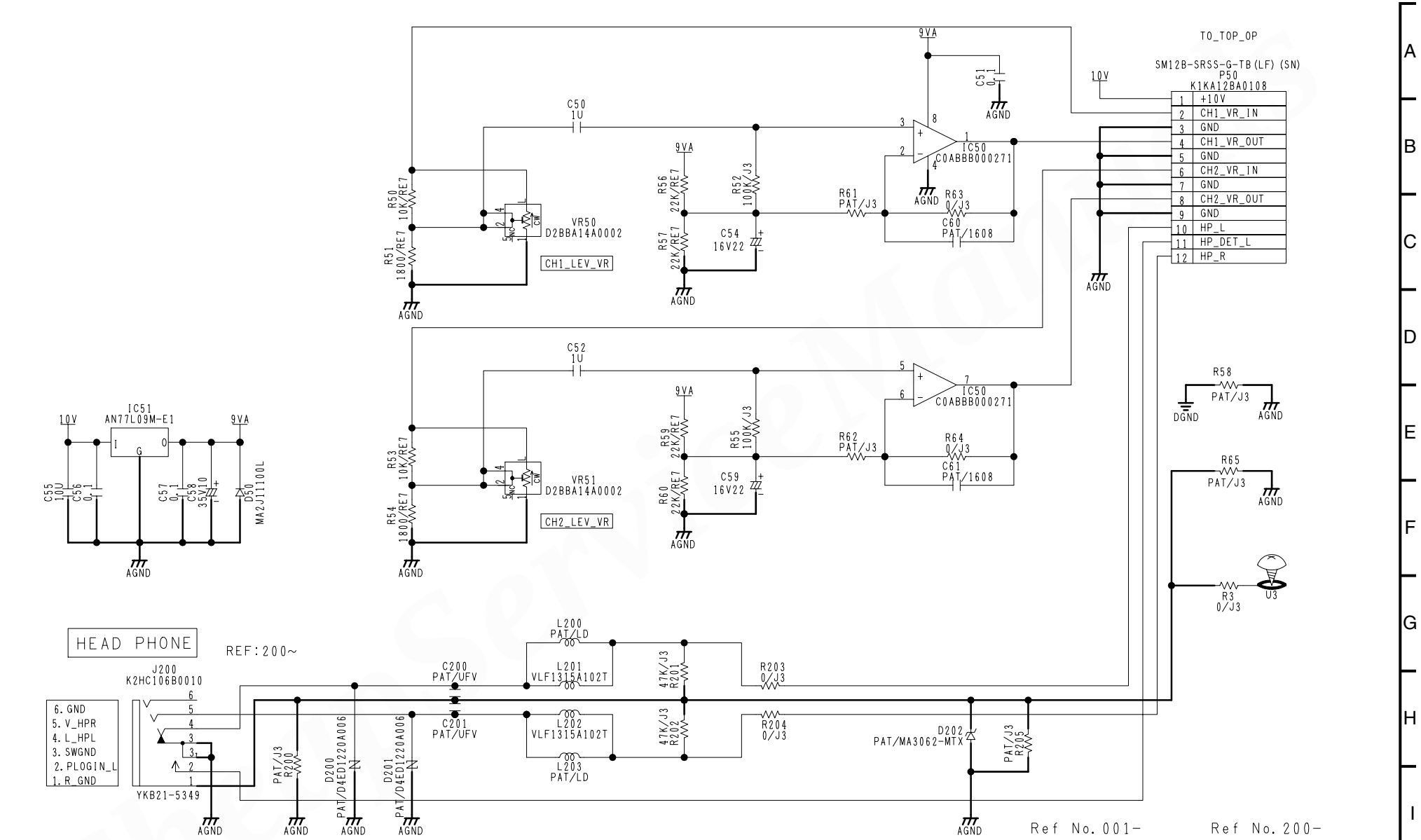
COMPONENT NAME	**POWER_SW**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M4A		KR0A0388(1/1)
		SCM049

Cheap Service Manuals

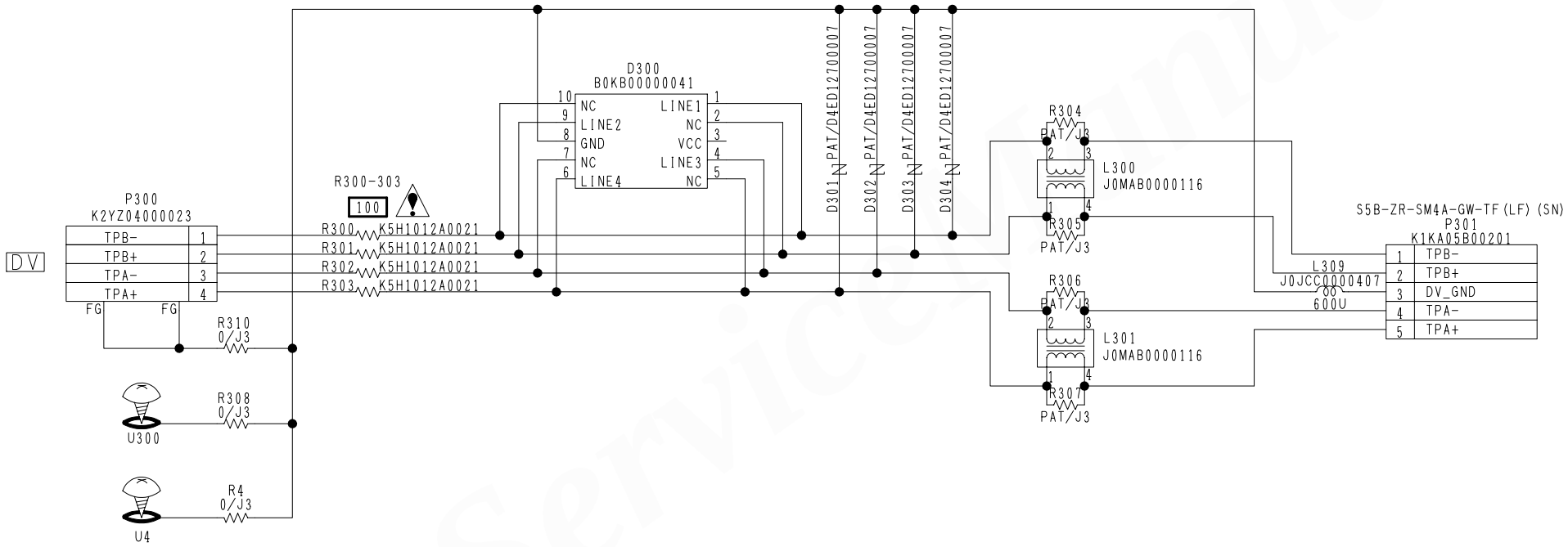


COMPONENT NAME	**BACK PANEL (CONNECTOR)**	01/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M2A/B		KR0A0386(1/3)
		SCM050

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COMPONENT NAME	**BACK PANEL (AUDIO_VR)**	02/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP001M2A/B	KR0A0386(2/3)	
	SCM051	



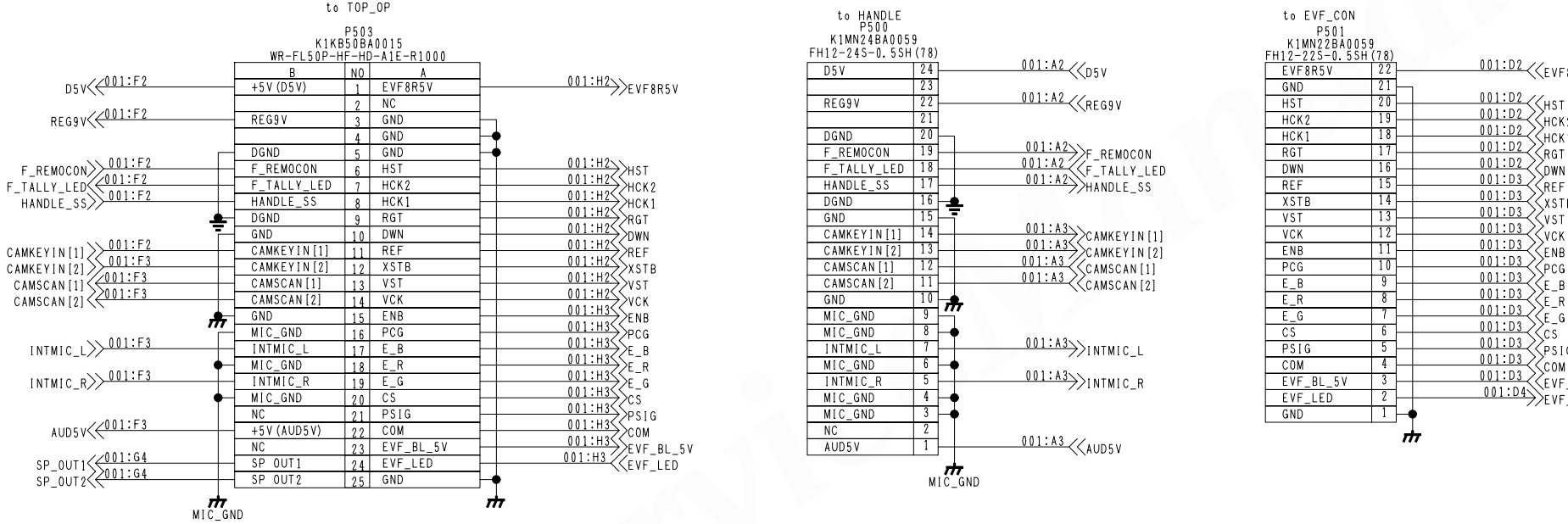
Ref No. 300−

⚠ 警告 ⚠印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

Components identified with the mark⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

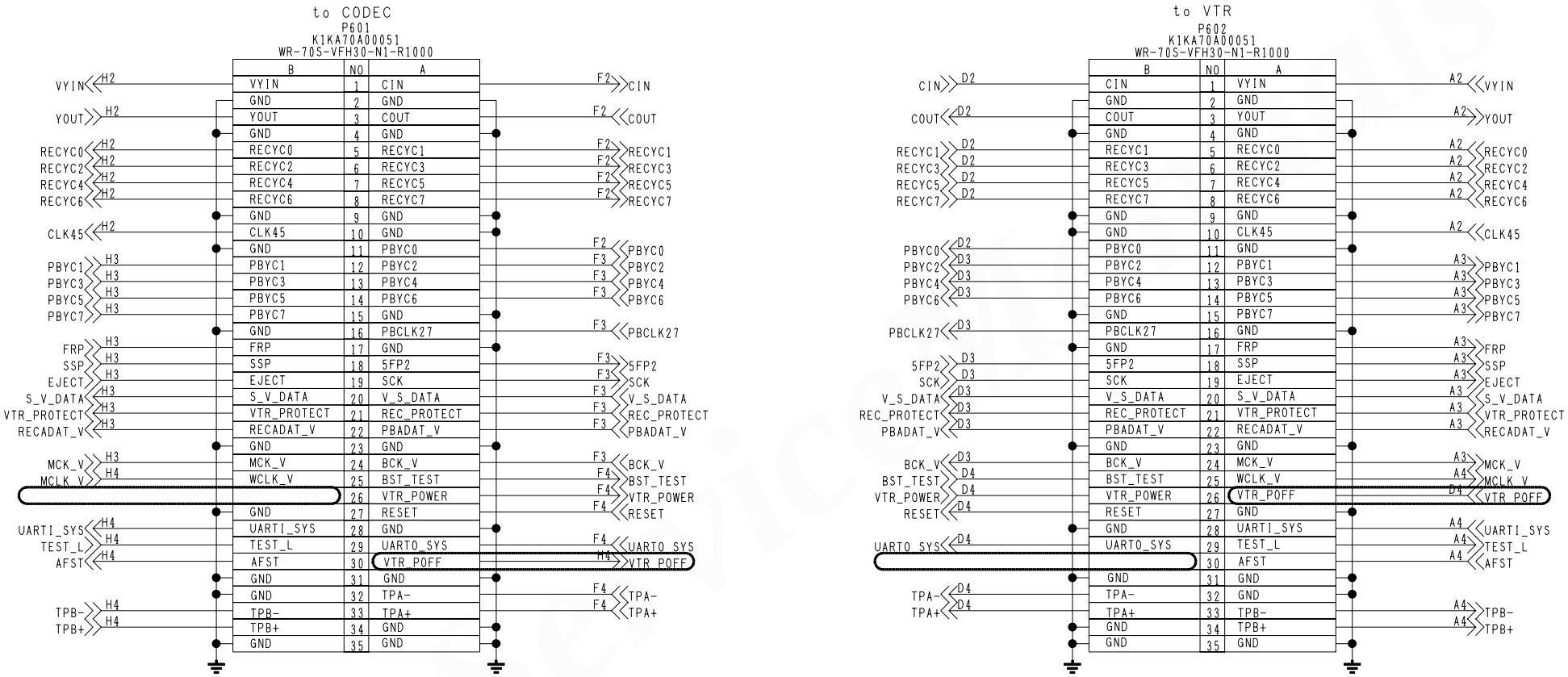
COMPONENT NAME	BACK PANEL (1394 CONNECTOR)	03/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M2A/B		KR0A0386(3/3)
		SCM052

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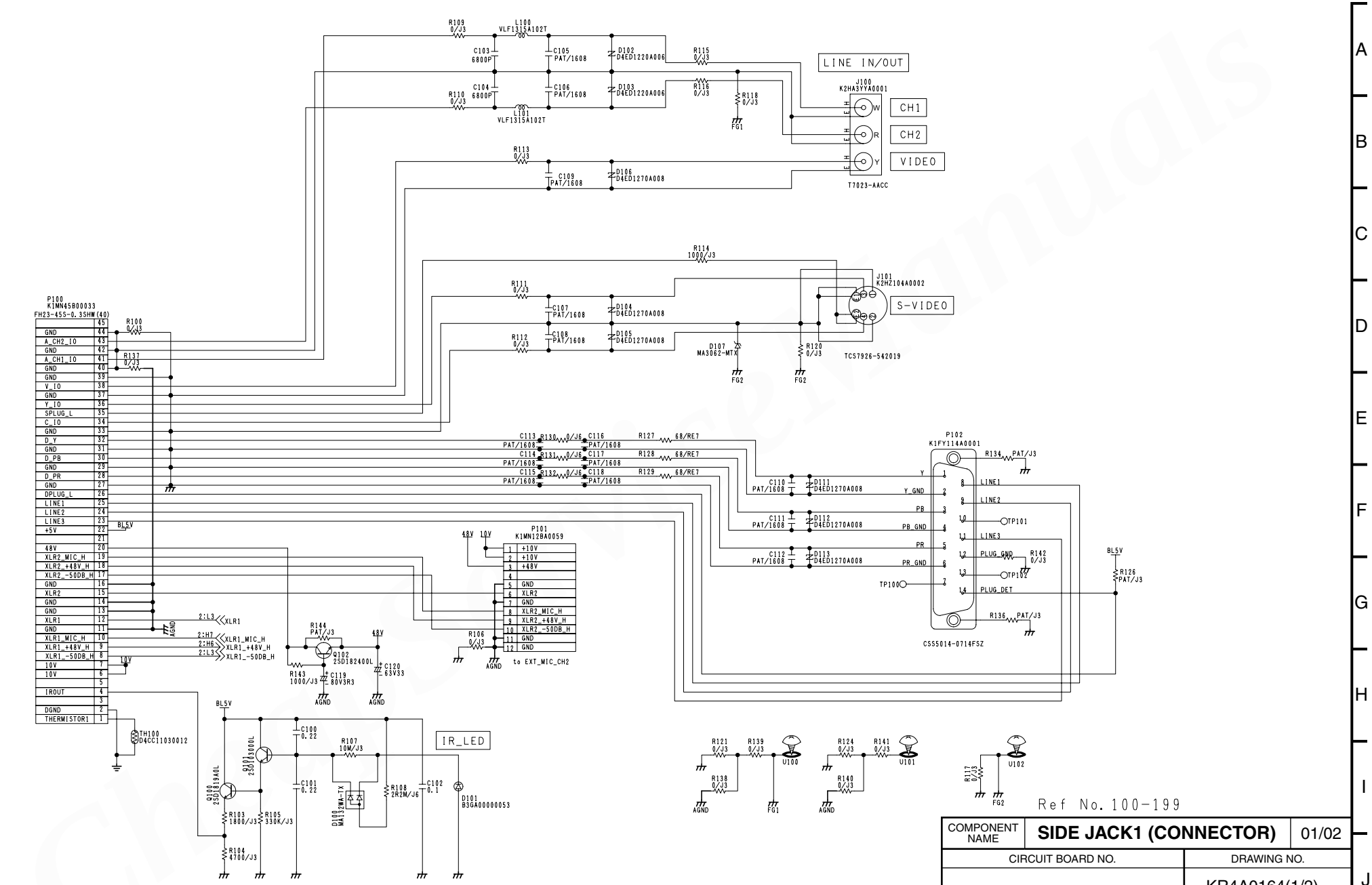
COMPONENT NAME	TOP_CON	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP001N2A		KR0A0401(1/1)
		SCM053

Onepservicemanuals

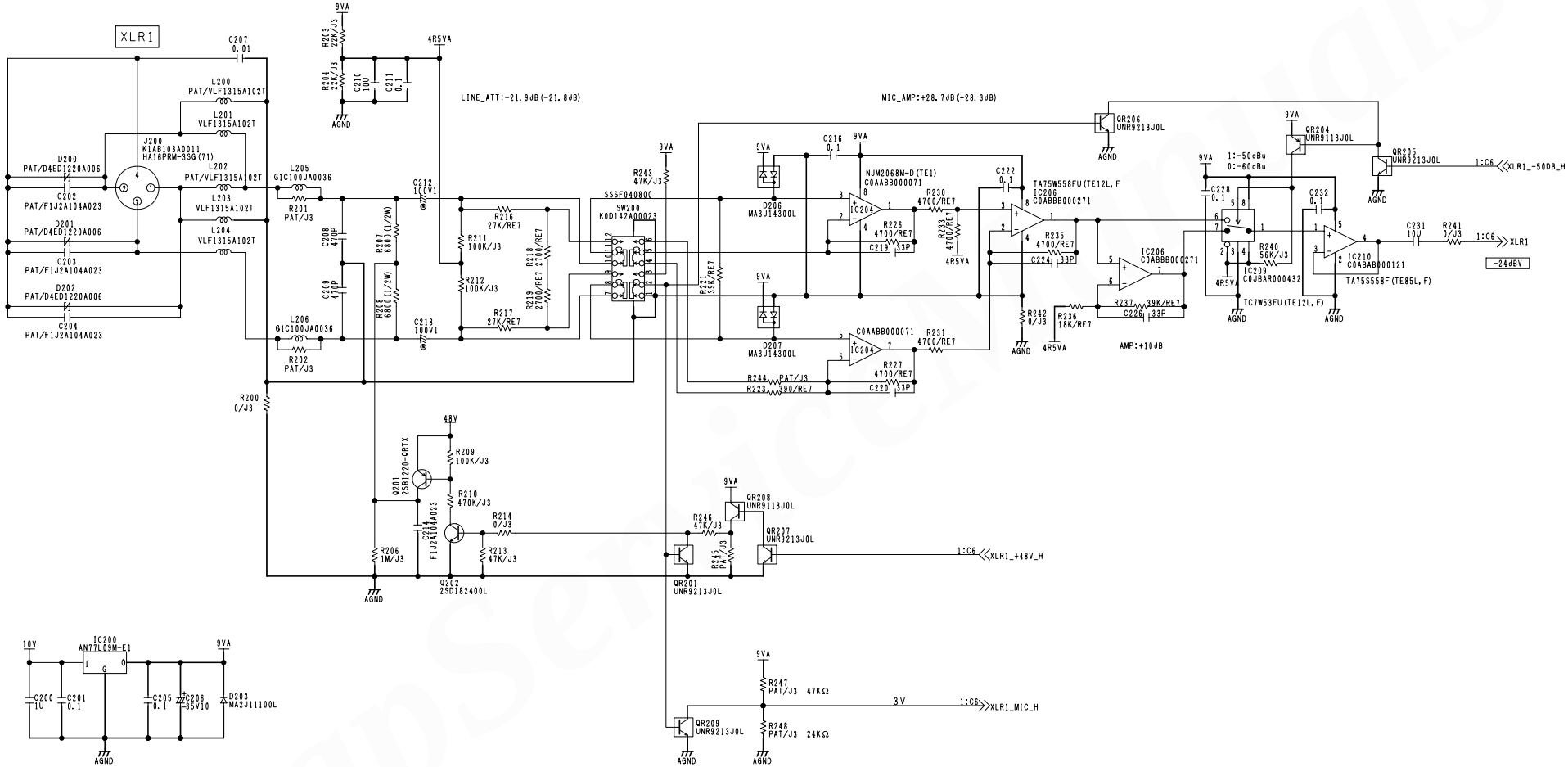


COMPONENT NAME	BOTTOM_CON	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP001N3A		KR0A0402(1/1)
		SCM054

Onedirectmanuals



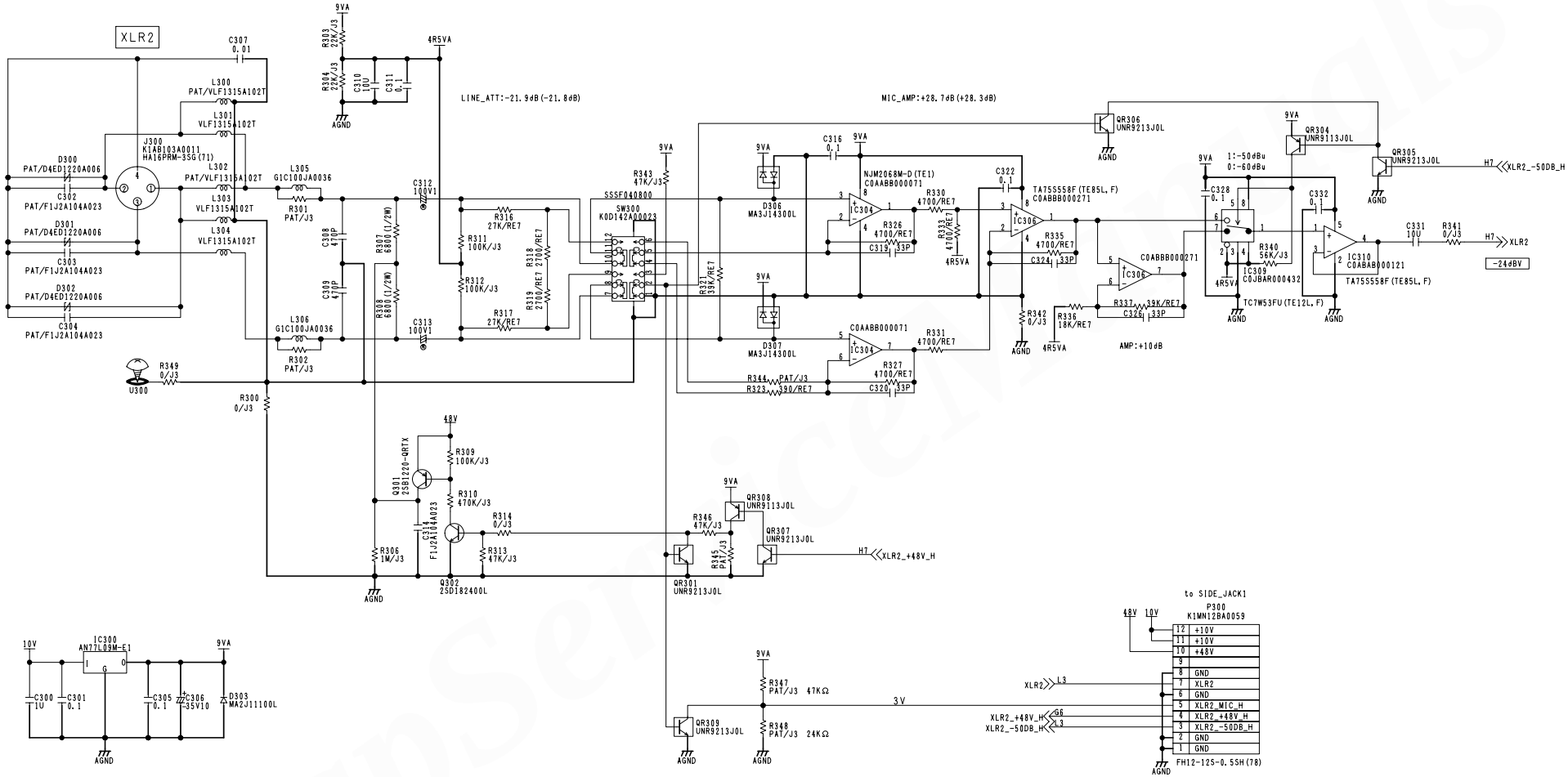
COMPONENT NAME	SIDE JACK1 (CONNECTOR)	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP04902A		KR4A0164(1/2)
		SCM055



Ref No. 200-299

COMPONENT NAME	SIDE JACK1 (XLR1)	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP04902A		KR4A0164(2/2)
		SCM056

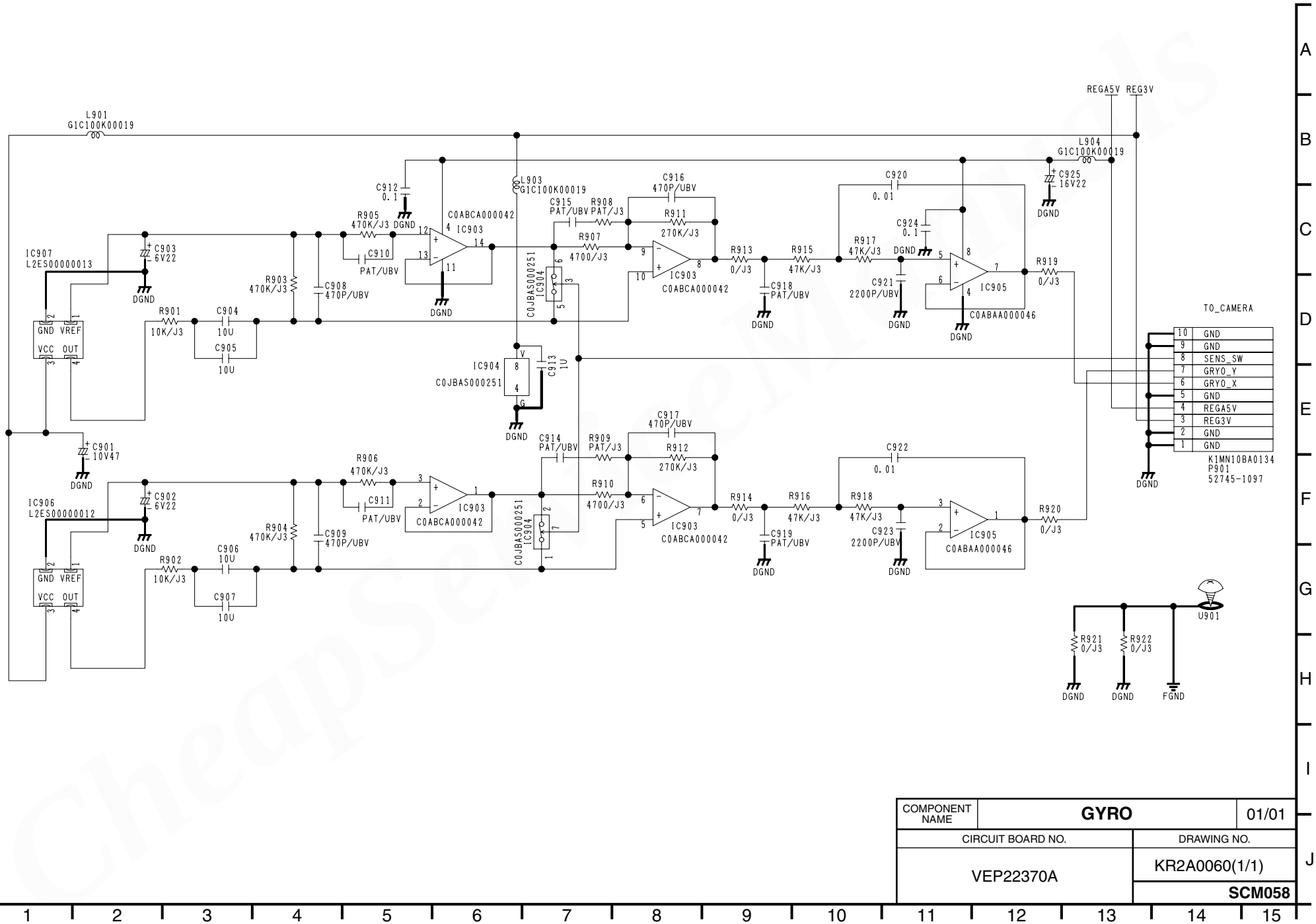
Onlinesemicon.com



Ref No. 300-399

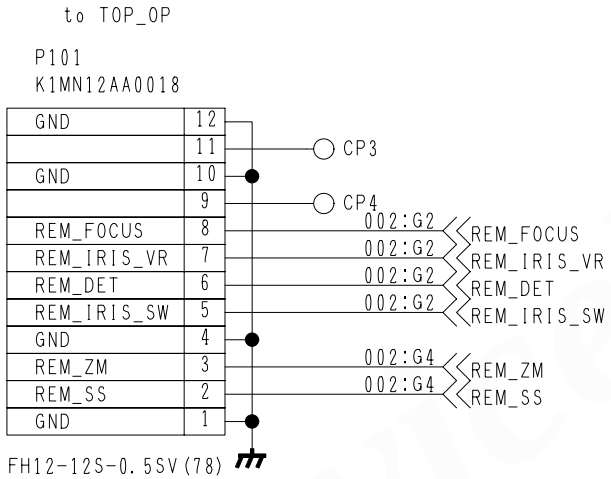
COMPONENT NAME	EXT_MIC2	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP04903A		KR4A0165(1/1)
		SCM057

Circuit Diagrams



COMPONENT NAME	**GYRO**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP22370A		KR2A0060(1/1)
		SCM058

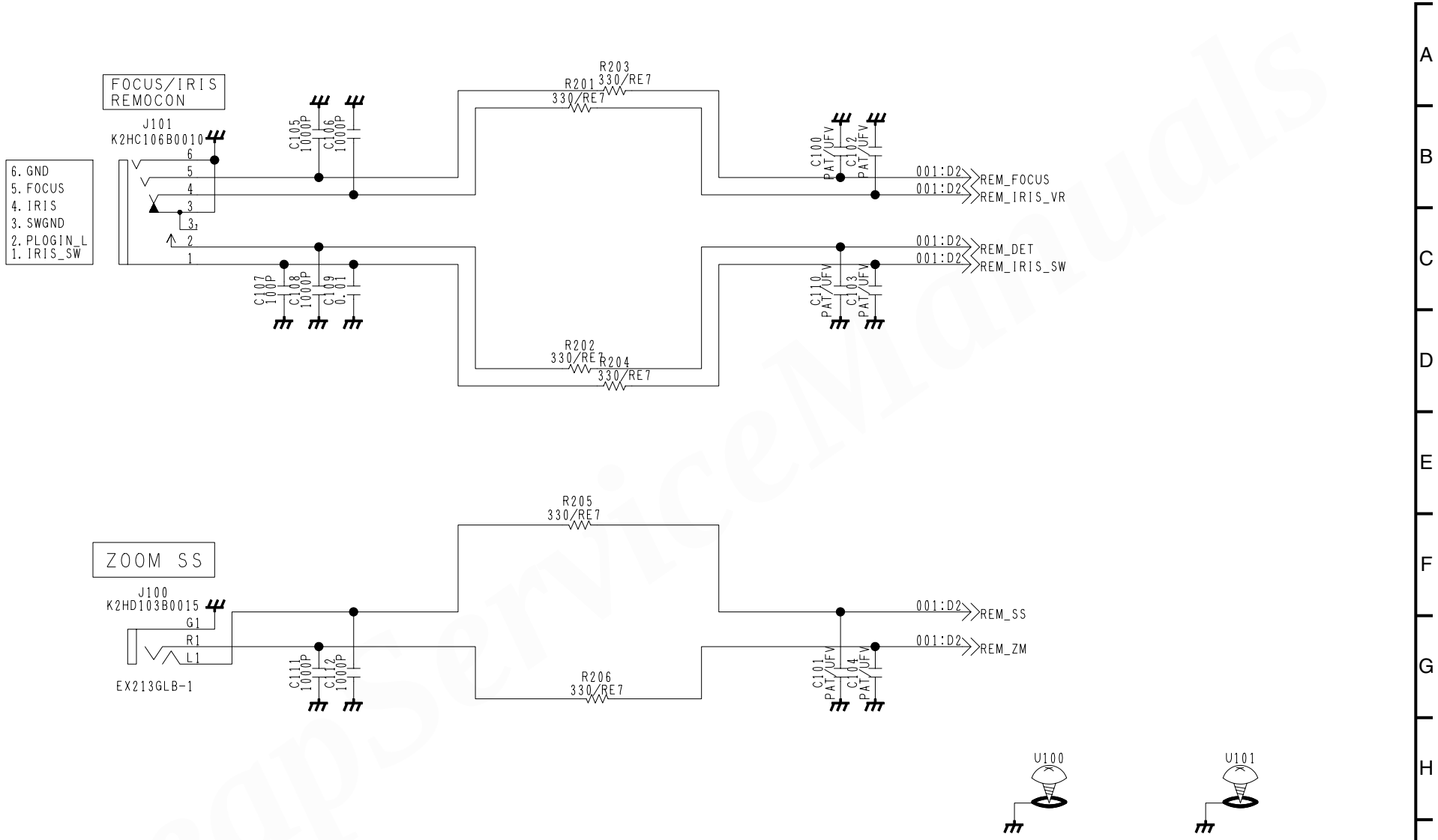
Chiếpsemanuals



Ref No. 100Series

COMPONENT NAME	SIDE JACK2	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP04904A		KR4A0166(1/2)
		SCM059

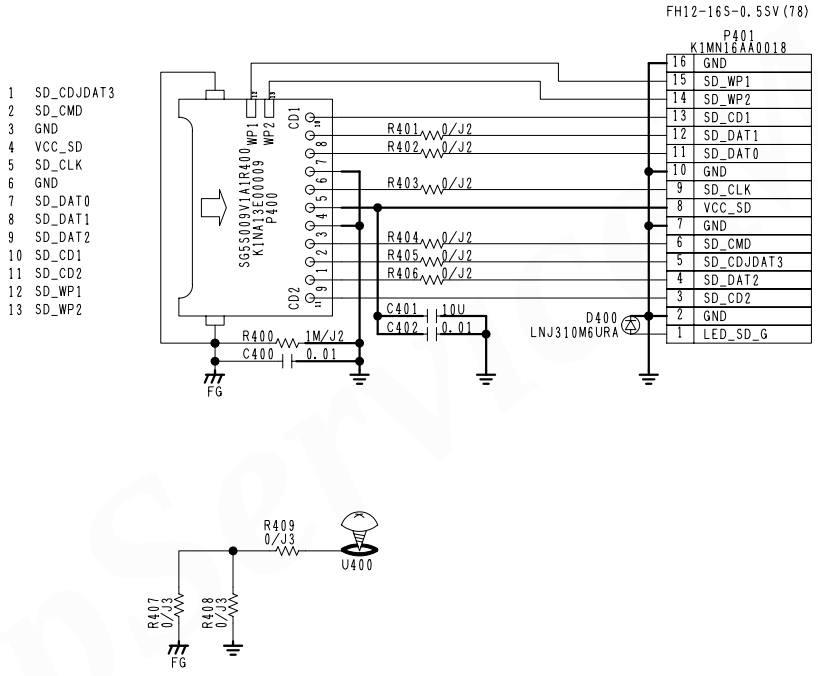
Cheapservicemanuals



Ref No. 200Series

COMPONENT NAME	SIDE JACK2	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP04904A		KR4A0166(2/2)
		SCM060

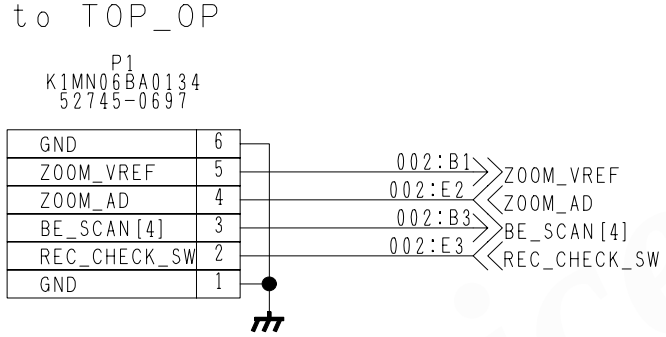
Cheapservicemanuals



Ref No. 400-

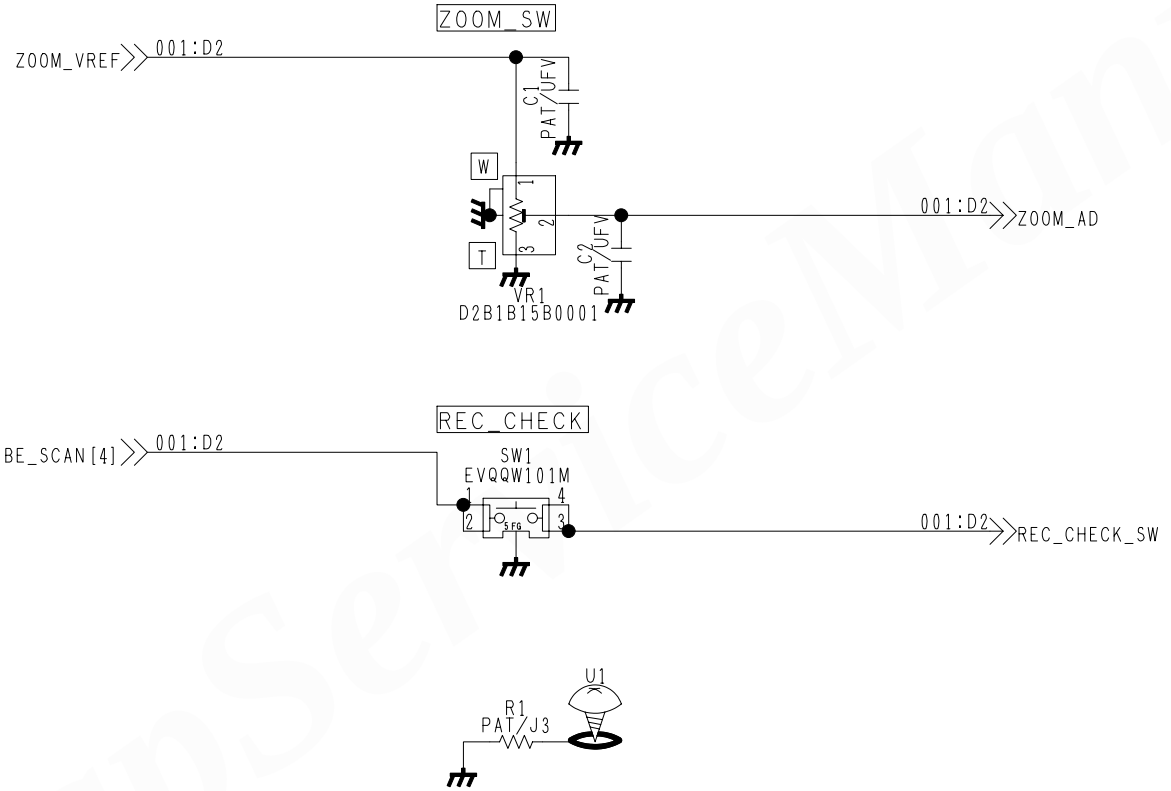
COMPONENT NAME	SD_CARD	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP001P2A		KR0A0430(1/1)
		SCM061

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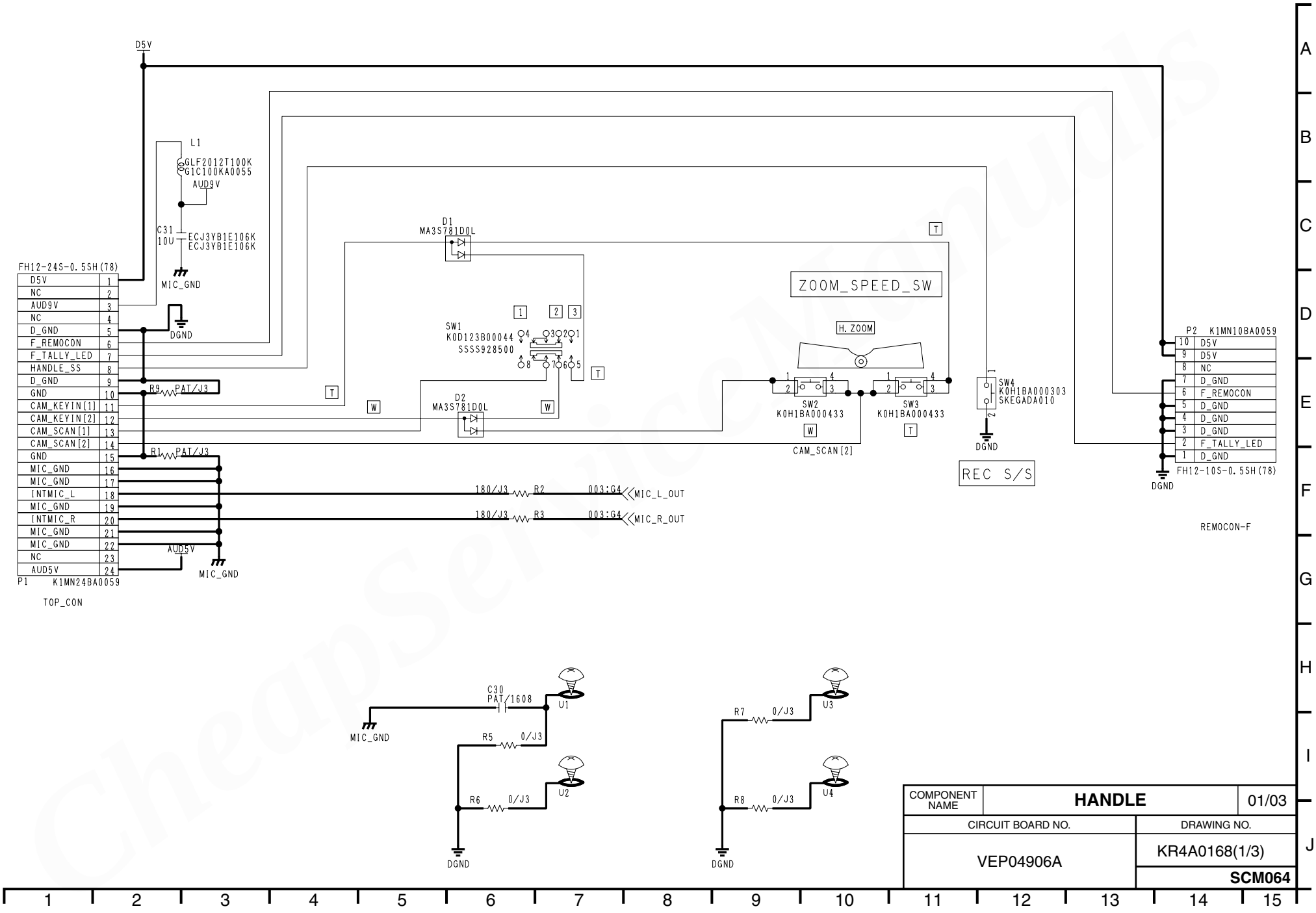
COMPONENT NAME	ZOOM_SW	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M5A		KR0A0389(1/2)
		SCM062

Cheapservicemanuals



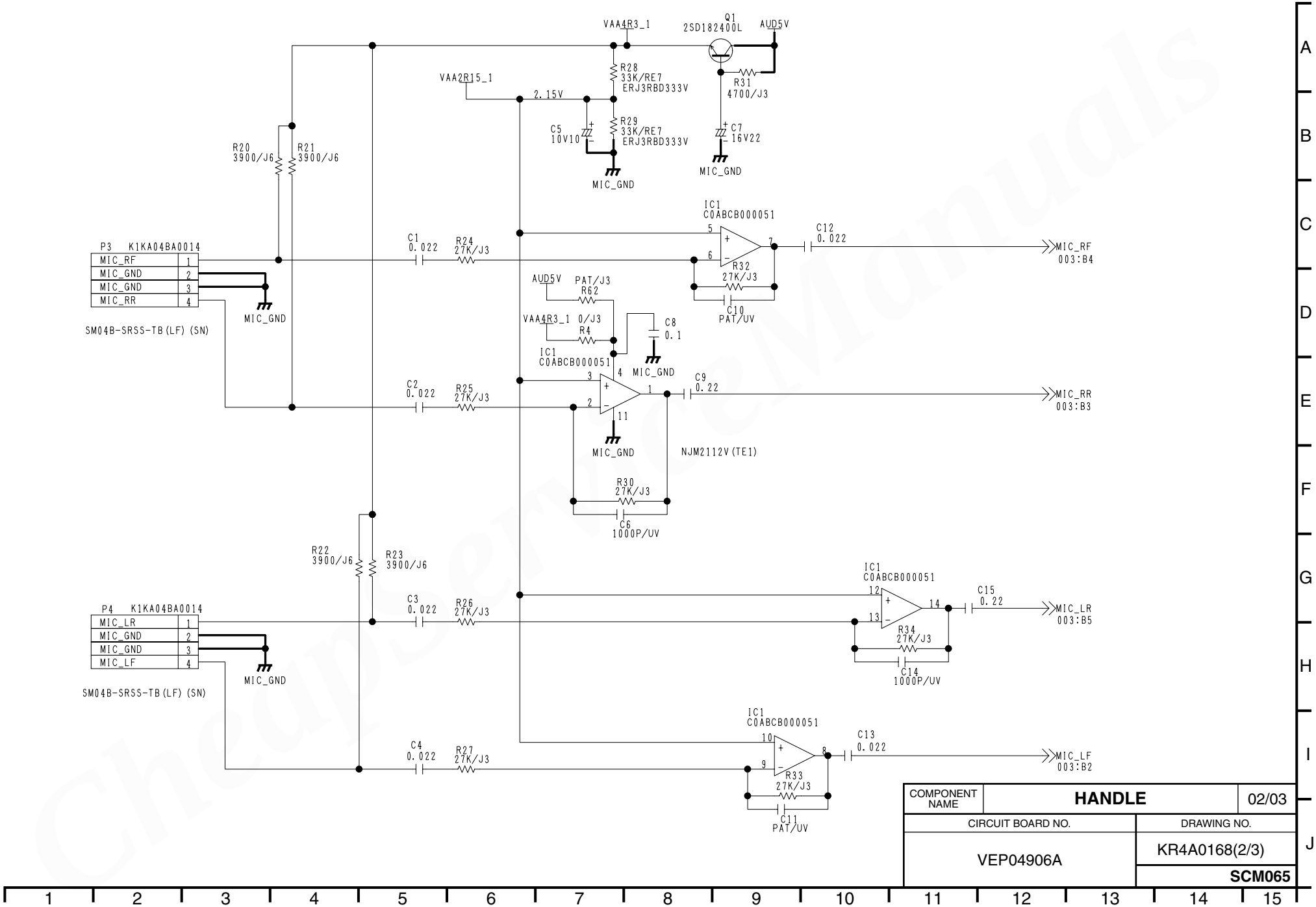
COMPONENT NAME	ZOOM_SW	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M5A		KR0A0389(2/2)
		SCM063

Cheapservicemanuals



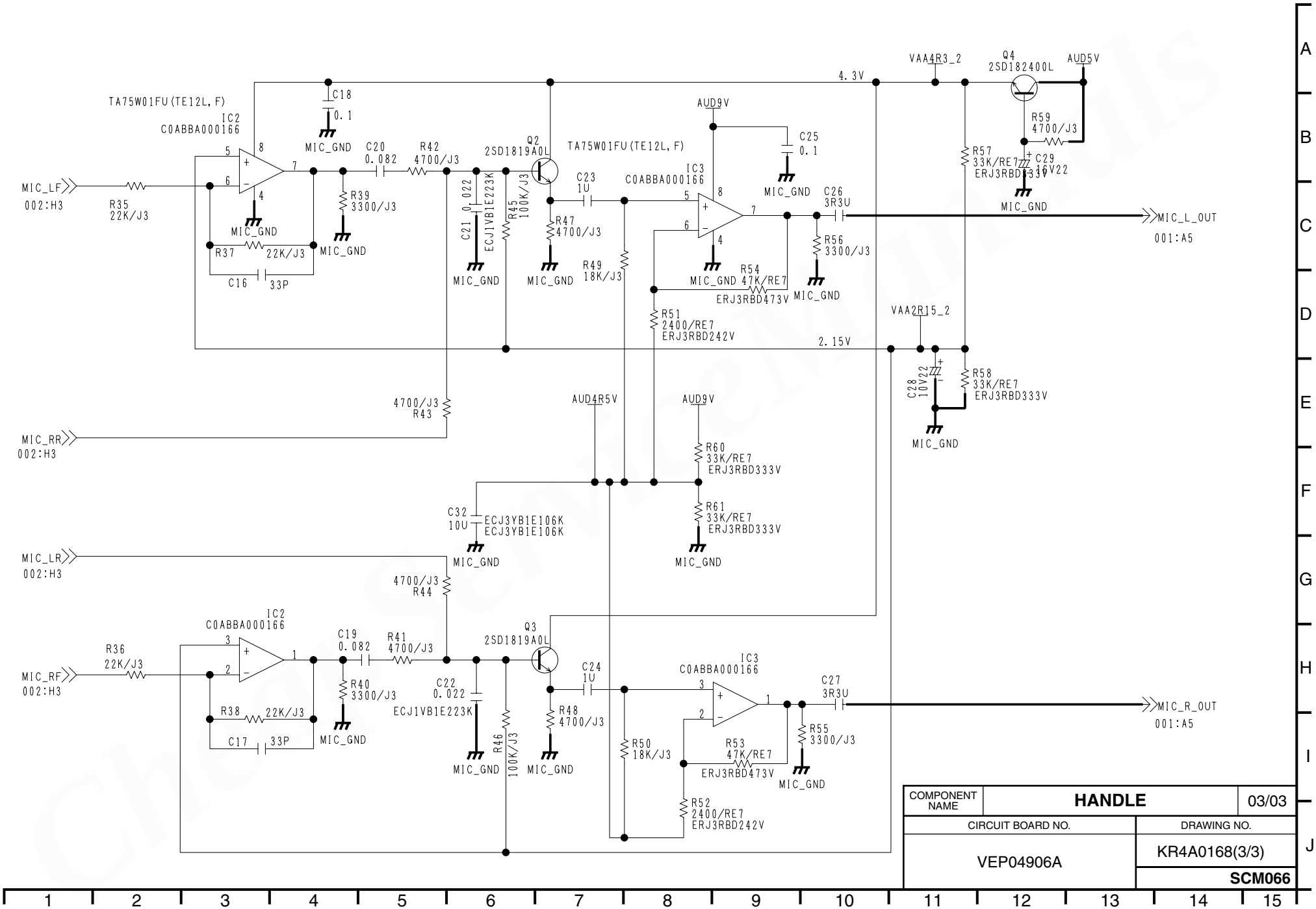
COMPONENT NAME	**HANDLE**	01/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04906A		KR4A0168(1/3)
		SCM064

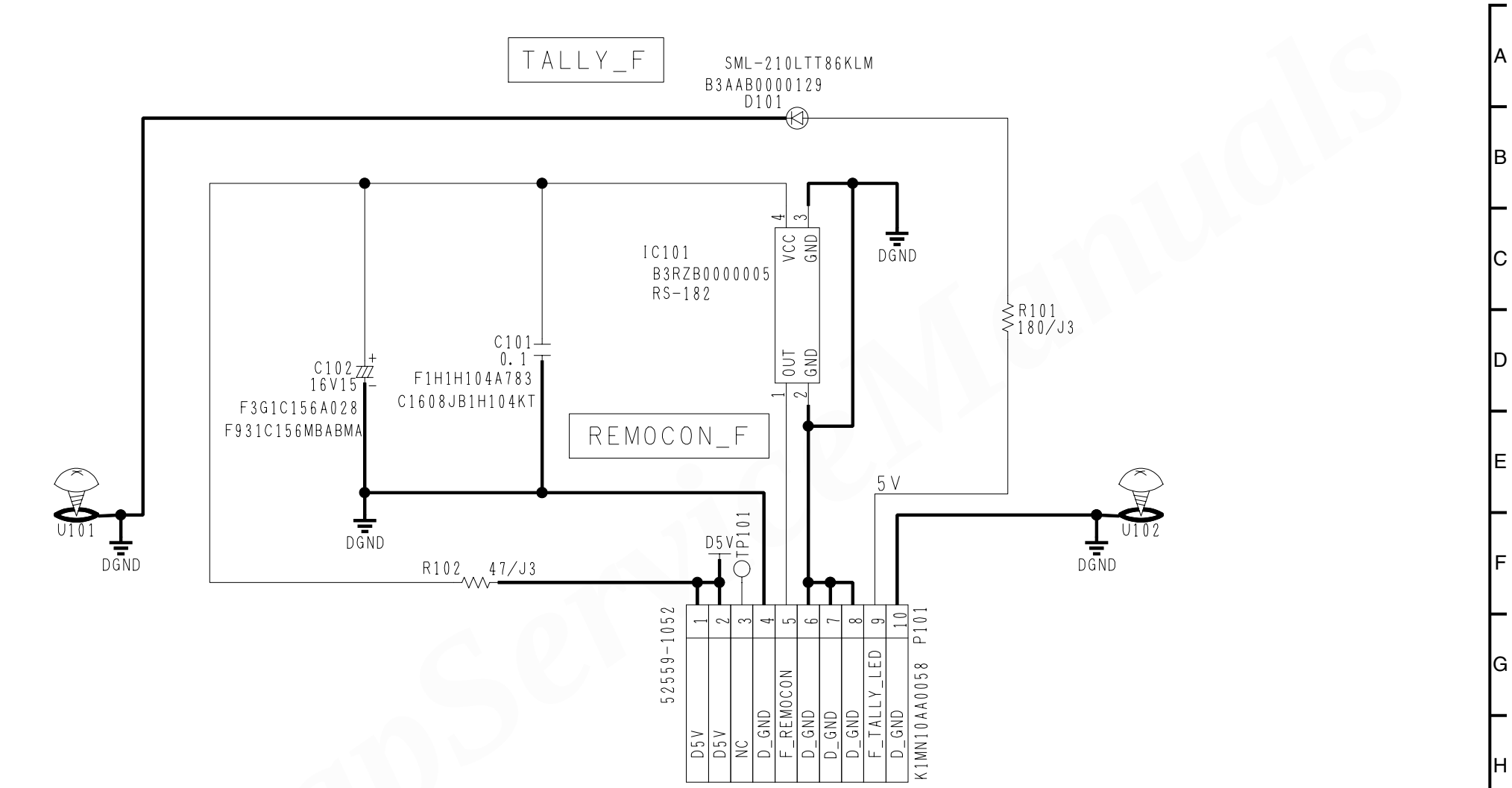
Onedsen Manuals



COMPONENT NAME	HANDLE	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP04906A		KR4A0168(2/3)
		SCM065

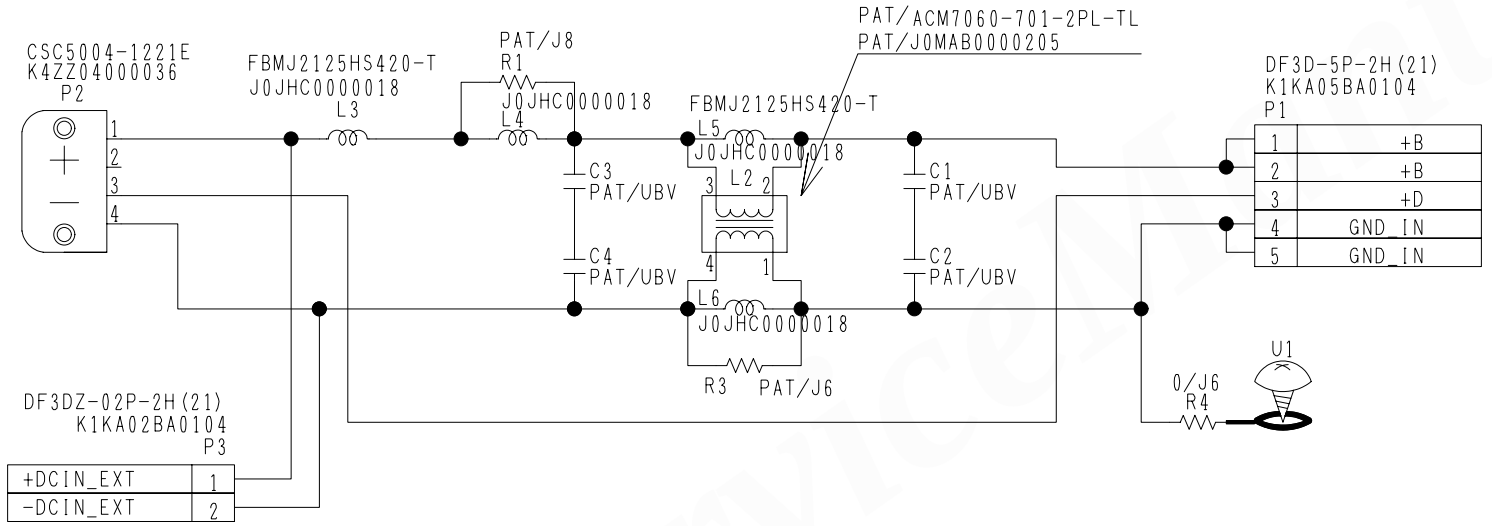
manualslib


TA75W01FU(TE12L, F)
IC2
C0ABBA000166
C18
0.1
MIC_GND
C20
0.082
R42
4700/J3
Q2
2SD1819A0L
TA75W01FU(TE12L, F)
IC3
C0ABBA000166
C23
1U
C25
0.1
AUD9V
4.3V
VAA4R3_2
Q4
2SD182400L
AUD5V
R59
4700/J3
R57
33K/RE7
ERJ3RBD333V
C29
16V22
MIC_LF
002:H3
R35
22K/J3
R39
3300/J3
R37
22K/J3
C16
33P
C21
0.022
ECJ1VB1E223K
R45
100K/J3
R47
4700/J3
R49
18K/J3
R54
47K/RE7
ERJ3RBD473V
C26
3R3U
R56
3300/J3
MIC_L_OUT
001:A5
R51
2400/RE7
ERJ3RBD242V
2.15V
VAA2R15_2
C28
10V22
R58
33K/RE7
ERJ3RBD333V
4700/J3
R43
MIC_RR
002:H3
AUD4R5V
AUD9V
R60
33K/RE7
ERJ3RBD333V
R61
33K/RE7
ERJ3RBD333V
C32
10U
ECJ3YB1E106K
ECJ3YB1E106K
MIC_LR
002:H3
4700/J3
R44
IC2
C0ABBA000166
R36
22K/J3
MIC_RF
002:H3
C19
0.082
R41
4700/J3
Q3
2SD1819A0L
R38
22K/J3
C17
33P
R40
3300/J3
C22
0.022
ECJ1VB1E223K
R46
100K/J3
R48
4700/J3
C24
1U
IC3
C0ABBA000166
R50
18K/J3
R53
47K/RE7
ERJ3RBD473V
R52
2400/RE7
ERJ3RBD242V
C27
3R3U
R55
3300/J3
MIC_R_OUT
001:A5
COMPONENT NAME
HANDLE
03/03
CIRCUIT BOARD NO.
VEP04906A
DRAWING NO.
KR4A0168(3/3)
SCM066



COMPONENT	REMOCON	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M3A		KR0A0387(1/1)
		SCM067

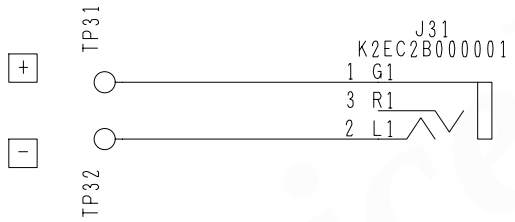
Cheapservicemanuals



PAT=PATTERN ONLY
Ref No. 1-49 Series.

COMPONENT NAME	BATTERY	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP01979A		KR1A0158(1/1)
		SCM068

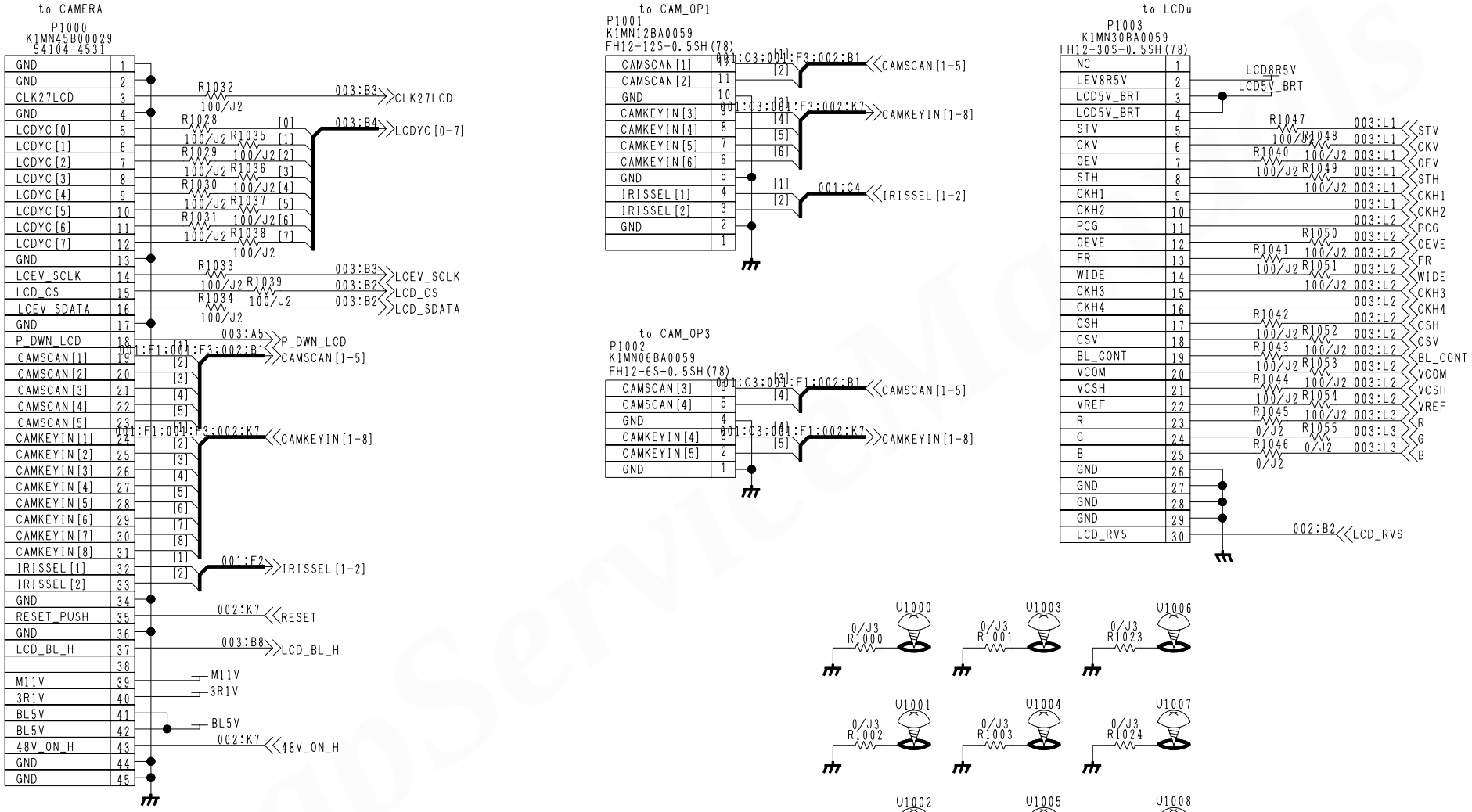
Cheapservicemanuals



Ref No. 31-49

COMPONENT NAME	DC_IN	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP01971A		KR1A0138(1/1)
		SCM069

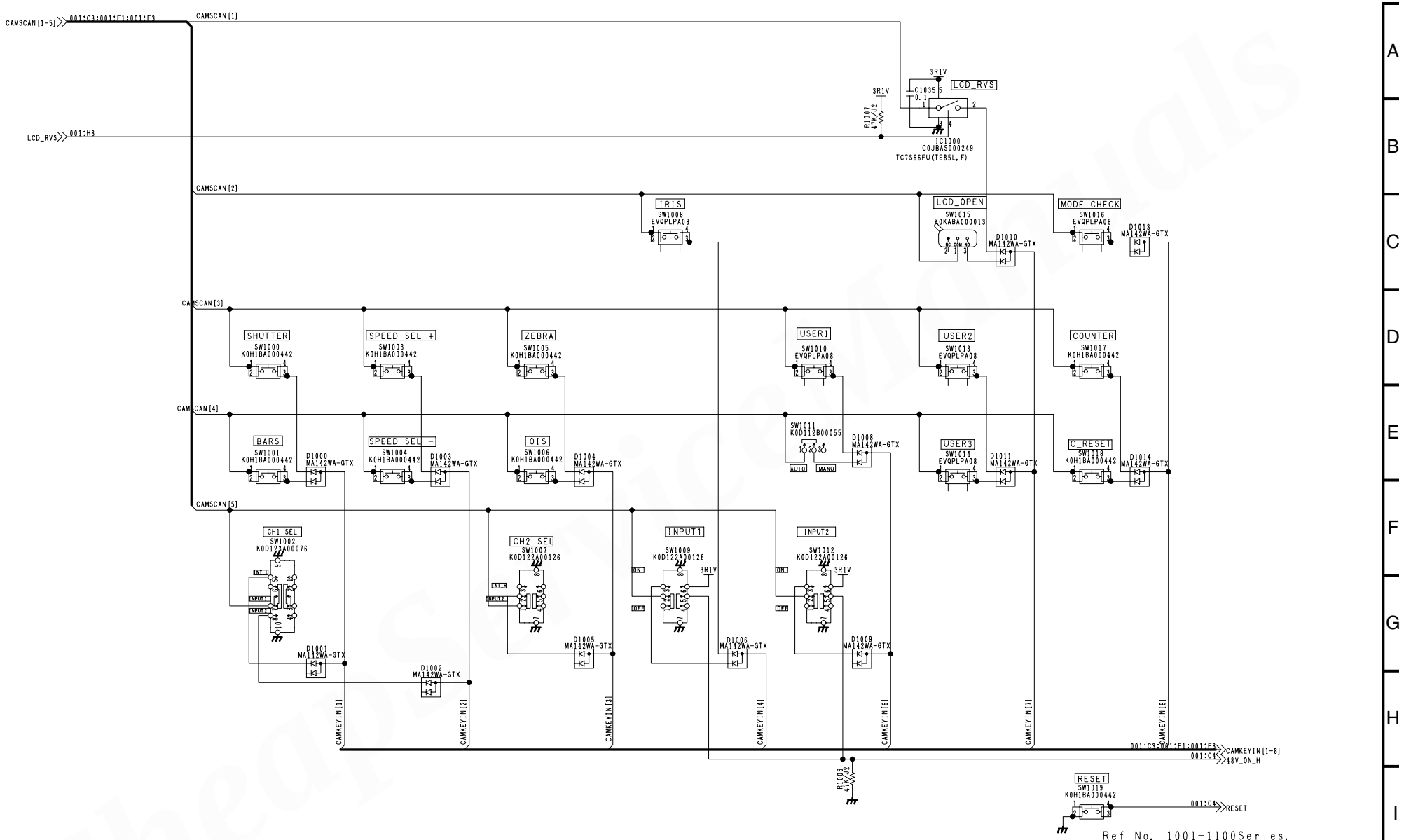
Cheapservicemanuals



Ref No. 1001-1100Series.

COMPONENT NAME	R_SIDE	01/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M6A		KR0A0390(1/3)
		SCM070

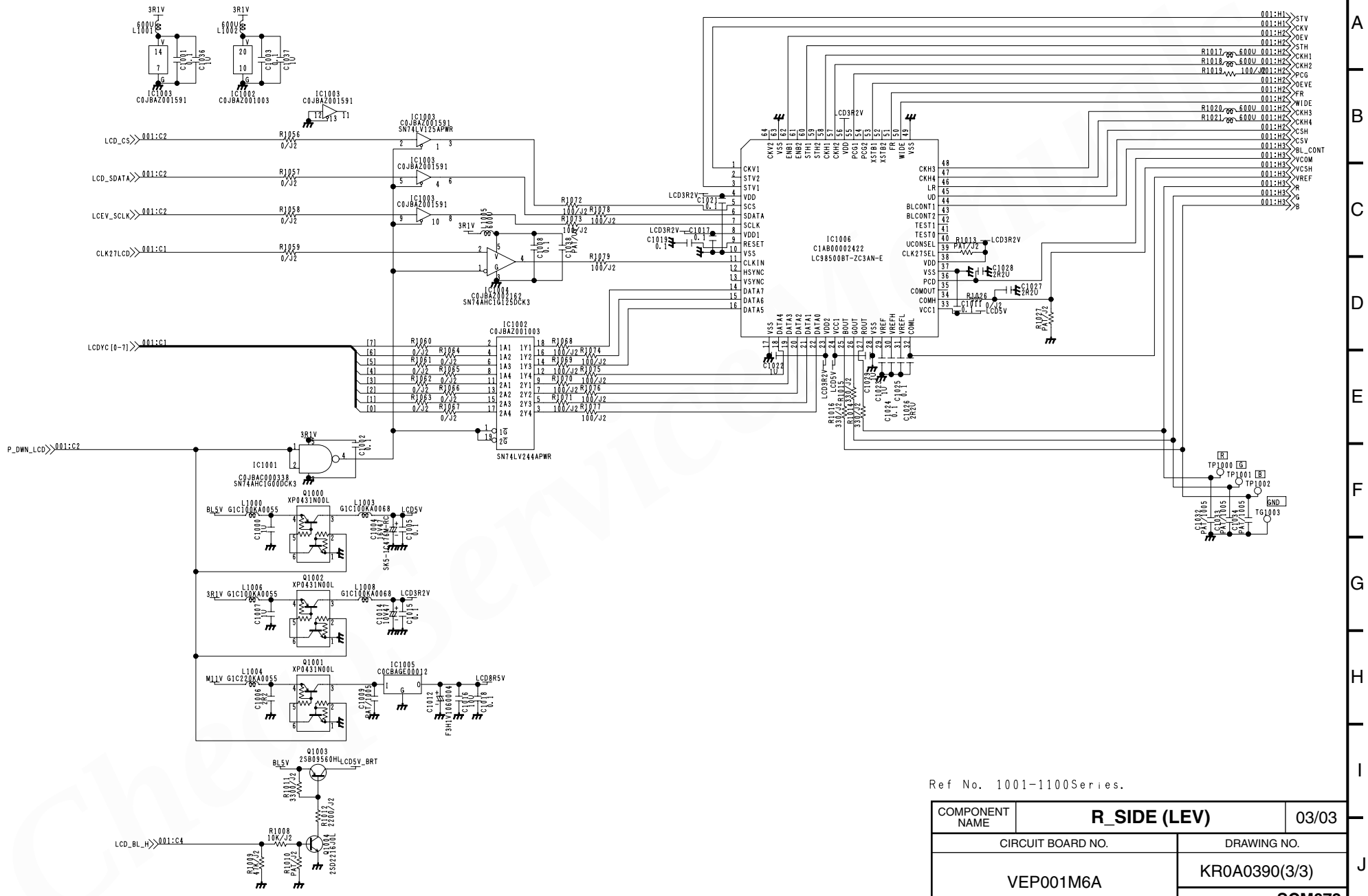
Onlinemanuals.ru

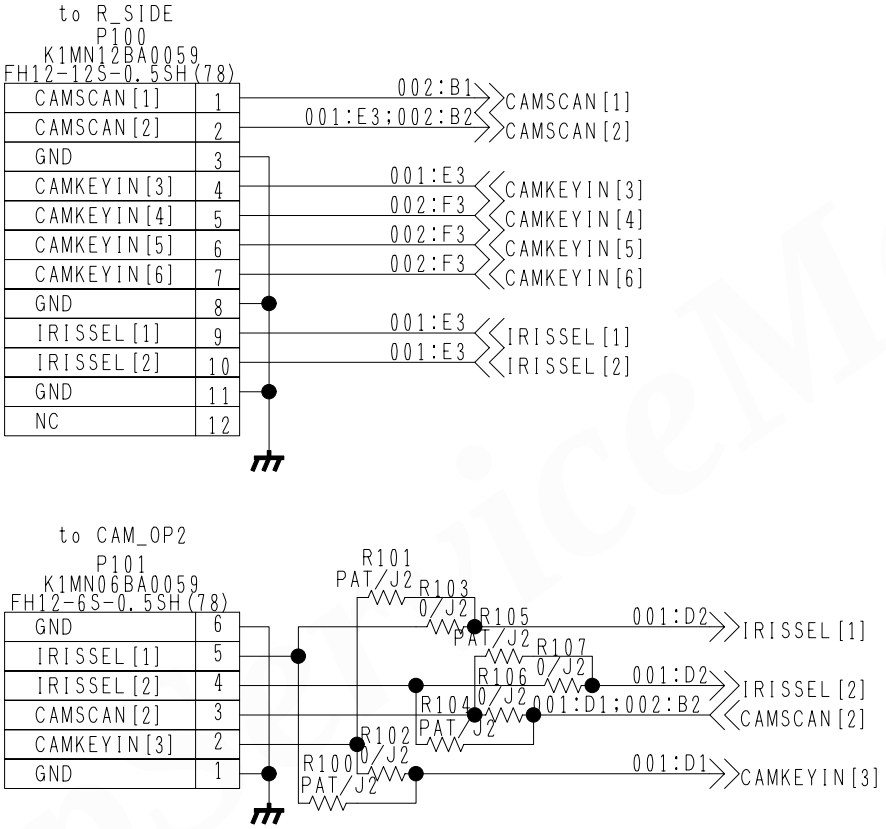


Ref No. 1001-1100Series.

COMPONENT NAME	R_SIDE	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP001M6A		KR0A0390(2/3)
		SCM071

Checked for Technical Materials

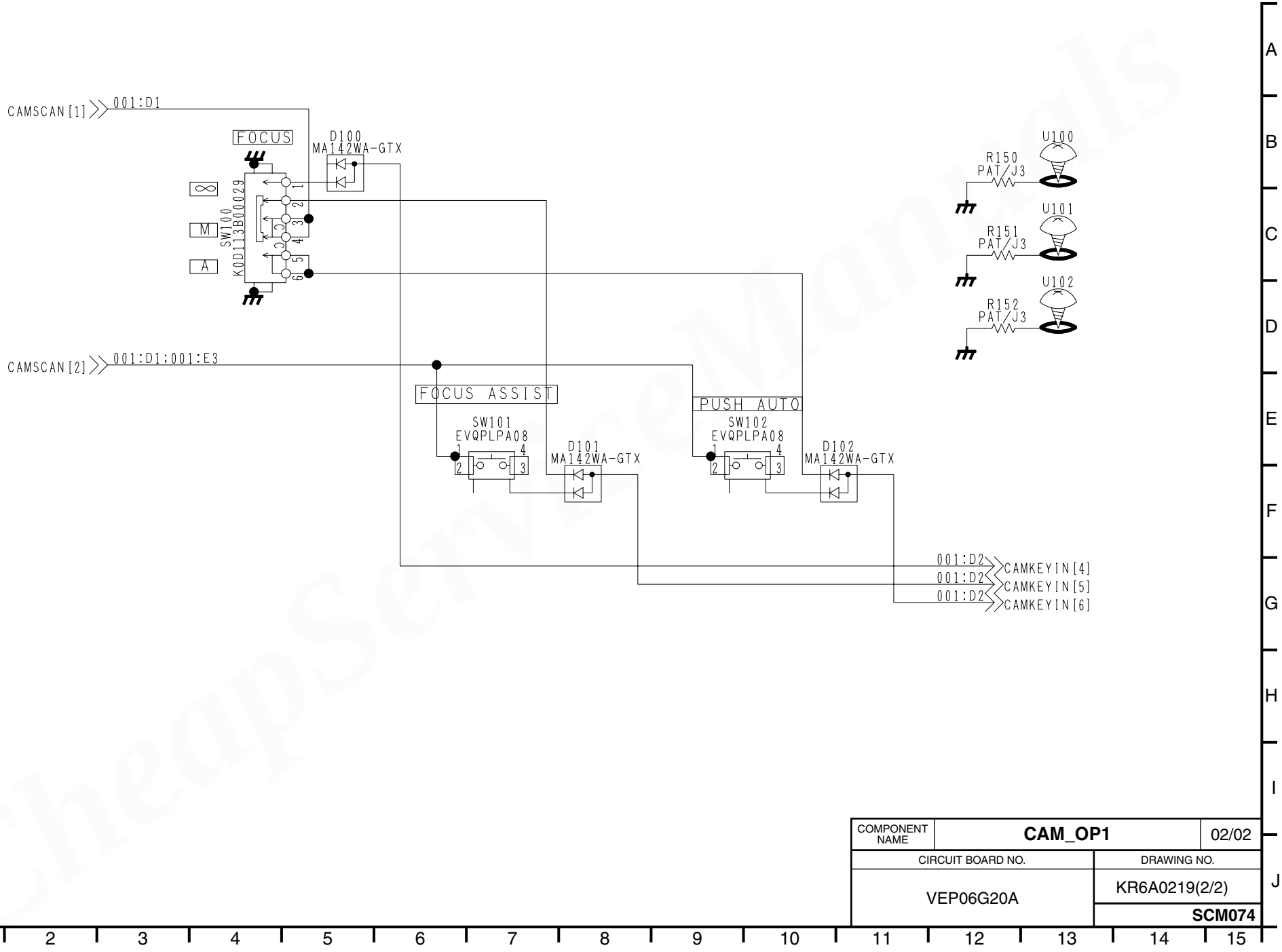

IC1006
C1AB00002422
LC98500BT-ZC3AN-E
IC1002
C0JBAZ001003
SN74LV244APWR
IC1003
C0JBAZ001591
SN74LV125APWR
IC1004
C0JBAZ002162
SN74AHC1G125DCK3
IC1001
C0JBAC000338
SN74AHC1G00DCK3
IC1005
C0CBAGE00012
Q1000
XP0431N00L
Q1001
XP0431N00L
Q1002
XP0431N00L
Q1003
2SB09560HL
Q1004
2SD2216JL
LCD_CS
LCD_SDATA
LCEV_SCLK
CLK27LCD
LCDYC[0-7]
P_DWN_LCD
LCD_BL_H
LCD5V
LCD3R2V
LCD8R5V
LCD5V_BRT
BL5V
3R1V
M11V
STV
CKV
OEV
STH
CKH1
CKH2
PCG
OEVE
FR
WIDE
CKH3
CKH4
CSH
CSV
BL_CONT
VCOM
VCSH
VREF
R
G
B
TP1000
TP1001
TP1002
TG1003
GND
Ref No. 1001-1100Series.
COMPONENT NAME
R_SIDE (LEV)
03/03
CIRCUIT BOARD NO.
VEP001M6A
DRAWING NO.
KR0A0390(3/3)
SCM072



Ref. No100Series

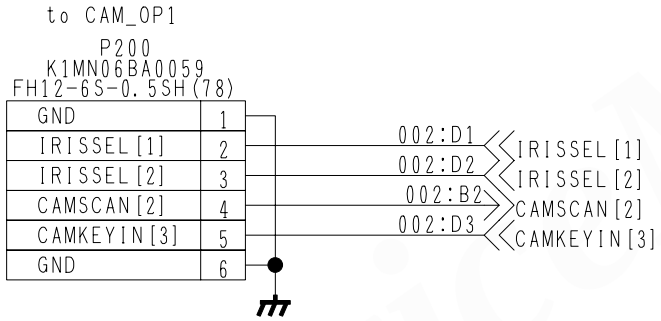
COMPONENT NAME	CAM_OP1	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06G20A		KR6A0219(1/2)
		SCM073

Cheapservicemanuals



COMPONENT NAME	CAM_OP1	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06G20A		KR6A0219(2/2)
		SCM074

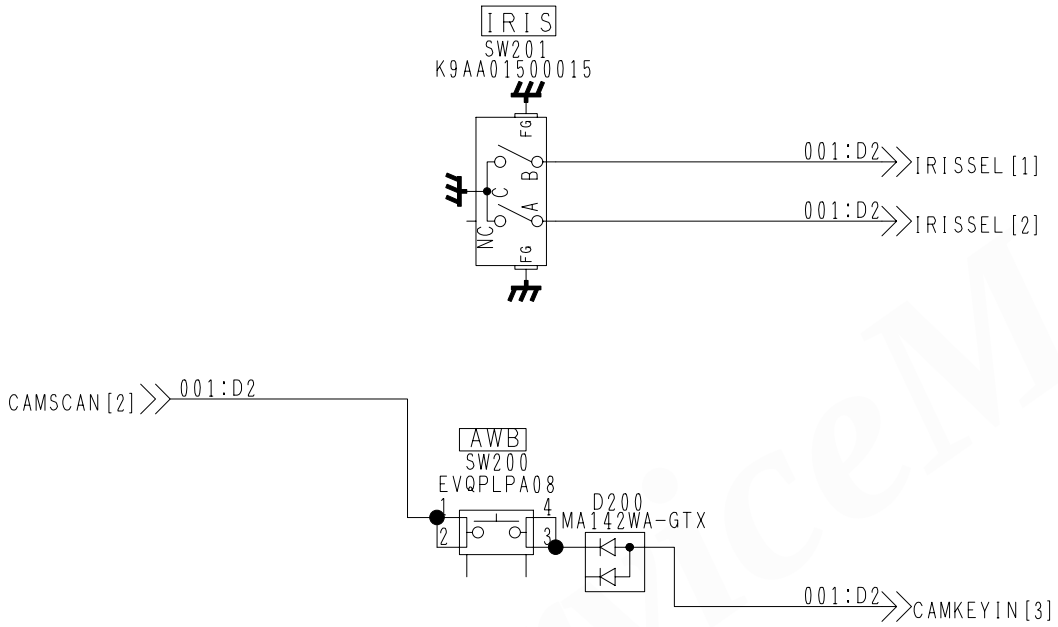
Cheapservicemanuals



Ref. No200Series

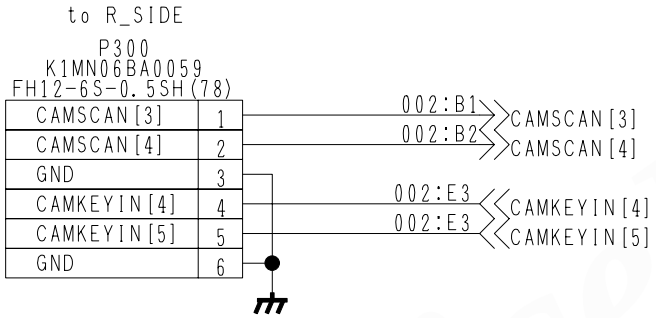
COMPONENT NAME	CAM_OP2	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06G21A		KR6A0220(1/2)
		SCM075

Cheapservicemanuals



COMPONENT NAME	CAM_OP2	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06G21A		KR6A0220(2/2)
		SCM076

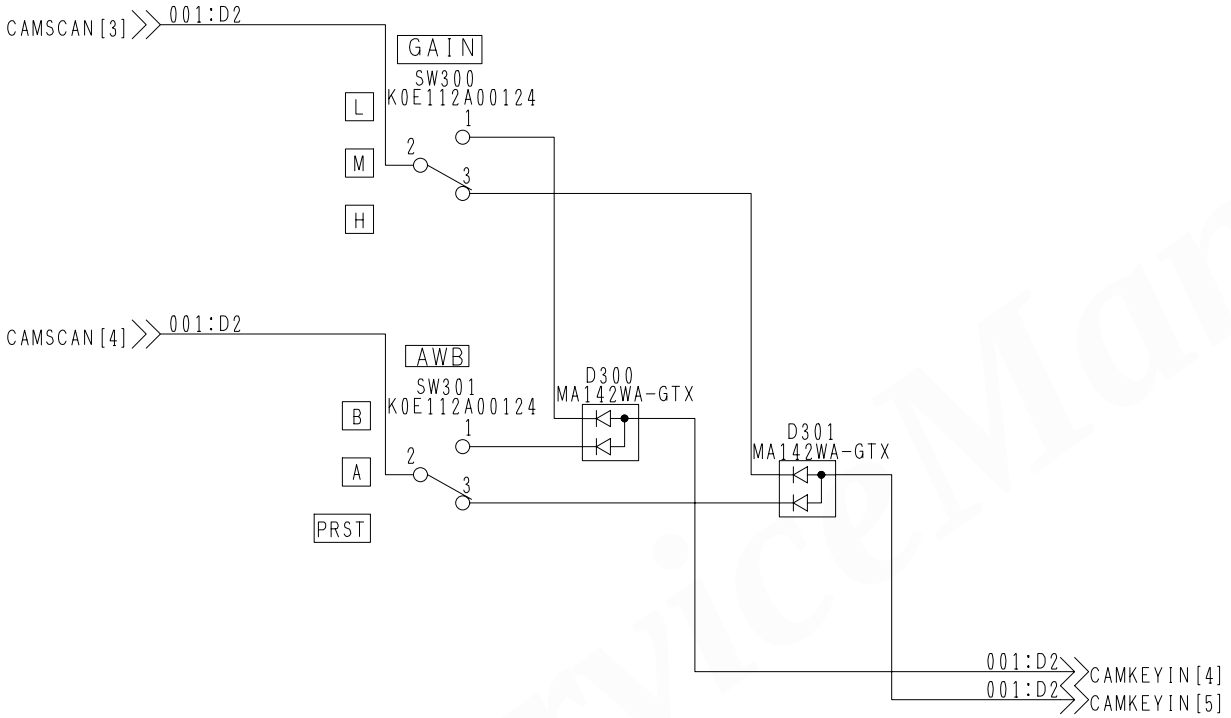
Cheapservicemanuals

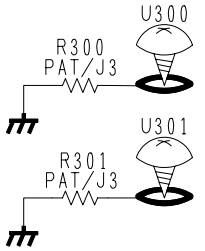


Ref. No300Series

COMPONENT NAME	CAM_OP3	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06G22A		KR6A0221(1/2)
		SCM077

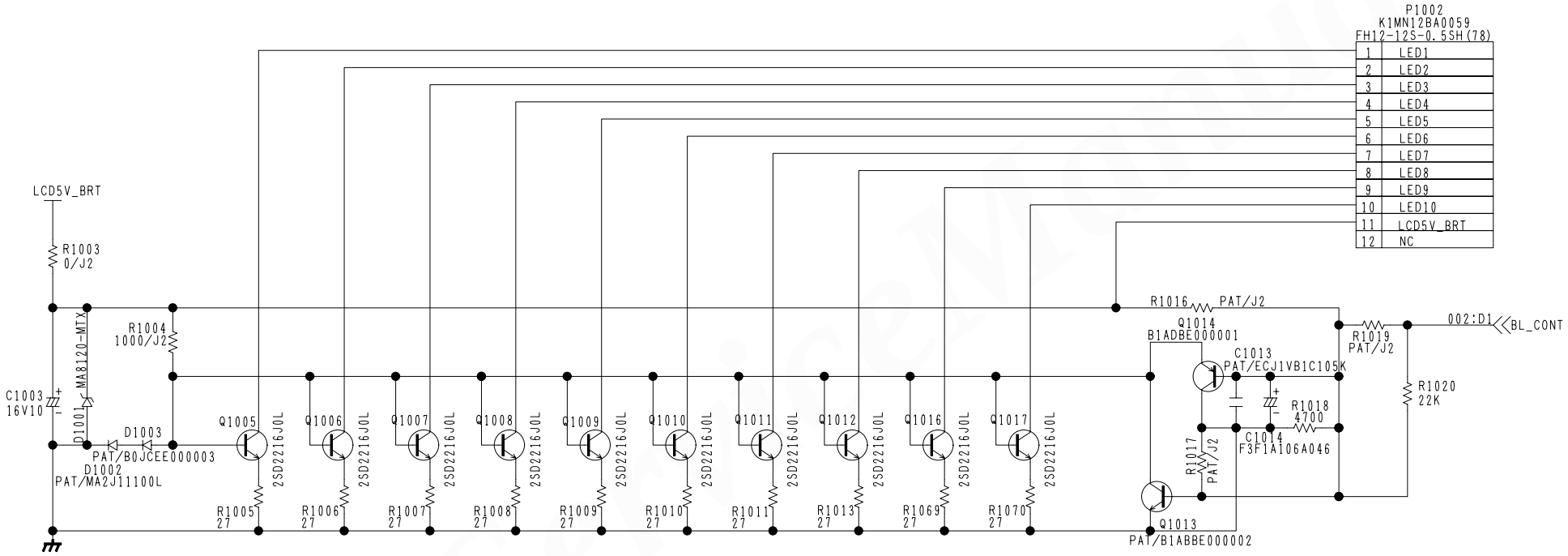
Cheapservicemanuals





COMPONENT NAME	CAM_OP3	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP06G22A		KR6A0221(2/2)
		SCM078

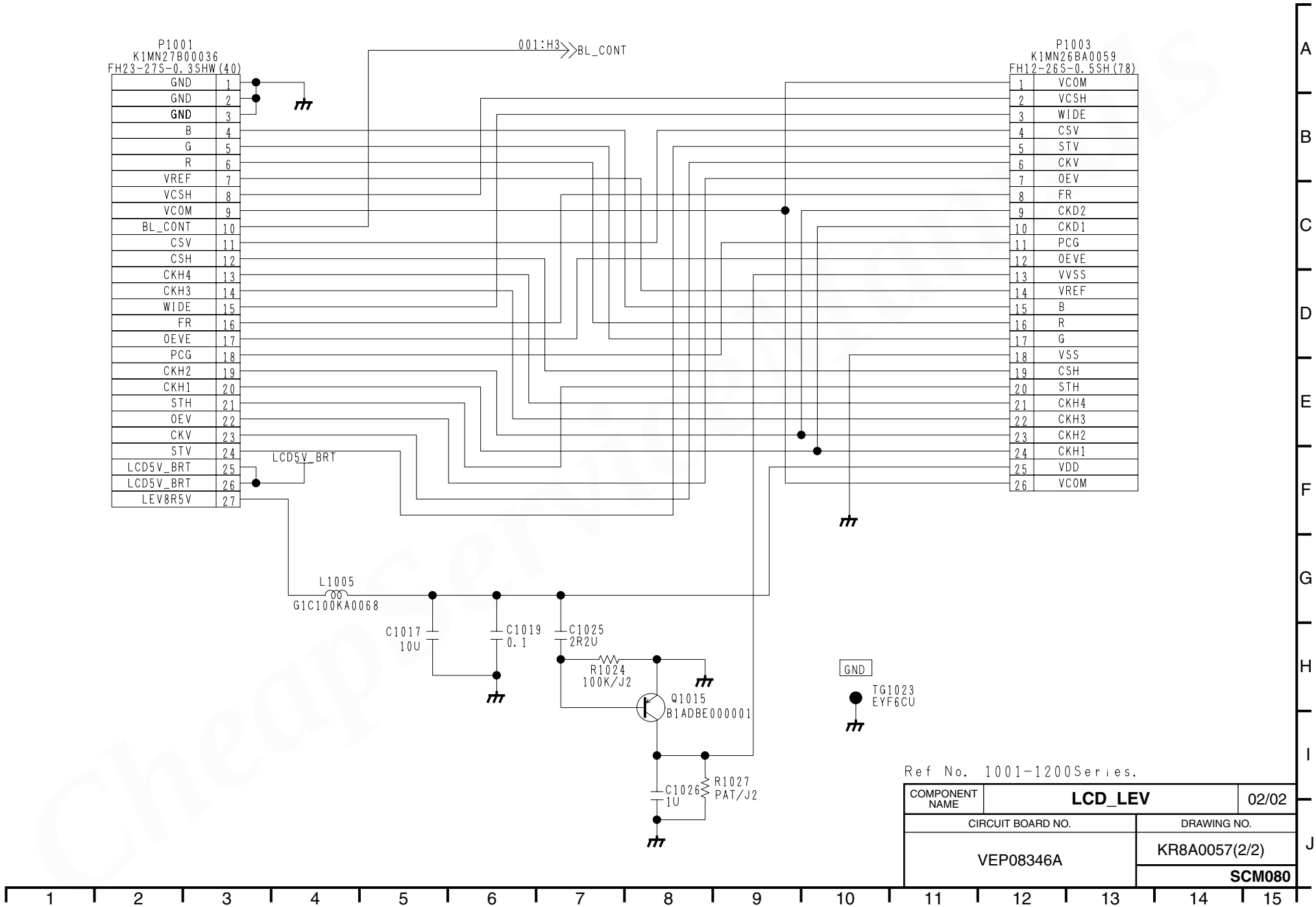
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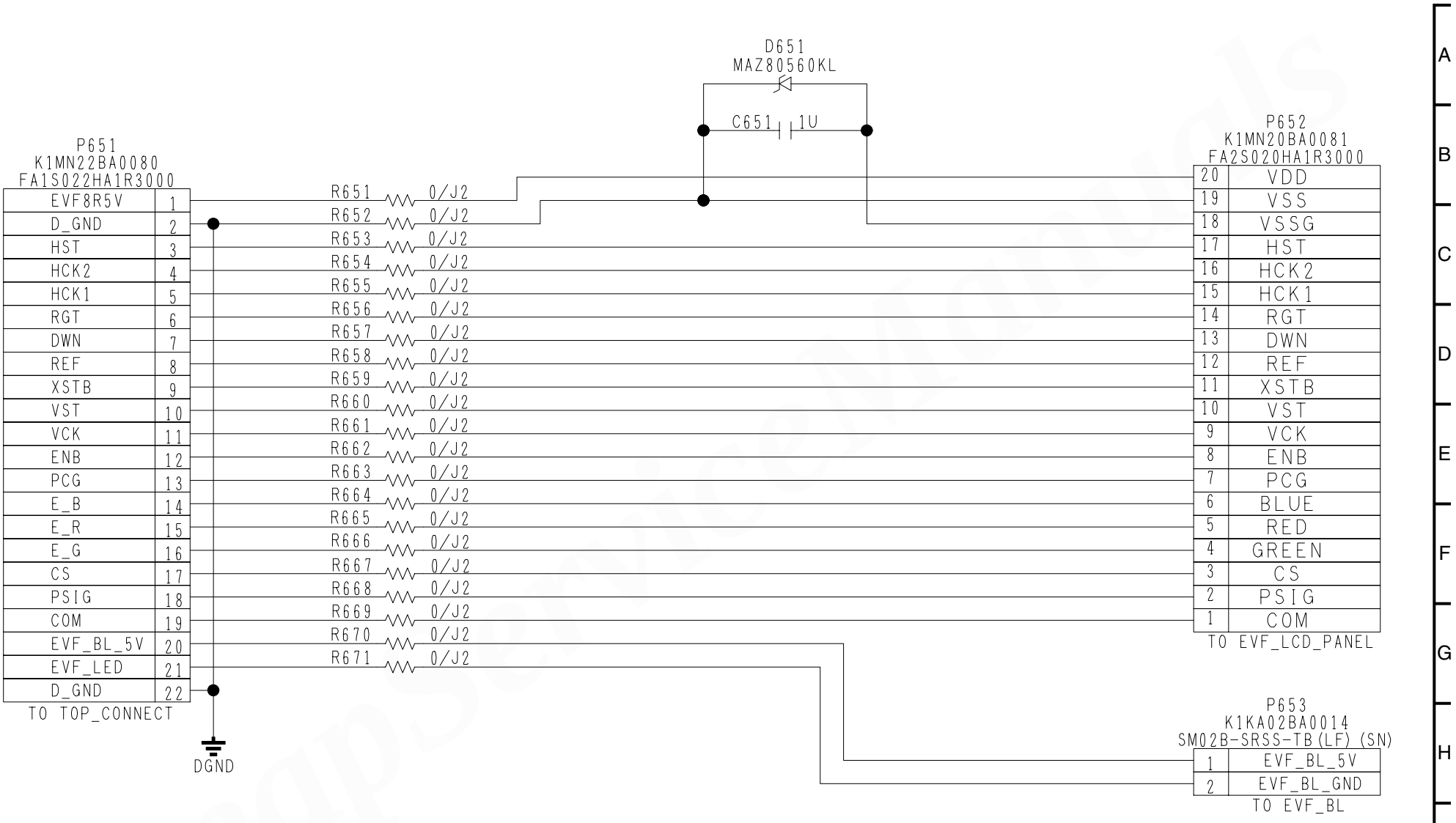


Ref No. 1001-1200Series.

COMPONENT NAME	LCD_LEV	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP08346A		KR8A0057(1/2)
		SCM079

Cheapservicemanuals

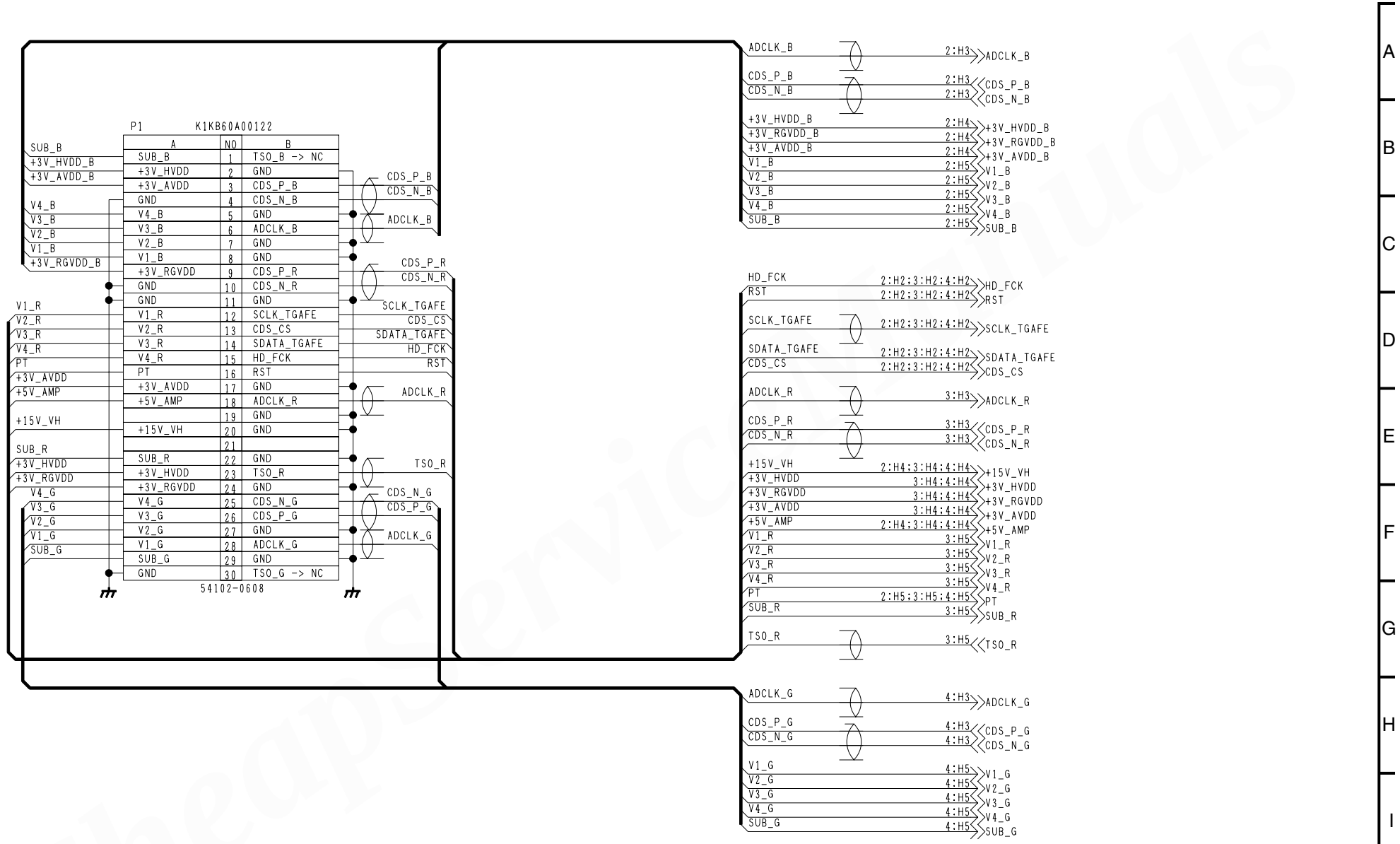

P1001
K1MN27B00036
FH23-27S-0.3SHW(40)
GND 1
GND 2
GND 3
B 4
G 5
R 6
VREF 7
VCSH 8
VCOM 9
BL_CONT 10
CSV 11
CSH 12
CKH4 13
CKH3 14
WIDE 15
FR 16
OEVE 17
PCG 18
CKH2 19
CKH1 20
STH 21
OEV 22
CKV 23
STV 24
LCD5V_BRT 25
LCD5V_BRT 26
LEV8R5V 27
001:H3
BL_CONT
LCD5V_BRT
P1003
K1MN26BA0059
FH12-26S-0.5SH(78)
1 VCOM
2 VCSH
3 WIDE
4 CSV
5 STV
6 CKV
7 OEV
8 FR
9 CKD2
10 CKD1
11 PCG
12 OEVE
13 VVSS
14 VREF
15 B
16 R
17 G
18 VSS
19 CSH
20 STH
21 CKH4
22 CKH3
23 CKH2
24 CKH1
25 VDD
26 VCOM
L1005
G1C100KA0068
C1017
10U
C1019
0.1
C1025
2R2U
R1024
100K/J2
Q1015
B1ADBE000001
C1026
1U
R1027
PAT/J2
GND
TG1023
EYF6CU
Ref No. 1001-1200Series.
COMPONENT NAME
LCD_LEV
02/02
CIRCUIT BOARD NO.
VEP08346A
DRAWING NO.
KR8A0057(2/2)
SCM080



Ref No. 651-700 Series.

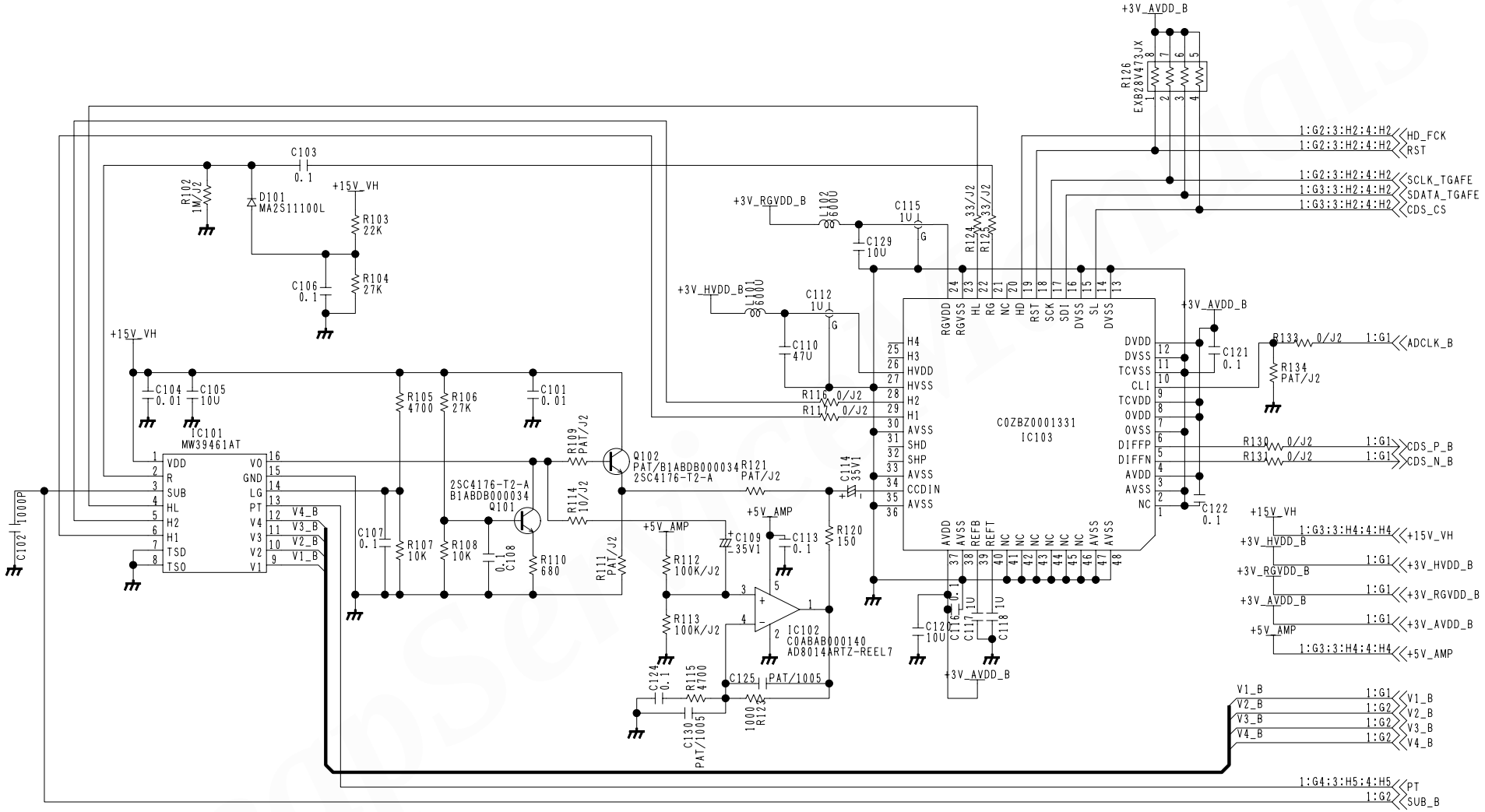
COMPONENT NAME	EVF CONNECT	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP29166A		KR3A0339(1/1)
		SCM081

Onedrservicemanuals



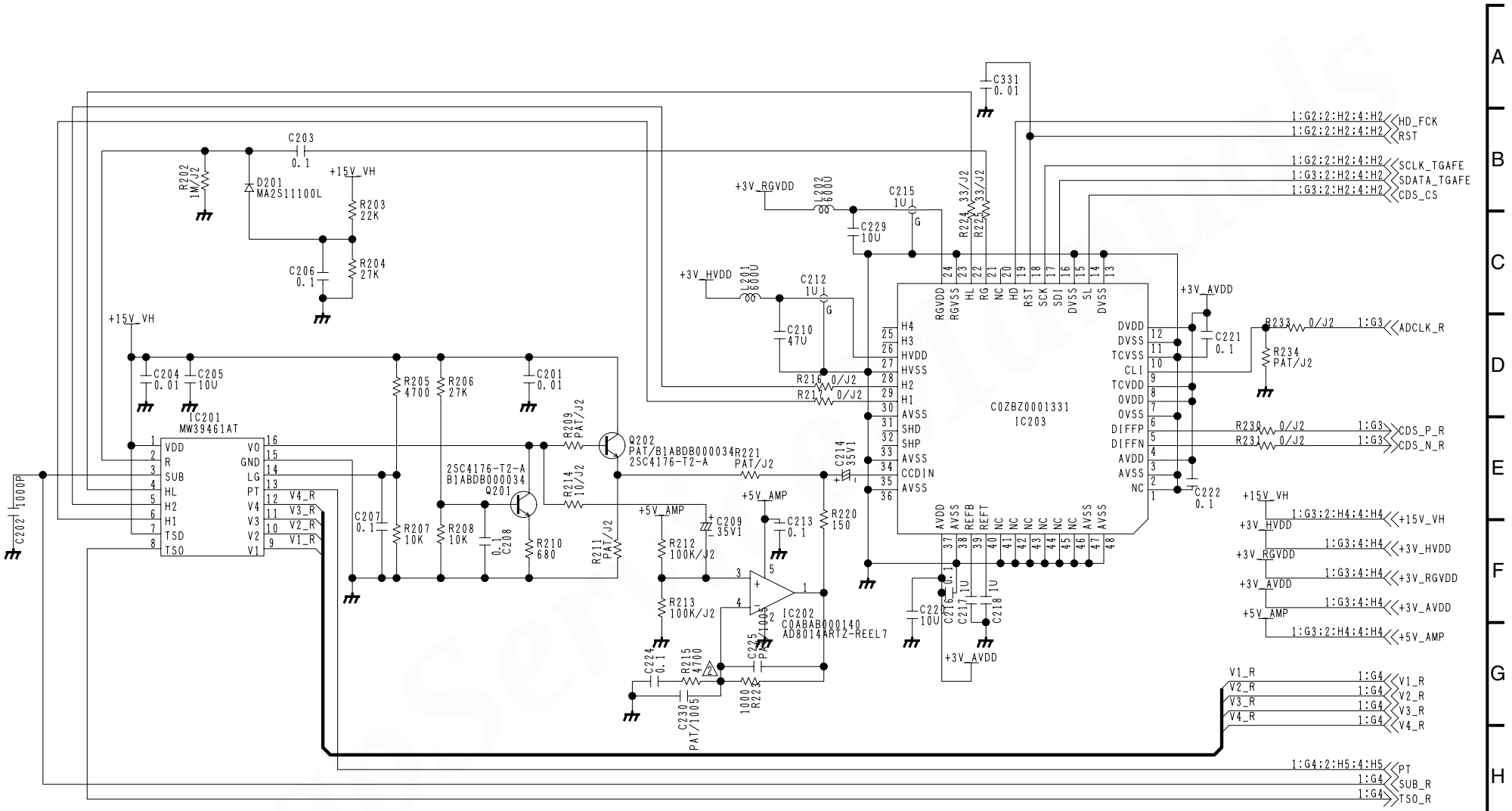
COMPONENT NAME	CCD_FLEX	01/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP22367A		KR3A0379(1/4)
		SCM082

Onedigitalmanuals



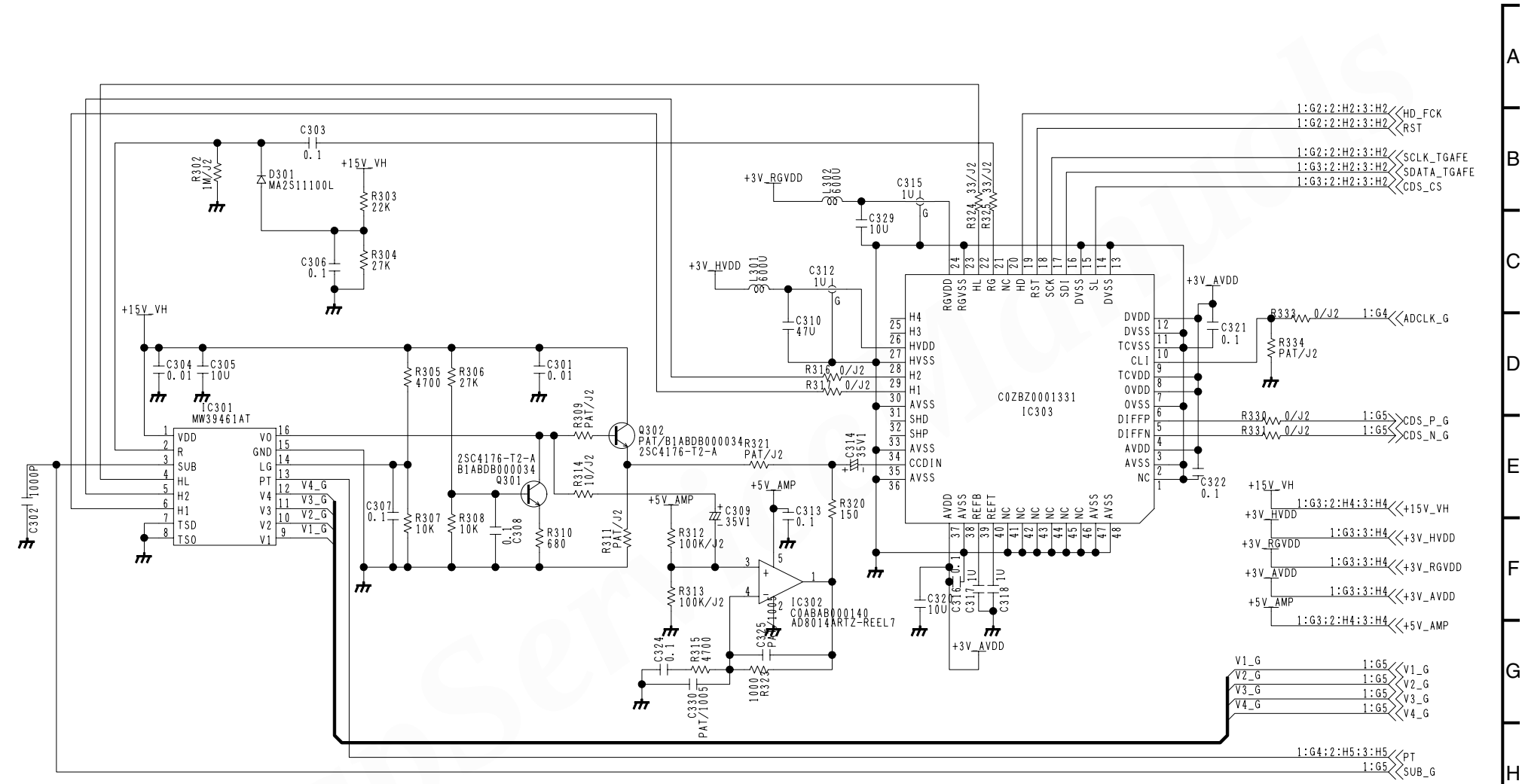
COMPONENT NAME	CCD_FLEX	02/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP22367A		KR3A0379(2/4)
		SCM083

onepcsetvices



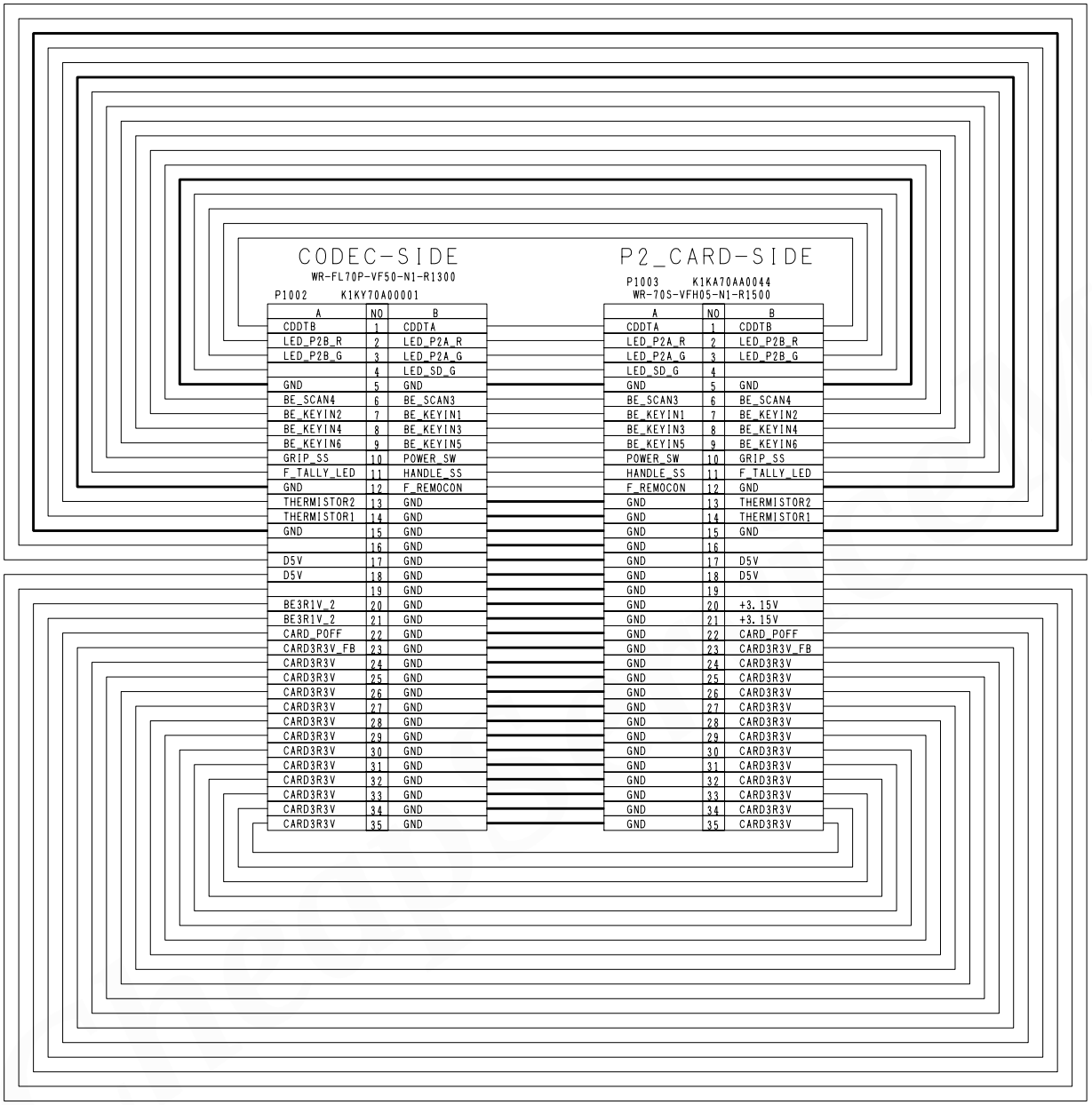
COMPONENT NAME	CCD_FLEX	03/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP22367A		KR3A0379(3/4)
		SCM084

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COMPONENT NAME	CCD_FLEX	04/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP22367A		KR3A0379(4/4)
		SCM085

Cnet Service Manual



CODEC-SIDE

WR-FL70P-VF50-N1-R1300

P1002 K1KY70A00001

A	NO	B
CDDTB	1	CDDTA
LED_P2B_R	2	LED_P2A_R
LED_P2B_G	3	LED_P2A_G
	4	LED_SD_G
GND	5	GND
BE_SCAN4	6	BE_SCAN3
BE_KEYIN2	7	BE_KEYIN1
BE_KEYIN4	8	BE_KEYIN3
BE_KEYIN6	9	BE_KEYIN5
GRIP_SS	10	POWER_SW
F_TALLY_LED	11	HANDLE_SS
GND	12	F_REMOCON
THERMISTOR2	13	GND
THERMISTOR1	14	GND
GND	15	GND
	16	GND
D5V	17	GND
D5V	18	GND
	19	GND
BE3R1V_2	20	GND
BE3R1V_2	21	GND
CARD_POFF	22	GND
CARD3R3V_FB	23	GND
CARD3R3V	24	GND
CARD3R3V	25	GND
CARD3R3V	26	GND
CARD3R3V	27	GND
CARD3R3V	28	GND
CARD3R3V	29	GND
CARD3R3V	30	GND
CARD3R3V	31	GND
CARD3R3V	32	GND
CARD3R3V	33	GND
CARD3R3V	34	GND
CARD3R3V	35	GND

P2_CARD-SIDE

P1003 K1KA70AA0044

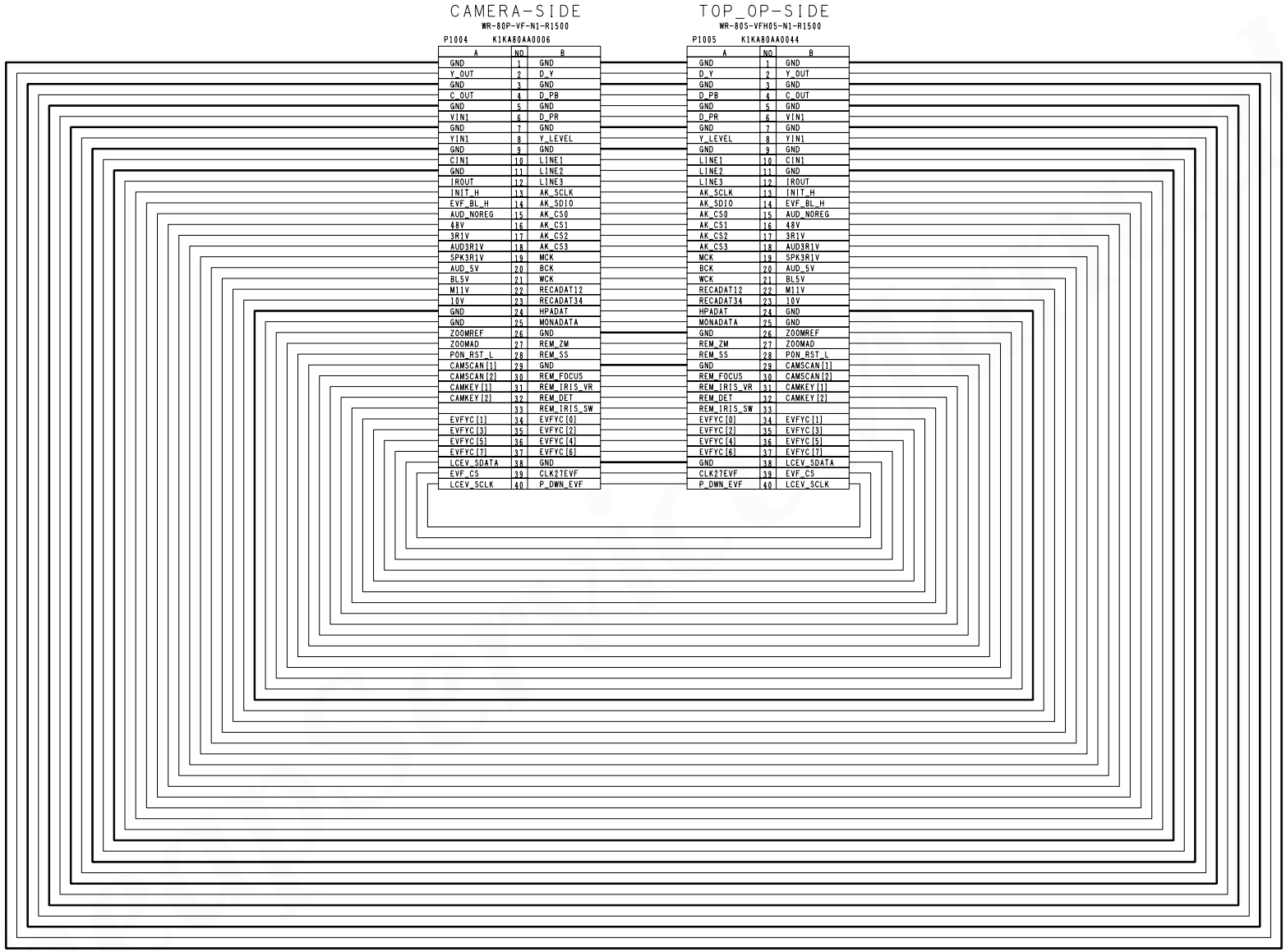
WR-70S-VFH05-N1-R1500

A	NO	B
CDDTA	1	CDDTB
LED_P2A_R	2	LED_P2B_R
LED_P2A_G	3	LED_P2B_G
LED_SD_G	4	
GND	5	GND
BE_SCAN3	6	BE_SCAN4
BE_KEYIN1	7	BE_KEYIN2
BE_KEYIN3	8	BE_KEYIN4
BE_KEYIN5	9	BE_KEYIN6
POWER_SW	10	GRIP_SS
HANDLE_SS	11	F_TALLY_LED
F_REMOCON	12	GND
GND	13	THERMISTOR2
GND	14	THERMISTOR1
GND	15	GND
GND	16	
GND	17	D5V
GND	18	D5V
GND	19	
GND	20	+3.15V
GND	21	+3.15V
GND	22	CARD_POFF
GND	23	CARD3R3V_FB
GND	24	CARD3R3V
GND	25	CARD3R3V
GND	26	CARD3R3V
GND	27	CARD3R3V
GND	28	CARD3R3V
GND	29	CARD3R3V
GND	30	CARD3R3V
GND	31	CARD3R3V
GND	32	CARD3R3V
GND	33	CARD3R3V
GND	34	CARD3R3V
GND	35	CARD3R3V

COMPONENT NAME	CODEC P2 FPC	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G94A		KR0A0409(1/1)
		SCM086

A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



CAMERA-SIDE

WR-80P-VF-N1-R1500

P1004 K1KA80AA0006

A	NO	B
GND	1	GND
Y_OUT	2	D_Y
GND	3	GND
C_OUT	4	D_PB
GND	5	GND
VIN1	6	D_PR
GND	7	GND
YIN1	8	Y_LEVEL
GND	9	GND
CIN1	10	LINE1
GND	11	LINE2
IROUT	12	LINE3
INIT_H	13	AK_SCLK
EVF_BL_H	14	AK_SDIO
AUD_NOREG	15	AK_CS0
48V	16	AK_CS1
3R1V	17	AK_CS2
AUD3R1V	18	AK_CS3
SPK3R1V	19	MCK
AUD_5V	20	BCK
BL5V	21	WCK
M11V	22	RECADAT12
10V	23	RECADAT34
GND	24	HPADAT
GND	25	MONADATA
ZOOMREF	26	GND
ZOOMAD	27	REM_ZM
PON_RST_L	28	REM_SS
CAMSCAN[1]	29	GND
CAMSCAN[2]	30	REM_FOCUS
CAMKEY[1]	31	REM_IRIS_VR
CAMKEY[2]	32	REM_DET
	33	REM_IRIS_SW
EVFYC[1]	34	EVFYC[0]
EVFYC[3]	35	EVFYC[2]
EVFYC[5]	36	EVFYC[4]
EVFYC[7]	37	EVFYC[6]
LCEV_SDATA	38	GND
EVF_CS	39	CLK27EVF
LCEV_SCLK	40	P_DWN_EVF

TOP_OP-SIDE

WR-80S-VFH05-N1-R1500

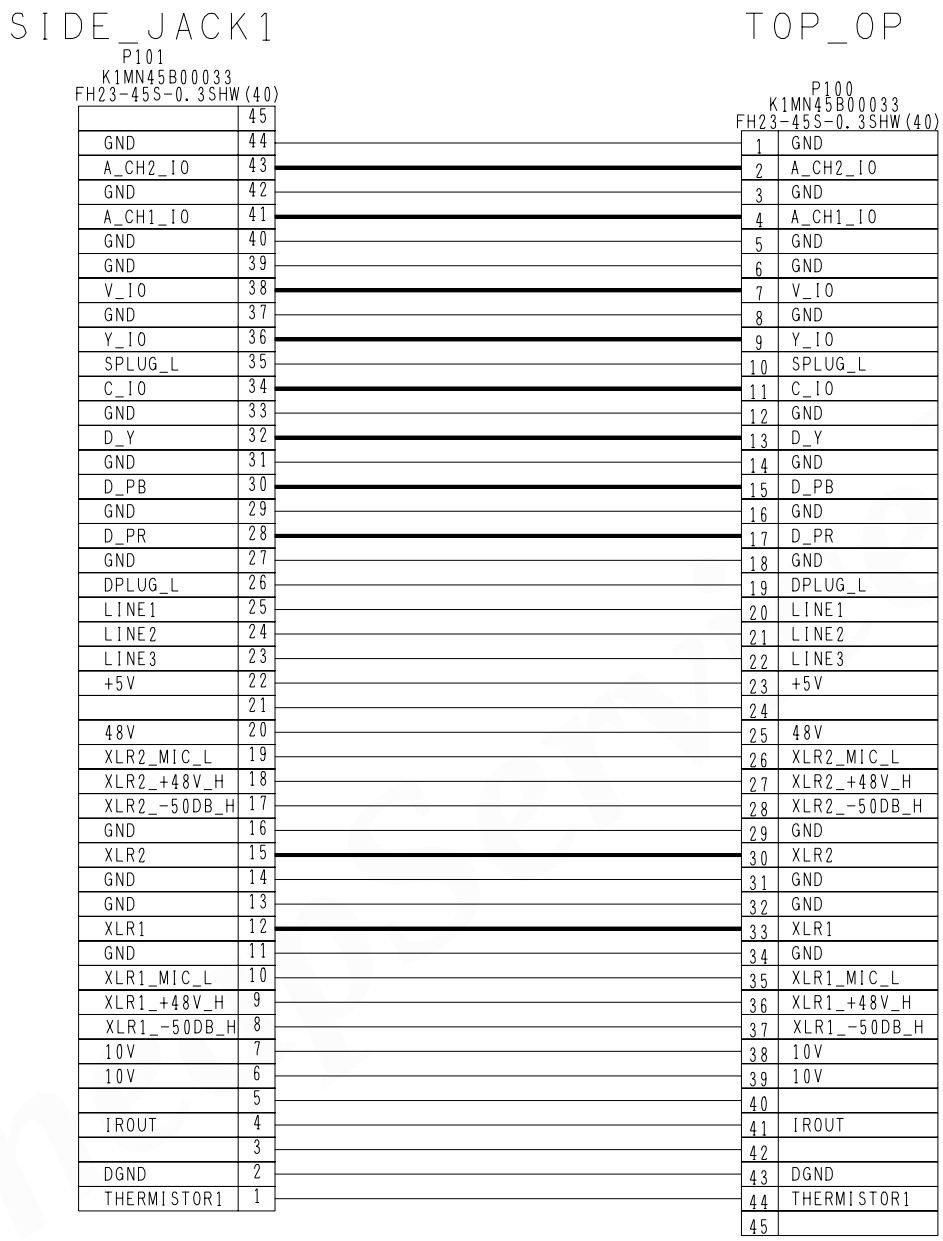
P1005 K1KA80AA0044

A	NO	B
GND	1	GND
D_Y	2	Y_OUT
GND	3	GND
D_PB	4	C_OUT
GND	5	GND
D_PR	6	VIN1
GND	7	GND
Y_LEVEL	8	YIN1
GND	9	GND
LINE1	10	CIN1
LINE2	11	GND
LINE3	12	IROUT
AK_SCLK	13	INIT_H
AK_SDIO	14	EVF_BL_H
AK_CS0	15	AUD_NOREG
AK_CS1	16	48V
AK_CS2	17	3R1V
AK_CS3	18	AUD3R1V
MCK	19	SPK3R1V
BCK	20	AUD_5V
WCK	21	BL5V
RECADAT12	22	M11V
RECADAT34	23	10V
HPADAT	24	GND
MONADATA	25	GND
GND	26	ZOOMREF
REM_ZM	27	ZOOMAD
REM_SS	28	PON_RST_L
GND	29	CAMSCAN[1]
REM_FOCUS	30	CAMSCAN[2]
REM_IRIS_VR	31	CAMKEY[1]
REM_DET	32	CAMKEY[2]
REM_IRIS_SW	33	
EVFYC[0]	34	EVFYC[1]
EVFYC[2]	35	EVFYC[3]
EVFYC[4]	36	EVFYC[5]
EVFYC[6]	37	EVFYC[7]
GND	38	LCEV_SDATA
CLK27EVF	39	EVF_CS
P_DWN_EVF	40	LCEV_SCLK

COMPONENT NAME	CAMERA TOP FPC	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP03G96A		KR0A0410(1/1)
		SCM087

A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

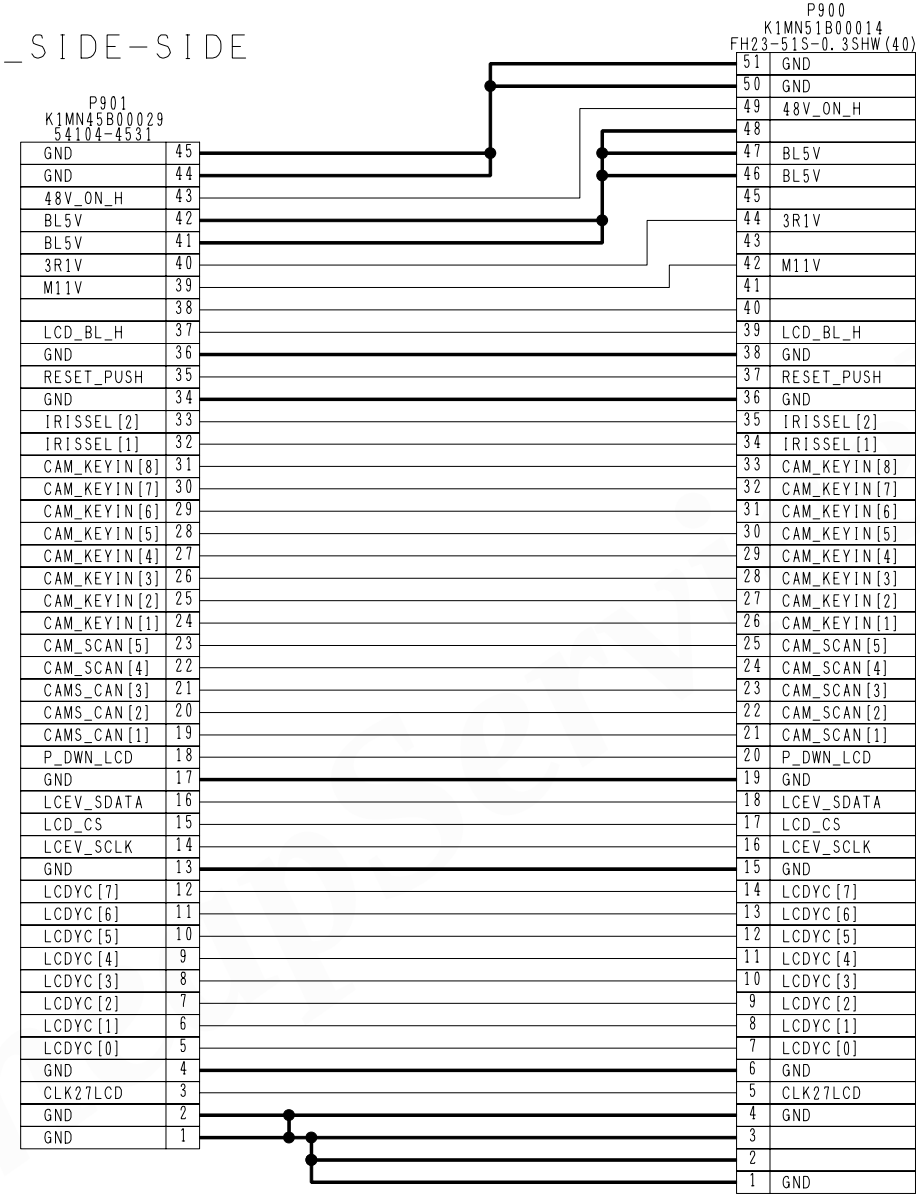


COMPONENT NAME	TOP OP SIDE JACK1 FPC	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VWJ1844		KR0A0411(1/1)
		SCM088

manuals

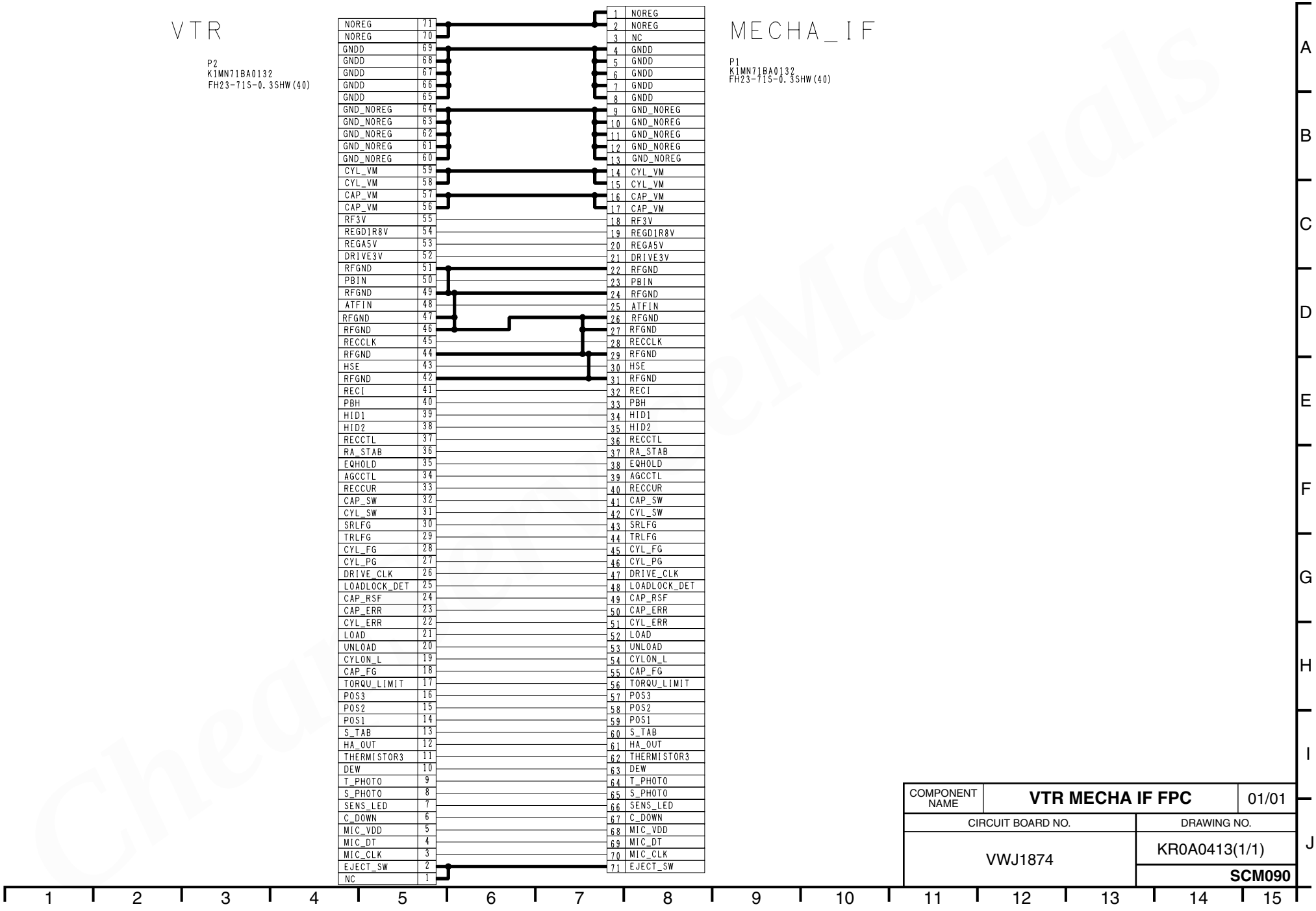
CAMERA-SIDE

R_SIDE-SIDE



COMPONENT NAME	CAMERA R SIDE FPC	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VWJ1845		KR0A0412(1/1)
		SCM089

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VTR
P2
K1MN71BA0132
FH23-71S-0.3SHW(40)
NOREG 71
NOREG 70
GNDD 69
GNDD 68
GNDD 67
GNDD 66
GNDD 65
GND_NOREG 64
GND_NOREG 63
GND_NOREG 62
GND_NOREG 61
GND_NOREG 60
CYL_VM 59
CYL_VM 58
CAP_VM 57
CAP_VM 56
RF3V 55
REGD1R8V 54
REGA5V 53
DRIVE3V 52
RFGND 51
PBIN 50
RFGND 49
ATFIN 48
RFGND 47
RFGND 46
RECCLK 45
RFGND 44
HSE 43
RFGND 42
RECI 41
PBH 40
HID1 39
HID2 38
RECCTL 37
RA_STAB 36
EQHOLD 35
AGCCTL 34
RECCUR 33
CAP_SW 32
CYL_SW 31
SRLFG 30
TRLFG 29
CYL_FG 28
CYL_PG 27
DRIVE_CLK 26
LOADLOCK_DET 25
CAP_RSF 24
CAP_ERR 23
CYL_ERR 22
LOAD 21
UNLOAD 20
CYLON_L 19
CAP_FG 18
TORQU_LIMIT 17
POS3 16
POS2 15
POS1 14
S_TAB 13
HA_OUT 12
THERMISTOR3 11
DEW 10
T_PHOTO 9
S_PHOTO 8
SENS_LED 7
C_DOWN 6
MIC_VDD 5
MIC_DT 4
MIC_CLK 3
EJECT_SW 2
NC 1
MECHA_IF
P1
K1MN71BA0132
FH23-71S-0.3SHW(40)
1 NOREG
2 NOREG
3 NC
4 GNDD
5 GNDD
6 GNDD
7 GNDD
8 GNDD
9 GND_NOREG
10 GND_NOREG
11 GND_NOREG
12 GND_NOREG
13 GND_NOREG
14 CYL_VM
15 CYL_VM
16 CAP_VM
17 CAP_VM
18 RF3V
19 REGD1R8V
20 REGA5V
21 DRIVE3V
22 RFGND
23 PBIN
24 RFGND
25 ATFIN
26 RFGND
27 RFGND
28 RECCLK
29 RFGND
30 HSE
31 RFGND
32 RECI
33 PBH
34 HID1
35 HID2
36 RECCTL
37 RA_STAB
38 EQHOLD
39 AGCCTL
40 RECCUR
41 CAP_SW
42 CYL_SW
43 SRLFG
44 TRLFG
45 CYL_FG
46 CYL_PG
47 DRIVE_CLK
48 LOADLOCK_DET
49 CAP_RSF
50 CAP_ERR
51 CYL_ERR
52 LOAD
53 UNLOAD
54 CYLON_L
55 CAP_FG
56 TORQU_LIMIT
57 POS3
58 POS2
59 POS1
60 S_TAB
61 HA_OUT
62 THERMISTOR3
63 DEW
64 T_PHOTO
65 S_PHOTO
66 SENS_LED
67 C_DOWN
68 MIC_VDD
69 MIC_DT
70 MIC_CLK
71 EJECT_SW
COMPONENT NAME
VTR MECHA IF FPC
01/01
CIRCUIT BOARD NO.
VWJ1874
DRAWING NO.
KR0A0413(1/1)
SCM090

SECTION 7

CIRCUIT BOARD DIAGRAMS
プリント基板図

MODEL: AG-HVX200/P/AN/E/MC/HVX202EN

NOTE:
BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST SECTION.

CAUTION

THE ▭ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

⚠ 警告

⚠の部品は、安全上重要な部品です。
交換するときは、安全及び性能維持のため、必ず指定の部品をご使用ください。
部品は難燃性や耐電圧など、安全上の特性を持ったものとなっていますので、部品交換は、使用されているものと同じ特性の部品をご使用ください。

部品ご注文の際には必ず部品リストに記載の品番でご注文ください。

⚠ 警 告	
感電注意	AC100Vの加わっている活電部(充電部、活電部)に直接触れないでください。 ☞感電ややけどの可能性があります。

① ⚠ 警 告 ⚠ 印の部品は安全上重要な部品です。交換するときは、安全上および性能維持のため必ず指定の部品をご使用ください。
② ▭ 内は充電部です。AC 100Vが加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。
③ 部品交換時には、電源プラグをぬいてから行ってください。
④ 一次側（充電部）の電圧・波形は、一次側アースを基準に測定してください。
⑤ 部品品番は、部品価格表で確認の上交換ください。

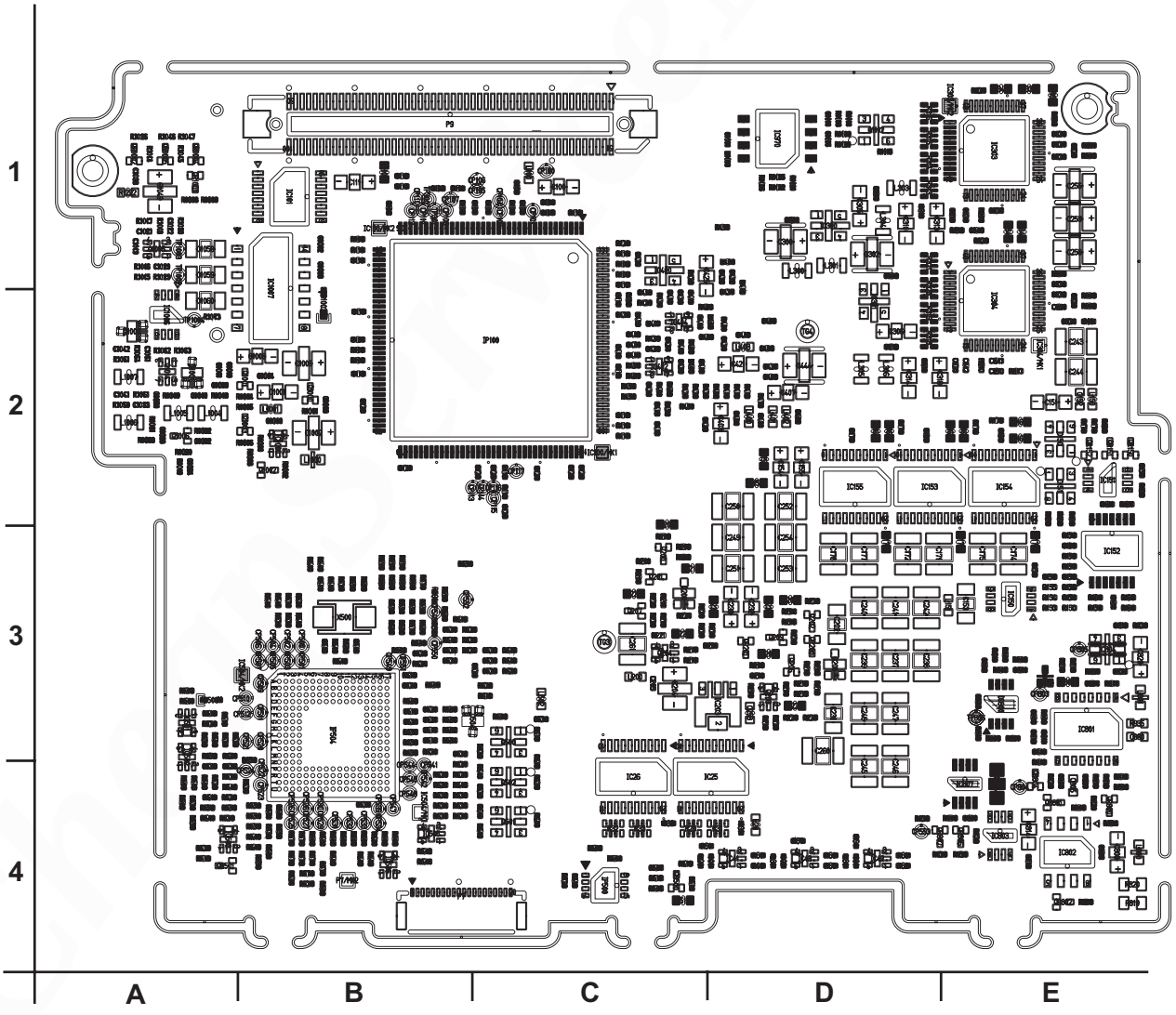
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CAMERA C.B.A. (FOIL SIDE)

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC25	D4	IC301	D2	IC804	E3	Q204	C3	Q1014	A2	QR807	E4
IC26	C4	IC303	E1	IC807	E4	Q205	D3	Q1102	D1	QR1001	A1
IC41	D4	IC304	E2	IC970	D1	Q206	D3	QR150	E2	QR1002	A1
IC42	D4	IC400	C1	IC1000	B2	Q207	C3	QR151	E2	QR1004	A1
IC43	D4	IC402	C2	IC1006	A2	Q208	C3	QR152	E2	QR1005	A1
IC100	C2	IC404	C2	IC1007	B2	Q209	D3	QR200	D3	TP300	B1
IC101	B1	IC501	A3	IP100	C2	Q500	C3	QR201	D3	TP301	B1
IC150	E3	IC502	A3	IP500	C4	Q501	C4	QR500	C4	TP806	E3
IC151	E2	IC503	A4	IP504	B3	Q502	C4	QR501	A4	TP1002	A1
IC152	E3	IC505	B4	P7	B4	Q1000	B2	QR800	E4	TP1003	A1
IC153	D2	IC506	B4	P9	B1	Q1001	B2	QR801	E4	TP1004	A2
IC154	E2	IC800	E3	Q200	C3	Q1002	B2	QR802	E4	X500	B3
IC155	D2	IC801	E3	Q201	C3	Q1003	B2	QR803	E3		
IC203	D3	IC802	E4	Q202	D3	Q1005	A1	QR804	E4		
IC300	D1	IC803	E3	Q203	D3	Q1006	A2	QR806	E4		

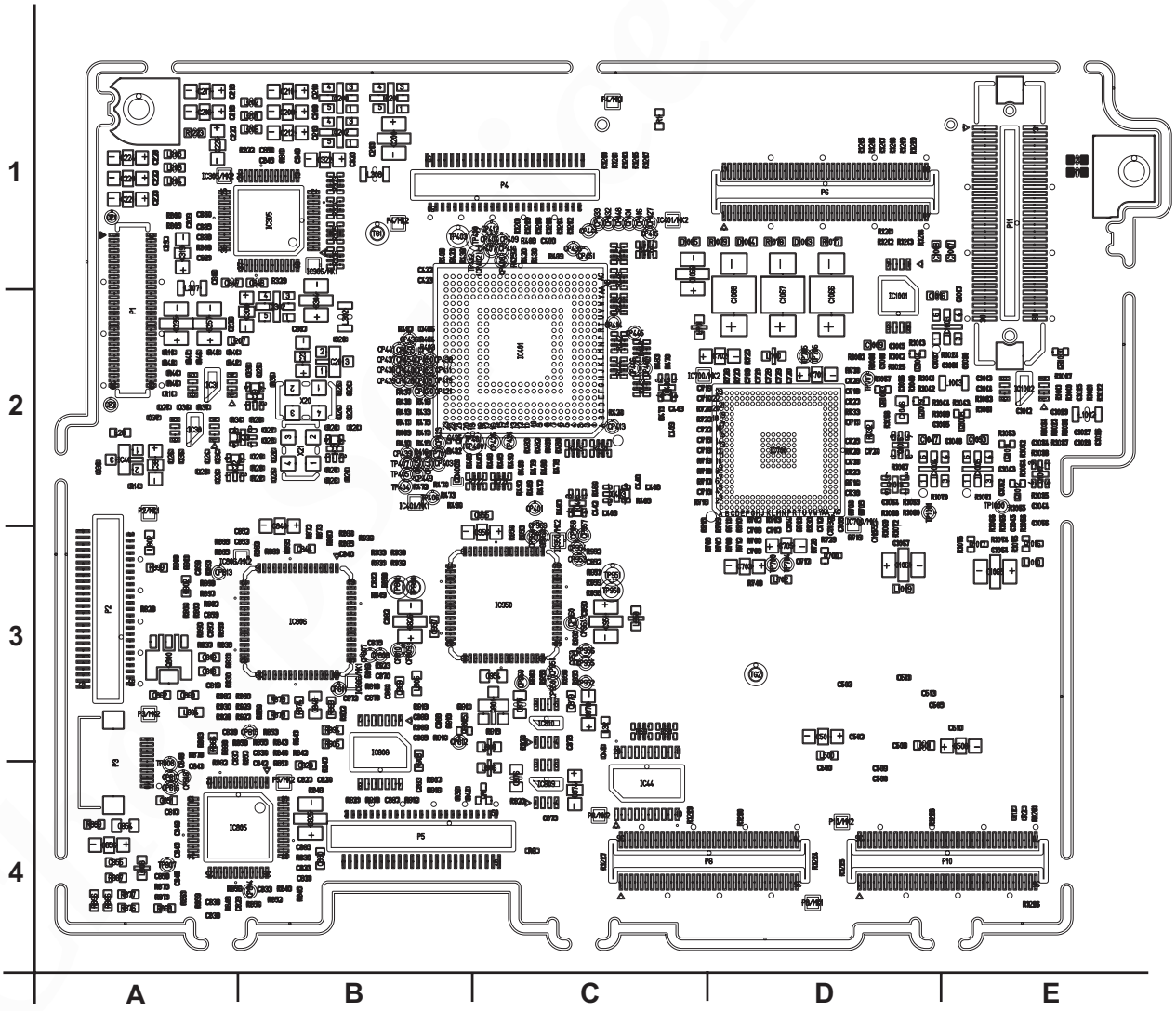


CBA-1

CAMERA C.B.A. (COMPONENT SIDE)

COMPONENT SIDE

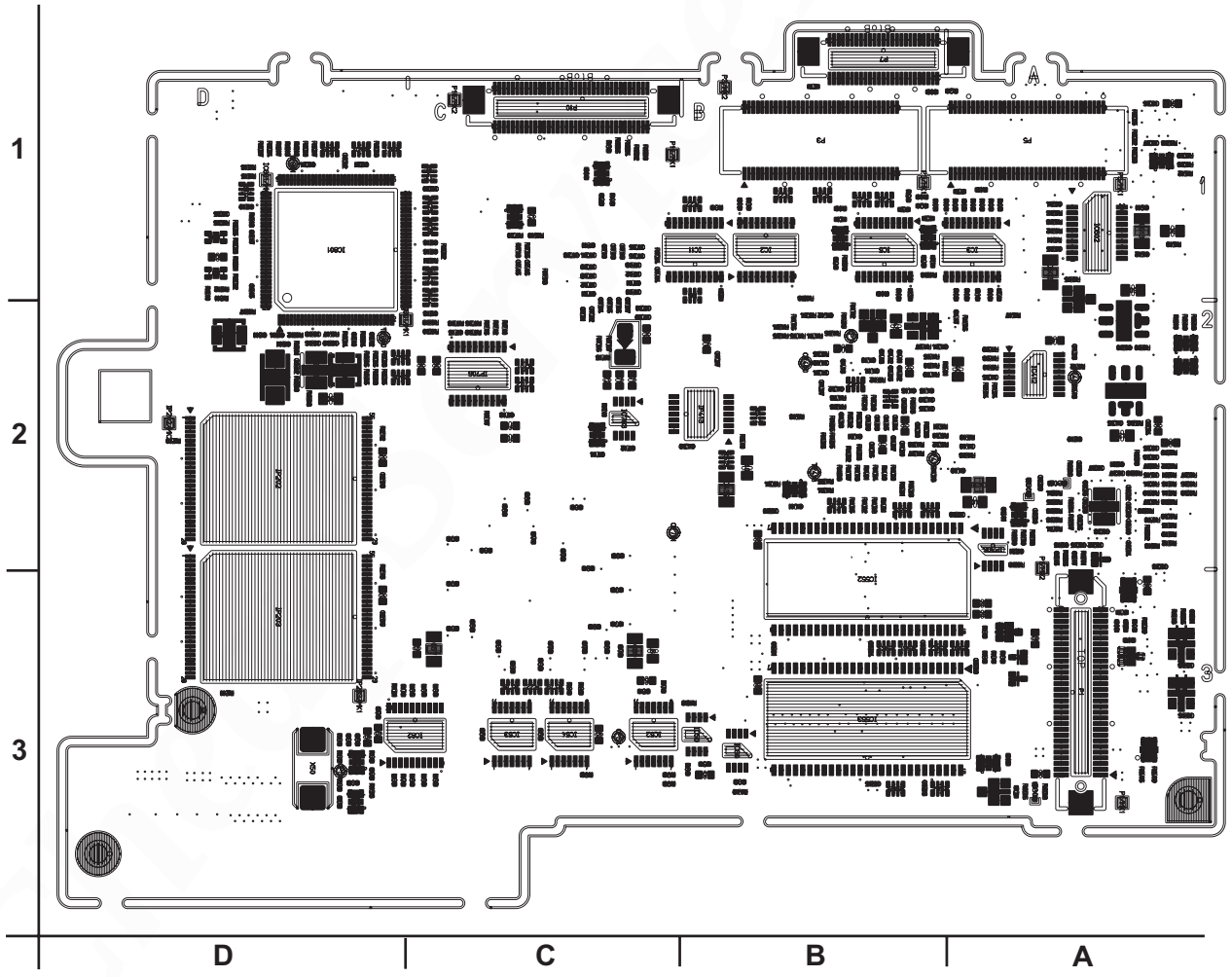
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC20	B2	IC401	C2	IC1004	D2	Q1004	D2	TP400	C1	TP800	B3
IC21	B2	IC403	C2	IC1005	E2	Q1007	E2	TP401	B2	TP801	B3
IC22	B2	IC405	C2	P1	A2	Q1008	E2	TP402	C1	TP807	A4
IC23	B2	IC406	C2	P2	A3	Q1009	D2	TP403	B1	TP808	A4
IC29	B2	IC700	D2	P3	A4	Q1011	E2	TP404	B2	TP950	C3
IC30	A2	IC805	B4	P4	C1	Q1012	E2	TP405	B2	TP951	C3
IC31	A2	IC806	B3	P5	B4	Q1013	D2	TP406	B2	TP1000	E2
IC40	A2	IC808	B3	P6	D1	Q1015	D2	TP407	B2	TP1001	D2
IC44	C4	IC809	C4	P8	D4	Q1016	E3	TP700	D3	X20	B2
IC200	B1	IC810	C3	P10	E4	Q1017	E3	TP701	B2	X21	B2
IC201	B1	IC950	C3	P11	E1	QR1	C4	TP704	D3		
IC202	B1	IC1001	D2	Q700	D3	QR805	B3	TP705	D2		
IC302	B2	IC1002	E2	Q800	A3	QR1000	E2	TP706	D2		
IC305	B1	IC1003	E2	Q801	C3	QR1003	D2	TP707	D2		



CODEC C.B.A. (FOIL SIDE)

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2	B1	IC52	C3	IC307	A2	IC703	C2	P3	B1	QR302	A2
IC3	A1	IC53	C3	IC409	B2	IC705	C2	P5	A1	TP405	A2
IC5	B1	IC54	C3	IC411	A2	IC710	C1	P7	B1	TP415	B2
IC6	B1	IC55	D3	IC412	A2	IC801	D1	P10	C1	TP418	B2
IC7	B1	IC62	C3	IC414	B2	IP202	D2	Q2	A3	TP800	D2
IC9	A3	IC64	B3	IC552	B3	IP203	D3	Q3	A3	TP801	D1
IC11	B1	IC300	A3	IC553	B3	IP306	A2	Q302	A2	X50	D3
IC12	C1	IC302	A3	IC600	A2	IP413	B2	Q303	A2	X800	D2
IC50	B3	IC303	A3	IC602	A1	IP706	C2	QR1	A3		
IC51	D3	IC304	A3	IC605	A1	P1	A3	QR2	A3		

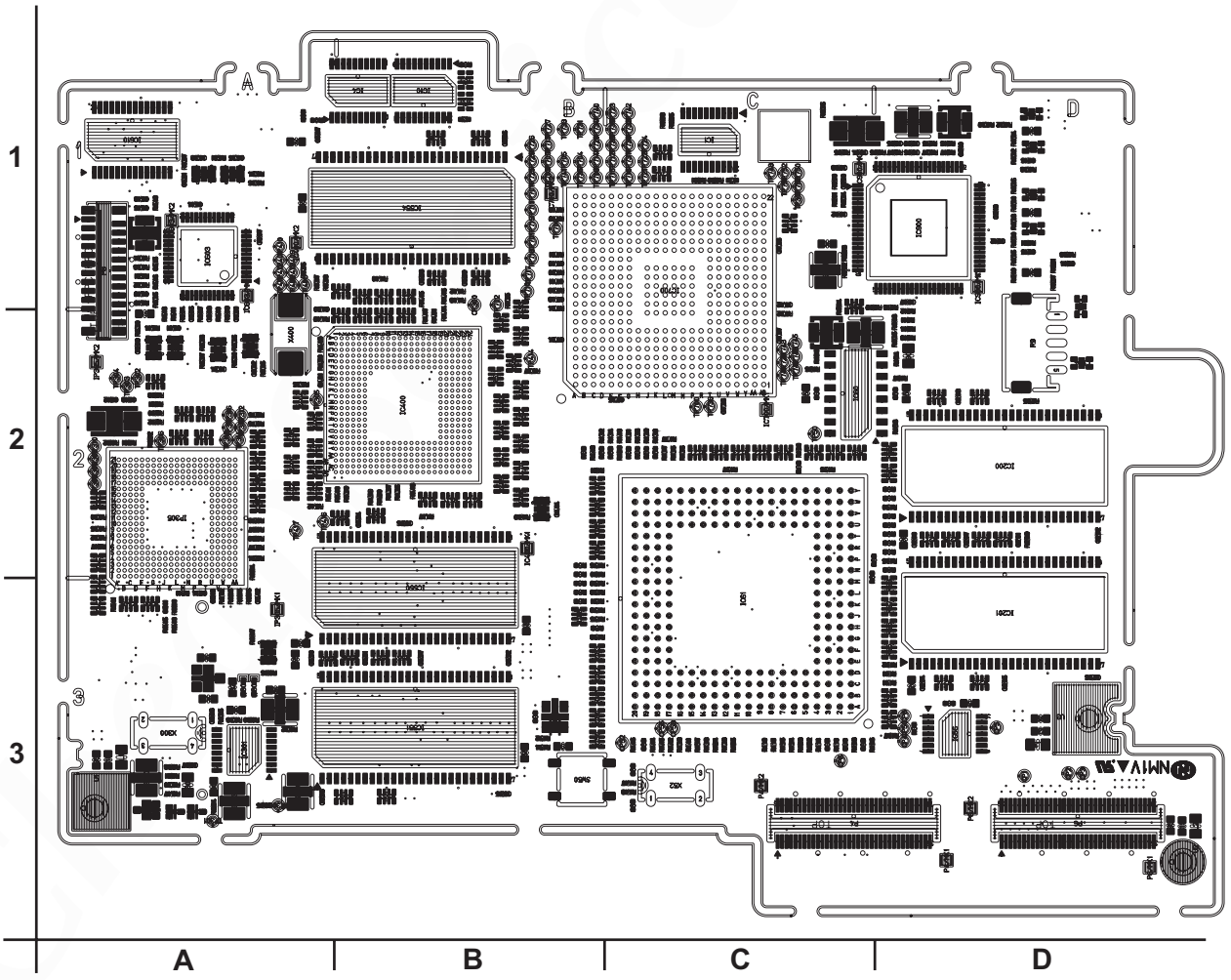


CBA-3

CODEC C.B.A. (COMPONENT SIDE)

COMPONENT SIDE

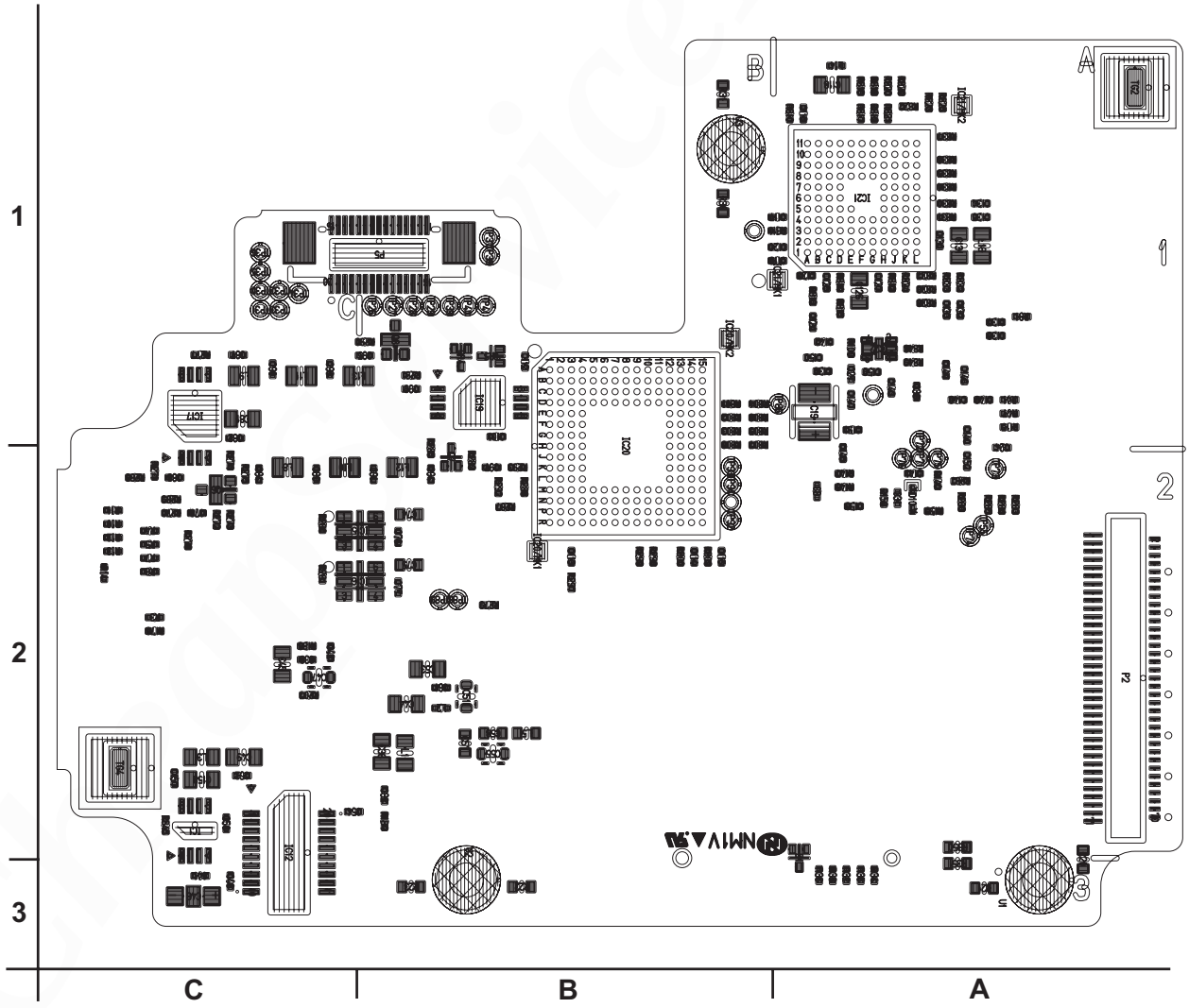
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IC1	C1	IC609	A1	TP305	A2	TP414	B2	TP718	B1	TP739	C1
IC4	B1	IC610	A1	TP306	A2	TP416	A2	TP719	B1	TP740	B1
IC10	B1	IC700	C1	TP307	A2	TP417	A2	TP720	B1	TP741	B1
IC56	D3	IC900	D3	TP308	A2	TP700	C2	TP721	C1	TP742	C1
IC60	C2	IP305	A2	TP309	A2	TP701	B1	TP722	C1	TP743	C2
IC61	C3	P4	C3	TP310	A2	TP702	B1	TP723	C1	TP744	C2
IC66	B3	P6	D3	TP311	A2	TP703	B1	TP724	C1	TP745	C2
IC200	D2	P8	A1	TP312	A2	TP704	B1	TP725	B1	TP746	C2
IC201	D3	P9	D3	TP313	A2	TP705	B1	TP726	B1	TP747	C2
IC301	A3	Q300	A3	TP314	A2	TP706	B1	TP727	B1	TP748	C1
IC400	B2	Q301	A3	TP315	A2	TP707	B1	TP728	C2	TP750	C1
IC401	B2	Q305	A3	TP316	A2	TP708	B1	TP729	B1	TP751	C1
IC550	B3	QR300	A3	TP317	C1	TP709	B1	TP730	C1	TP752	C1
IC551	B3	QR301	A3	TP406	A1	TP710	B1	TP731	B1	TP753	C1
IC554	B1	SW50	B3	TP407	A1	TP711	B1	TP732	C1	X300	A3
IC601	A2	TP50	C2	TP408	A1	TP712	C1	TP733	B1	X301	A2
IC603	A1	TP300	A3	TP409	A1	TP713	B1	TP734	B1	X400	A2
IC604	A2	TP301	A3	TP410	A1	TP714	B1	TP735	B1	X52	C3
IC606	A2	TP302	A2	TP411	A1	TP715	C1	TP736	C2	X900	C1
IC607	A1	TP303	A2	TP412	A1	TP716	C1	TP737	C1		
IC608	A2	TP304	A2	TP413	A1	TP717	B1	TP738	C1		



VTR C.B.A. (FOIL SIDE)

FOIL SIDE

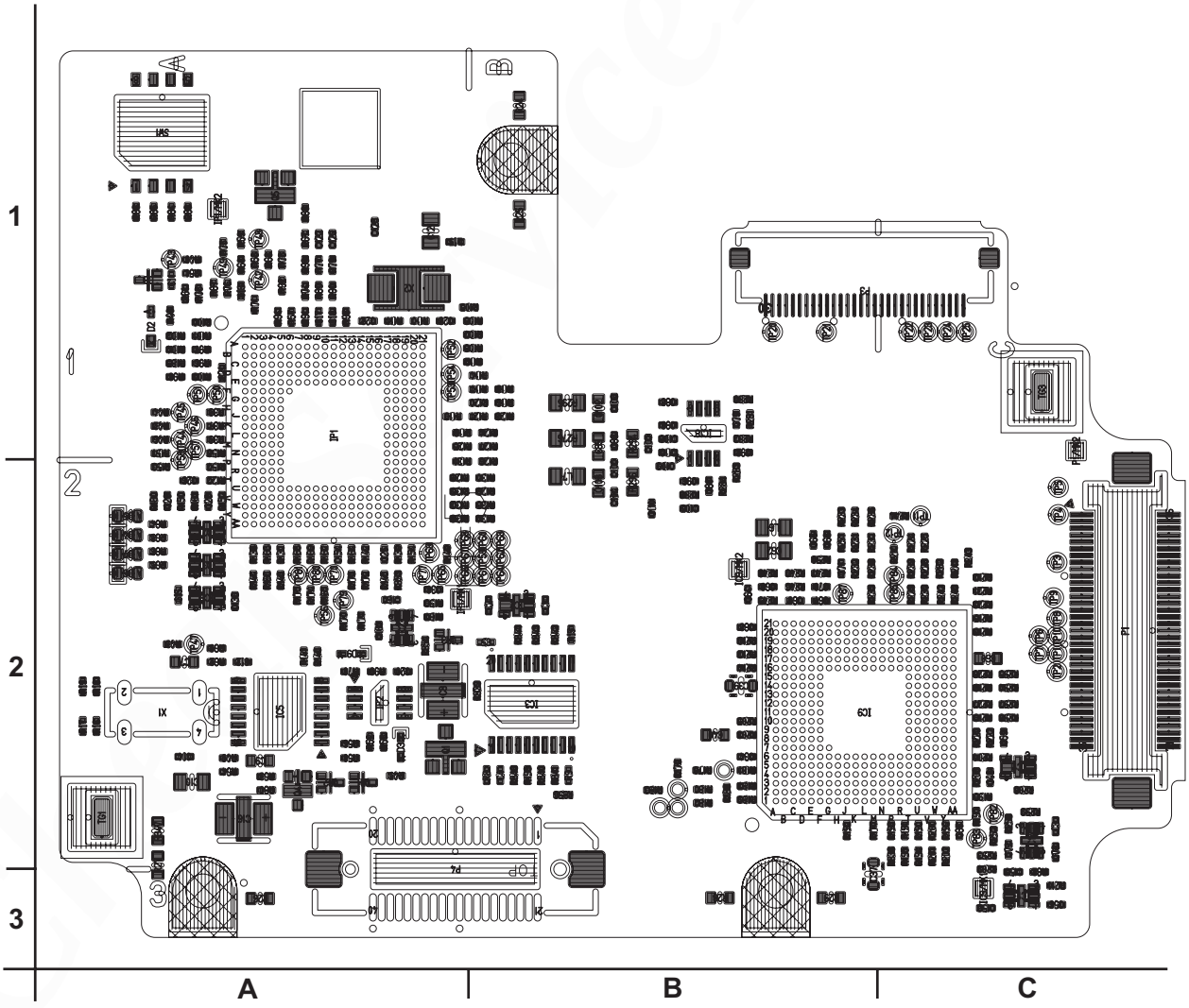
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IC1	C2	IC22	A1	TP26	B1	TP34	C1	TP55	A2	TP88	B2
IC12	C2	P2	A2	TP27	B1	TP35	C1	TP71	A2	TP89	B2
IC15	B2	P5	B1	TP28	B1	TP36	C1	TP72	A1	TP92	B1
IC16	B2	Q6	C2	TP29	B1	TP37	B1	TP73	A2	TP93	B1
IC17	C1	Q7	B2	TP30	C1	TP38	B1	TP74	A2	TP94	B1
IC19	B1	Q8	B1	TP31	C1	TP39	B1	TP75	A2		
IC20	B1	QR4	B1	TP32	C1	TP40	B1	TP76	A2		
IC21	A1	QR5	B1	TP33	C1	TP41	B1	TP86	A1		



VTR C.B.A. (COMPONENT SIDE)

COMPONENT SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2	B2	P4	A3	TP5	C2	TP42	A1	TP57	A1	TP77	A2
IC3	B2	Q1	A2	TP6	C2	TP43	A1	TP58	A1	TP79	A2
IC5	A2	Q2	A2	TP7	C2	TP44	A1	TP59	B2	TP80	A2
IC6	A2	Q3	A2	TP8	C2	TP45	A1	TP60	B2	TP81	A2
IC9	B2	Q4	A2	TP9	C2	TP46	A1	TP61	B2	TP82	C2
IC11	C2	Q5	A1	TP10	C2	TP47	A2	TP62	B2	TP83	C2
IC13	C3	QR1	A2	TP11	C2	TP48	A1	TP63	B2	TP84	C2
IC14	C2	QR2	A2	TP12	C2	TP49	A1	TP64	B2	TP85	C2
IC18	B1	QR3	A2	TP20	B1	TP50	A1	TP65	A2	TP87	B2
IC23	A2	SW1	A1	TP21	B1	TP51	A1	TP66	A2	X1	A2
IP1	A1	TP1	C2	TP22	C1	TP52	A1	TP67	A2	X2	A1
IP2	A2	TP2	C2	TP23	C1	TP53	A1	TP68	A2		
P1	C2	TP3	C2	TP24	C1	TP54	A1	TP69	A2		
P3	B1	TP4	C2	TP25	C1	TP56	A2	TP70	A2		



POWER C.B.A. (FOIL SIDE)

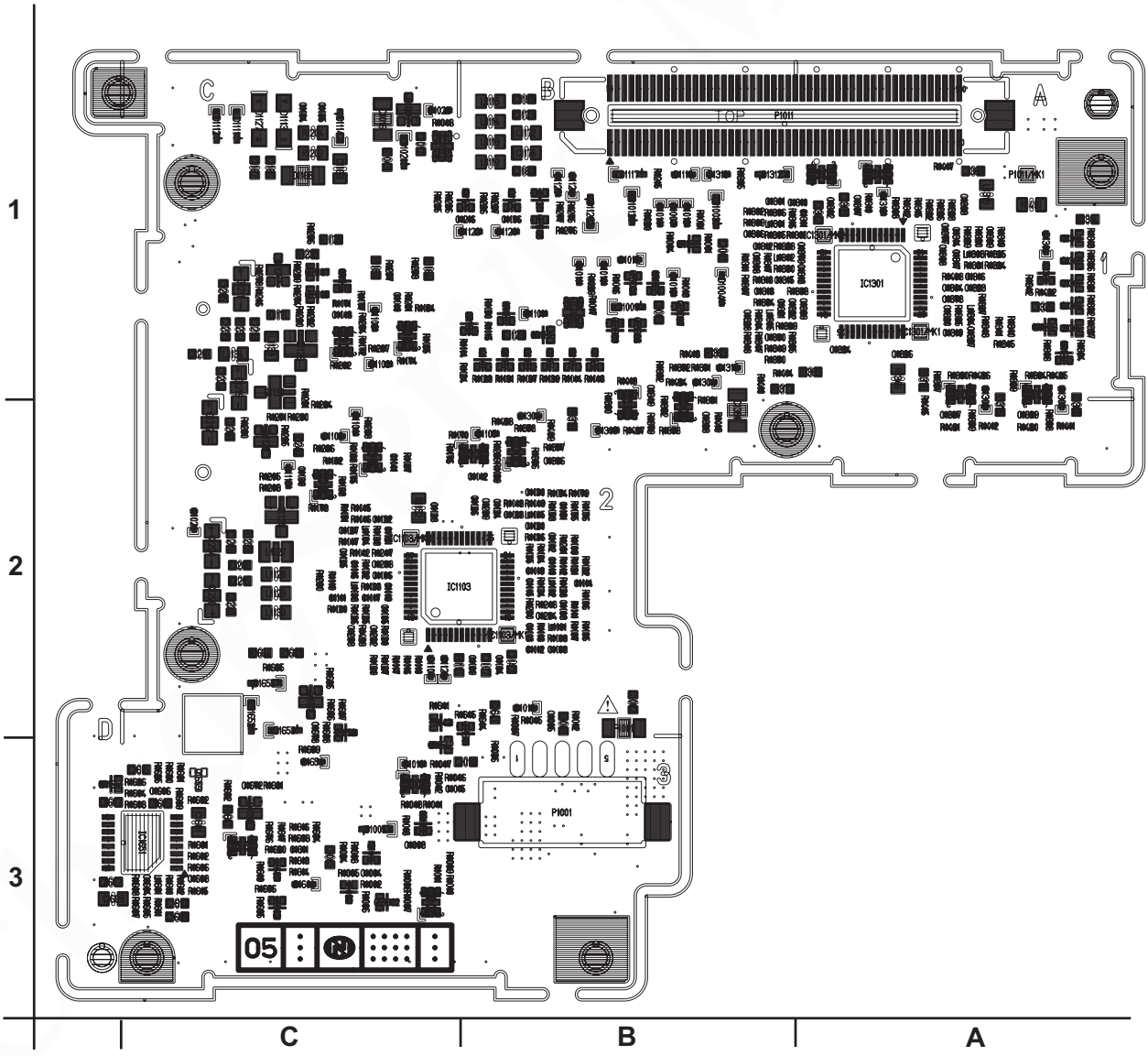
FOIL SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
F1001	B2	Q1011	C3	Q1124	C2	Q1305	A1	Q1658	C3	QR1103	B1
IC1001	B1	Q1101	B1	Q1125	B1	Q1306	B2	Q1659	C3	QR1104	C1
IC1002	C1	Q1102	B1	Q1126	C1	Q1307	A1	QR1001	B1	QR1105	C1
IC1103	B2	Q1103	B1	Q1127	C1	Q1308	B2	QR1002	C3	QR1107	C1
IC1301	A1	Q1104	B1	Q1128	C2	Q1309	A1	QR1003	C3	QR1108	B1
IC1651	C3	Q1105	B1	Q1129	B1	Q1311	B2	QR1004	B1	QR1301	A1
P1001	B3	Q1106	C2	Q1130	C1	Q1331	A1	QR1005	B1	QR1303	A1
P1011	B1	Q1107	C1	Q1131	B1	Q1601	C3	QR1007	B1	QR1641	B2
Q1001	C3	Q1108	C2	Q1301	A1	Q1602	C3	QR1008	B1	QR1642	C3
Q1002	C3	Q1109	B2	Q1302	A1	Q1651	C3	QR1009	B1	QR1651	C3
Q1008	C3	Q1110	C1	Q1303	A1	Q1656	C3	QR1101	B1		
Q1009	C1	Q1120	B1	Q1304	A1	Q1657	C3	QR1102	B1		

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

⚠ 警 告

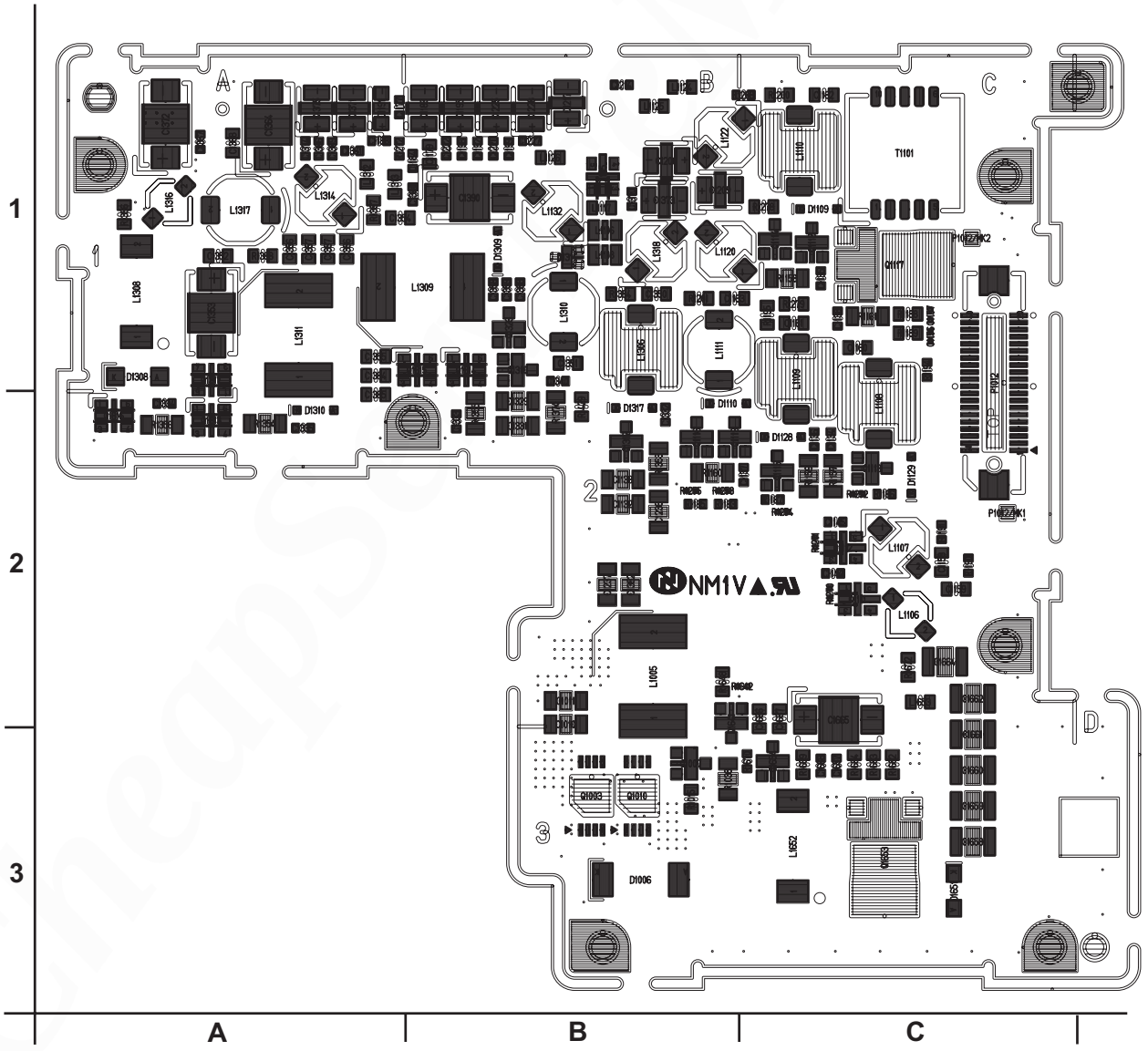
⚠ 印の部品は安全上重要な部品です。
交換するときは、安全上および性能維持のため
必ず指定の部品をご使用ください。



POWER C.B.A. (COMPONENT SIDE)

COMPONENT SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC1105	B1	Q1111	C2	Q1116	B2	Q1312	B2	Q1317	A1	T1101	C1
P1012	C1	Q1112	C2	Q1117	C1	Q1313	A2	Q1323	B1		
Q1003	B3	Q1113	C2	Q1118	C1	Q1314	B1	Q1641	B2		
Q1007	B3	Q1114	C1	Q1119	B2	Q1315	B1	Q1653	C3		
Q1010	B3	Q1115	C2	Q1310	B1	Q1316	A2	Q1654	C3		



SECTION 8

EXPLODED VIEWS & REPLACEMENT PARTS LIST

MODEL: AG-HVX200P,E,MC,AN,202EN

Note:

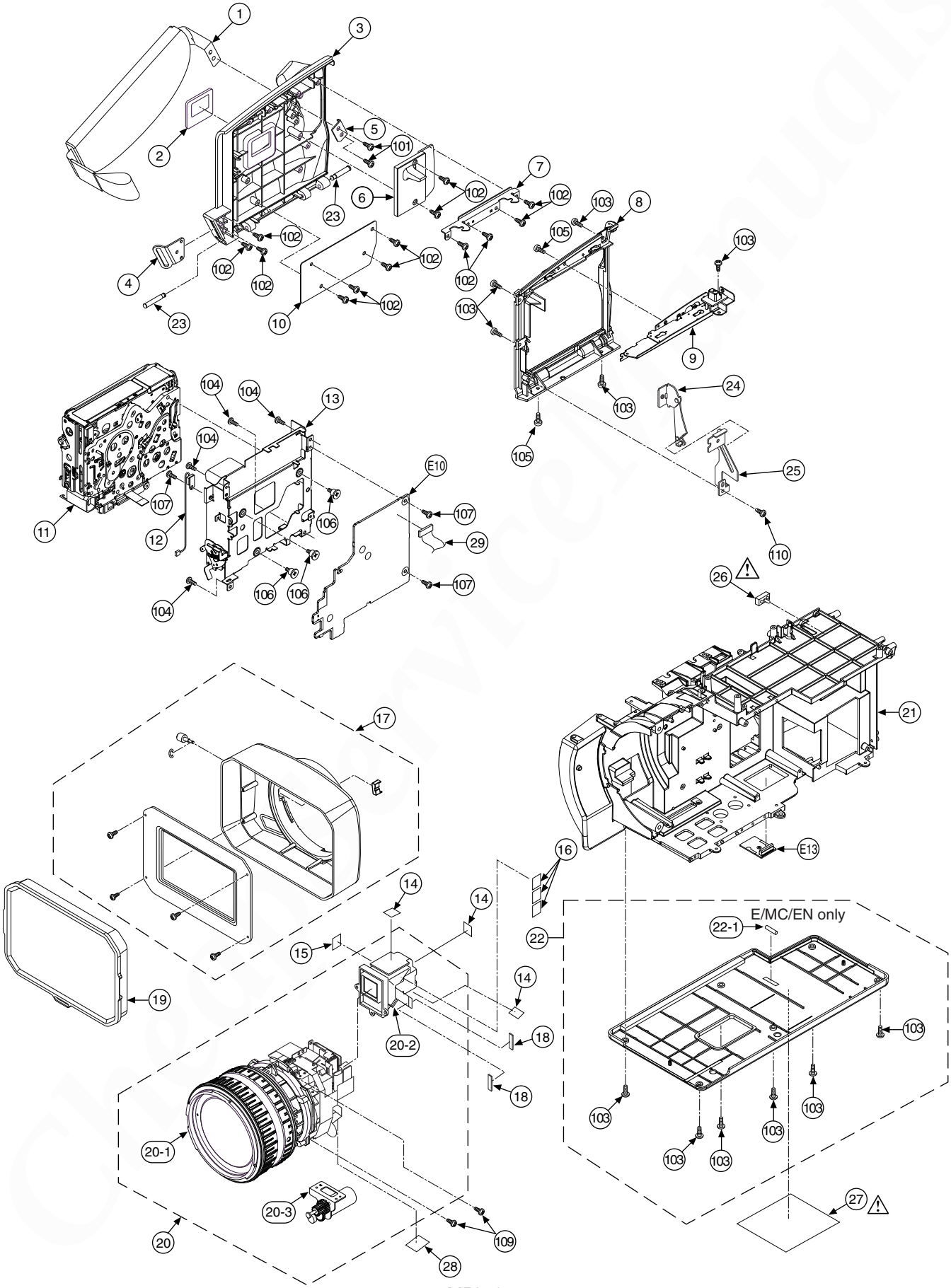
1. *Be sure to make your orders of replacement parts according to this list.
2. Unless otherwise specified, all resistors are in OHMS, K=1,000 OHMS, all capacitors are in MICROFARADS (μF), P=μμF.
3. The P.C. Board unit marked with "■" shown below the main assembled parts.
4. The parts marked with Ⓔ on the exploded view show the electric parts.
5. IMPORTANT SAFETY NOTICE
   Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
6. The marking (RTL) indicates the retention time is limited for this item.
   After the discontinuation of this assembly in production, it will no longer be available.
7. "M" in Remark column indicates needed in the periodical maintenance.

CONTENTS

FRAME & CASING PARTS ASSEMBLY (1) MPL-1
FRAME & CASING PARTS ASSEMBLY (2) MPL-3
HANDLE EVF PARTS ASSEMBLY MPL-5
LCD PARTS ASSEMBLY.....MPL-7
PACKING PARTS MPL-9
ELECTRICAL REPLACEMENT PARTS LIST EPL-1

FRAME & CASING PARTS ASSEMBLY (1)

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.



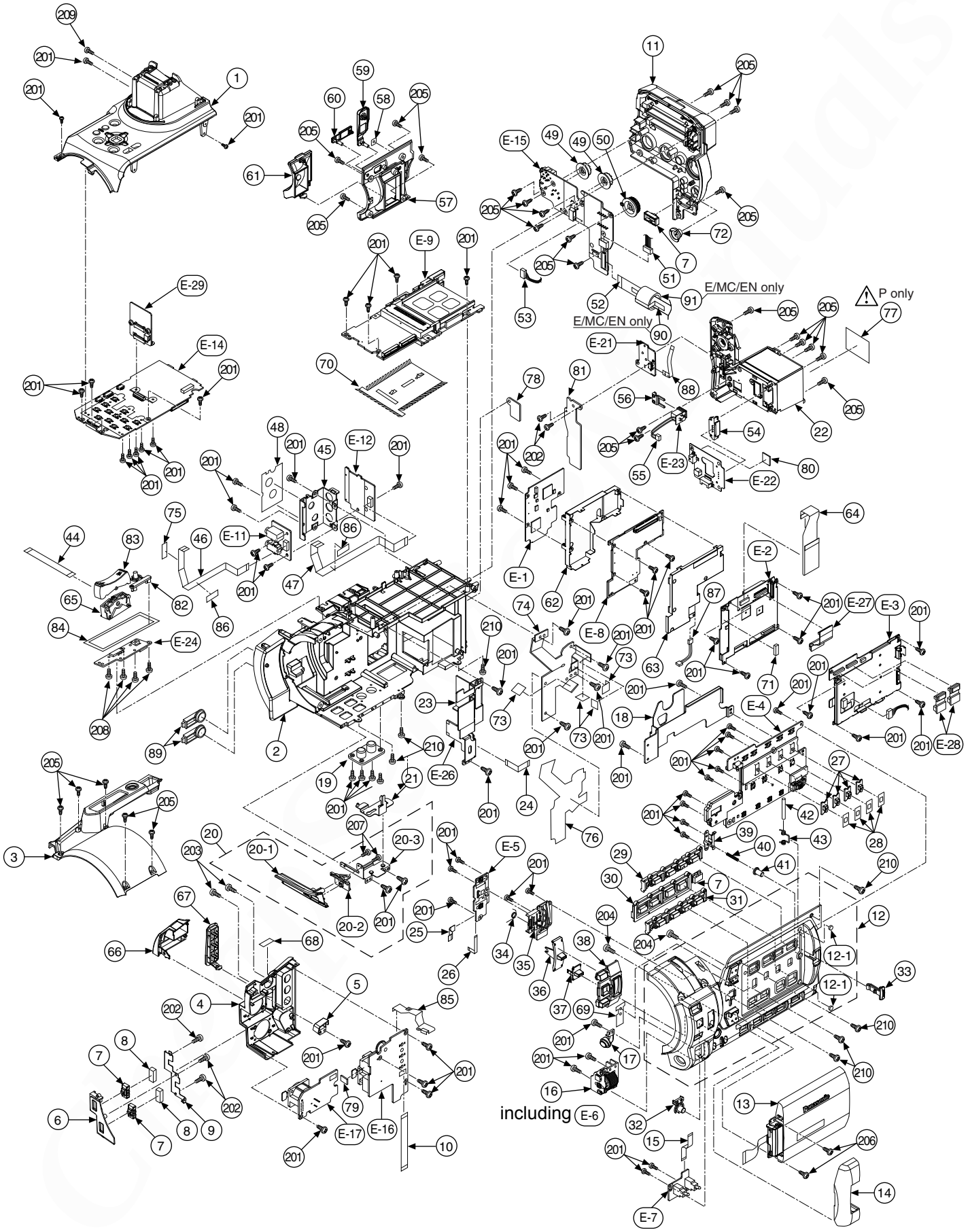
FRAME & CASING PARTS ASSEMBLY(1)

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VFB0215	GLIP BELT	1	
2	VGH4860	CASSETTE COVER WINDOW	1	
3	VGP6148	GLIP COVER	1	
4	VMP7325	GLIP BELT ANGLE (FRONT)	1	
5	VMP8331	BELT FIX ANGLE	1	
6	VGQ8611	GARAGE COVER OSAE	1	
7	VMP8473	CASSETTE LOCK ANGLE	1	
8	VGP6149	GRIP FRAME	1	
9	VXA8179	LOCK U	1	
10	VGF1043	GRIP SHEET	1	
11	VXY1903Z1	MECHA U	1	
12	L2BB00000003	DEW SENSOR	1	
13	VXK1835	MECHA FRAME U	1	
14	VSC5831	CERAMIC SHEET CDS	3	
15	VSC5832	CERAMIC SHEET PRISM	1	
16	VSC5830	HEAT RADIATION SHEET	3	
17	VGQ8819/S	LENS HOOD	1	
18	J0ZZZ0000053	FILTER	2	
19	VGQ8820	HOOD CAP	1	
20	VXW0770/S	CAMERA LENS U	1	
20-1	VXW0769	LENS U	1	
20-2	VXQ1401/S	PRISM U	1	
20-3	L6DABBKD0001	ZOOM MOTOR U	1	
21	VKM6880	MAIN FRAME	1	
22	VYK1U98	BOTTOM COVER U	1	FOR AG-HVX200P/AN
22	VYK1W32	BOTTOM COVER U	1	FOR AG-HVX200E/MC/202EN
22-1	VMT1567	SOFT HIGH SHIELD GASKET	1	FOR AG-HVX200E/MC/202EN
23	VMS7653	CASSETTE COVER SHAFT	2	
24	VXL3325	LINK ARM U	1	
25	VMA0U09	LINK GUIDE	1	
⚠ 26	VMT1549	GASKET	1	
⚠ 27	VQL1J48	CAUTION LABEL	1	FOR AG-HVX200P
⚠ 27	VQL1E83	CAUTION LABEL	1	FOR AG-HVX200E/MC/202EN
⚠ 27	VQL1K66	CAUTION LABEL	1	FOR AG-HVX200AN
28	VMT1762	LENS FPC COVER SHEET	1	
29	VWJ1874	VTR MECHA FPC	1	
101	XTB26+6GFJK	SCREW	2	
102	XQN2+BJ5FJK	SCREW	13	
103	XQN2+B4FJK	SCREW	11	
104	XQN2+B4FN	SCREW	4	
105	XQN2+B4FJK	SCREW	2	
106	VHD1133	SCREW	3	
107	XQN2+B4FN	SCREW	3	
109	XYN3+F6FJ	SCREW	2	
110	XQN2+BJ5FJK	SCREW	1	
E10	VEP03G91A	MECHA IF C.B.A.	1	
E13	VEP001N3A	BOTTOM CON C.B.A.	1	

FRAME & CASING PARTS ASSEMBLY (2)

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.



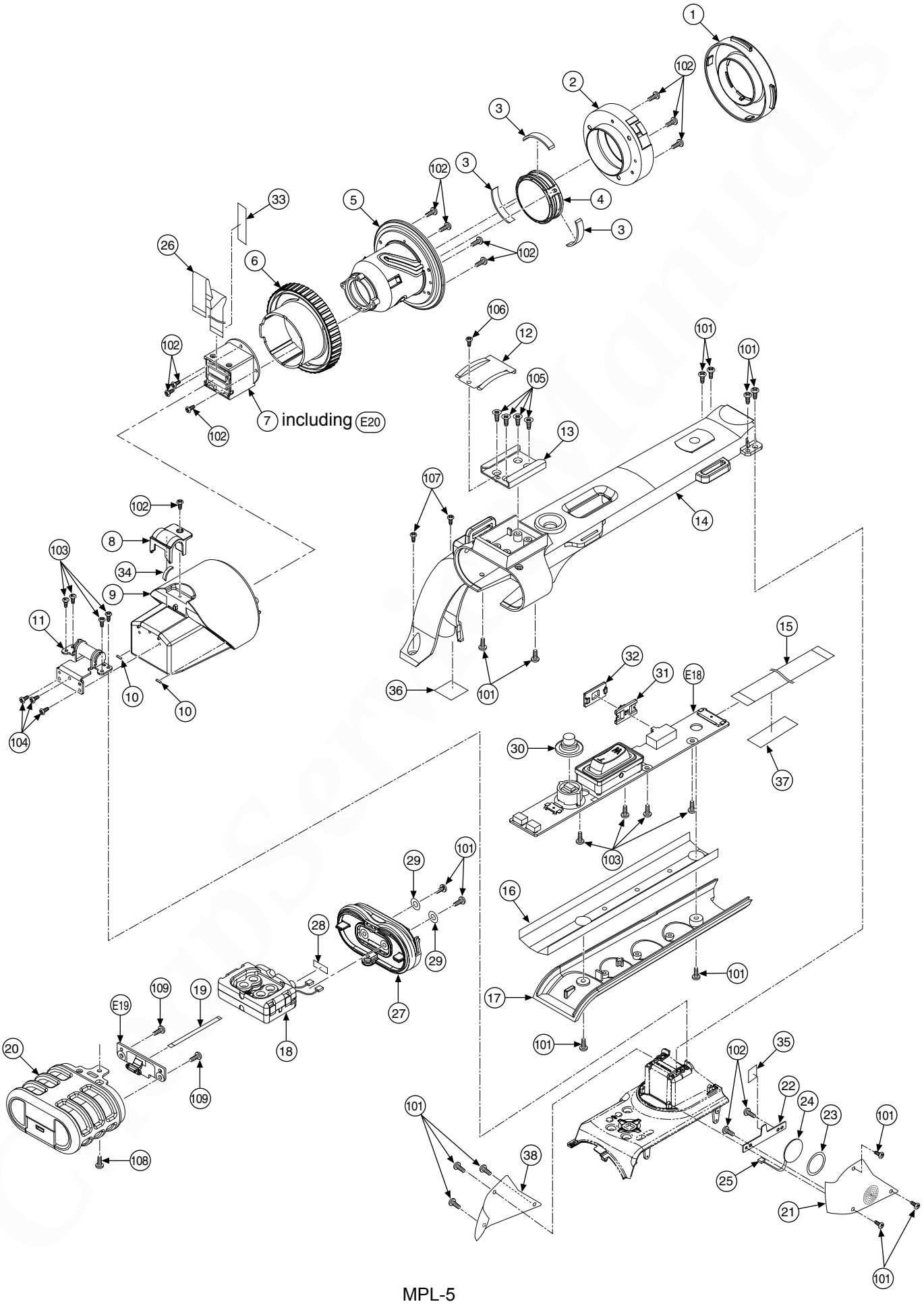
FRAME & CASING PARTS ASSEMBLY(2)

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYK1U58	TOP PANEL U	1	
2	VKM6880	MAIN FRAME	1	
3	VYK1U94	ZOOM SW CASE U	1	
4	VGM2152	JACK FRAME	1	
5	VKW3303	AWB SENSOR WINDOW	1	
6	VGQ8838	AUDIO SW COVER	1	
7	VGU0A01	MODE SW KNOB	4	
8	VMT1761	FRONT MIC SW SHEET	2	
9	VMP8589	AUDIO SW PLATE	1	
10	VWJ12H2040L0	12PIN40MM FFC	1	
11	VYK1Y37	BACK PANEL 1U	1	
12	VYK1U66	SIDE CASE R 1U	1	
12-1	VMG1286	CUSHION RUBBER	2	
13	VYK1U47	LCD U	1	
14	VGQ8773	LCD HINGE COVER	1	
15	VWJ06H2033L0	6PIN33MM FFC	1	
16	VEK0J73	IRIS DIAL U	1	
17	VGU9929	AWB BUTTON	1	
18	VSC5806	SIDE R HEAT SINK	1	
19	VMP8615	TRIPOD FRAME	1	
20	VYQ3733	CLUTCH U	1	
20-1	VGU9936	CLUTCH KNOB	1	
20-2	VGP6167	CLUTCH PANEL	1	
20-3	VMP8557	CLUTCH FRAME	1	
21	VMP8558	CLUTCH ARM ANGLE	1	
22	VYK1Y38	BATTERY CASE 1U	1	
23	VSC5801	CCD HEAT SINK	1	
24	VWJ10H2030L0	10PIN30MM FFC	1	
25	VWJ12H2050L0	12PIN50MM FFC	1	
26	VWJ06H2045L0	6PIN45MM FFC	1	
27	VGU9894	SLIDE KNOB	4	
28	VGH4857	SLIDE KNOB SHEET	4	
29	VGU9931	LCD BUTTON B	1	
30	VGU9935	COUNTER BUTTON	1	
31	VGU9930	LCD BUTTON A	1	
32	VGU9937	EVF DTL BUTTON	1	
33	VGU9197	MONITOR LOCK KNOB	1	
34	VMB4017	FOCUS SPRING	1	
35	VGQ8772	CAM OP BACKUP	1	
36	VGU9928	ND KNOB	1	
37	VGU9926	FOCUS KNOB	1	
38	VGU9927	CAM OP BUTTON	1	
39	VMP7331	OPENER HOLDER ANGLE	1	
40	VMB3996	POP UP SPRING	1	
41	VGQ6901	MONITOR KNOB	1	
42	VMS7187	LCD LOCK SHAFT	1	
43	VMB3659	MONITOR OPENER SPRING	1	
44	VWJ06H2033L0	6PIN33MM FFC	1	
45	VMP8552	JACK ANGLE	1	
46	VWJ12H2120L0	12PIN120MM FFC	1	
47	VWJ16H2145L0	16PIN145MM FFC	1	
48	VGH4874	JACK PLATE	1	
49	VGU9721	AUDIO VR KNOB	2	
50	VYQ3547	MODE DIAL U P.C.BOARD	1	
51	VEE1C06	AUDIO CABLE	1	
52	VWJ24H2030L0	24PIN30MM FFC	1	
53	VEE1C12	1394 CABLE	1	
54	K4ZZ04000036	BATTERY TERMINAL	1	
55	VEE1C20	DC IN-BATTERY CABLE	1	
56	VMP7340	DCIN ANGLE	1	
57	VGP6163	SIDE COVER L	1	
58	VGH4881	LED NAME PLATE	1	
59	VJF1544	SD CARD CAP	1	
60	VJF1545	USB COVER	1	
61	VJF1541	JACK COVER	1	
62	VSC5805	SHIELD PLATE B	1	
63	VSC5804	SHIELD PLATE A	1	
64	VWJ1845	CAMERA TO SIDE CASE-R FPC	1	
65	VYQ3807	ZOOM SW 1 U	1	
66	VJF1542	SIDE JACK CAP A	1	
67	VJF1543	SIDE JACK CAP B	1	
68	VGH4876	JACK NAME PLATE 2	1	
69	VMZ3638	HINGE FPC HOLD SHEET	1	
70	VSC5850	P2 CARD SHELD PLATE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
71	VMG1727	LENS CUSHION	1	
72	VGU9219	CAMERA/VCR BUTTON	1	
73	VSC5833	CERAMIC SEAT HEAT RADIATION	4	
74	VSC5824	CDS HEAT SINK	1	
75	VMZ3465	CD CON CUSHION	1	
76	VSC5845	CDS RADIATION SHEET	1	
⚠ 77	VQL1J79	CAUTION LABEL	1	FOR AG-HVX200P
78	VYF3081	EVR COVER U	1	
79	VMT1766	EVF FPC CUSHION	1	
80	VMZ3631	C.B.A. BARRIER	1	
81	VGF1050	DUSTPROOF SHEET	1	
82	VGU9925	REC CHECK BUTTON	1	
83	VGU9215	ZOOM LEVER	1	
84	VMZ3406	ZOOM PCB BLIND SHEET	1	
85	VWJ1844	SIDE JACK FPC	1	
86	VMT1749	FFC FIX SHEET	2	
87	VEE1C05	BATTERY-POWER CABLE	1	
88	VWJ06H2060L0	6PIN FFC	1	
89	VJF1468	XLR CAP	2	
90	VMT1774	CORE TAPE	1	FOR AG-HVX200E/MC/202EN
91	J0KD00000103	CORE	1	FOR AG-HVX200E/MC/202EN
201	XQN2+B4FN	SCREW	74	
202	XQN2+BJ5FJK	SCREW	5	
203	XYN26+A6FJK	SCREW	2	
204	XQN2+BJ6FJ	SCREW	2	
205	XQN2+B4FJK	SCREW	27	
206	XYN2+C5FJ	SCREW	2	
207	XQN2+BJ4FJK	SCREW	2	
208	XQN16+BJ4FJK	SCREW	4	
209	XQN2+A5FJK	SCREW	1	
210	VHD1887	SCREW	7	
E1	VEP03G90C	VTR C.B.A.	1	FOR AG-HVX200P/AN
E1	VEP03G90D	VTR C.B.A.	1	FOR AG-HVX200E/MC/202EN
E2	VEP23655A	CAMERA C.B.A.	1	FOR AG-HVX200P/AN
E2	VEP23655B	CAMERA C.B.A.	1	FOR AG-HVX200E/MC/202EN
E3	VEP03G89A	CODEC C.B.A.	1	FOR AG-HVX200P/AN
E3	VEP03G89B	CODEC C.B.A.	1	FOR AG-HVX200E/MC/202EN
E4	VEP001M6A	R SIDE C.B.A.	1	
E5	VEP06G20A	CAM OP1 C.B.A.	1	
E6	VEP06G21A	CAM OP2 C.B.A.	1	
E7	VEP06G22A	CAM OP3 C.B.A.	1	
E8	VEP01978A	POW C.B.A.	1	
E9	VEP03G92B	P2 CARD C.B.A.	1	
E11	VEP04904A	SIDE JACK2 C.B.A.	1	
E12	VEP001P2A	SD CARD C.B.A.	1	
E14	VEP001M1A	TOP OP C.B.A.	1	
E15	VEP001M2B	BACK PANEL C.B.A.	1	
E16	VEP04902A	SIDE JACK1 C.B.A.	1	
E17	VEP04903A	EXT MIC 2 C.B.A.	1	
E21	VEP001M4A	POWER SW C.B.A.	1	
E22	VEP01979A	BATTERY C.B.A.	1	
E23	VEP01971A	DC IN P.C.BOARD	1	
E24	VEP001M5A	ZOOM SW C.B.A.	1	
E26	VEP22370A	GYRO C.B.A.	1	
E27	VEP03G96A	CAMERA TOP FPC C.B.A.	1	
E28	VEP03G94A	CODEC P2 FPC C.B.A.	2	
E29	VEP001N2A	TOP CON C.B.A.	1	

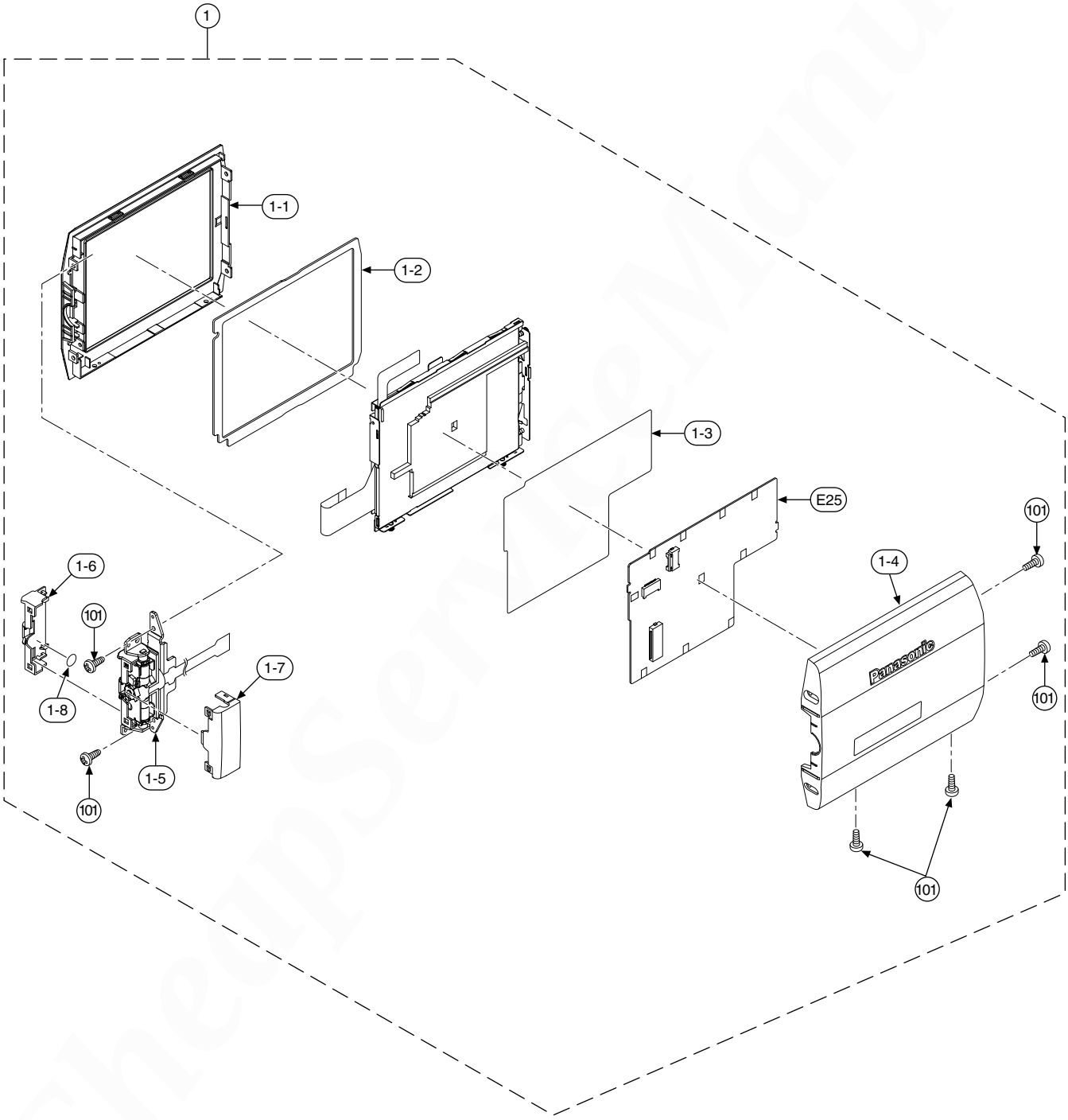
HANDLE EVF PARTS ASSEMBLY



HANDLE EVF PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYK1V99	EYE CAP U	1	
2	VGQ8840	EYE CAP BASE	1	
3	VMT1742	LENS SPACER SHEET	3	
4	VXW0567	EVF LENS ASS'Y	1	
5	VDK0176	HELICOID	1	
6	VGQ8779	DIOPTOR ADJ RING	1	
7	VYQ3545	EVF LCD HOLDER U	1	
8	VGQ8778	EVF HINGE COVER	1	
9	VGP6172	EVF CASE	1	
10	VMG1286	CUSHION RUBBER	2	
11	VKC0594	VF HINGE	1	
12	VMC1697	SPRING	1	
13	VJF1421	SHU	1	
14	VKH0426	HANDLE	1	
15	VWJ24H2060L0	24PIN60MM FFC	1	
16	VXA8302	HANDLE SHIELD	1	
17	VGQ8780	HANDLE GRIP	1	
18	VYK1R40	MIC U	1	
19	VWJ10H2065L0	10PIN65MM FFC	1	
20	VYK1W30	MIC CASE 1U	1	
21	VGP6171	VF CASE R	1	
22	VMP8559	SPEAKER SUPPORT ANGLE	1	
23	VKN0185	SPEAKER NET	1	
24	L0AA02A00057	SPEAKER	1	
25	VEE1B95	SPEAKER HARNESS	1	
26	VWJ1805	DVF FPC	1	
27	VMG1732	MIC DUMPER RUBBER	1	
28	VMT1767	MIC DUMPER SHEET	1	
29	XWG2FJ	WASHER	2	
30	VGU9988	REC BUTTON	1	
31	VGU9214	SLIDE KNOB	1	
32	VGH4857	SLIDE KNOB SHEET	1	
33	VMZ3361	SUPPORT SHEET	1	
34	VMT1766	EVF FPC CUSHION	1	
35	VMG1733	SP SHEET	1	
36	VMT1757	HANDLE GRIP SPACER SHEET	1	
37	VMZ3474	LCD BARRIER (C)	1	
38	VGP6170	VF CASE L	1	
101	XQN2+B4FJK	SCREW	16	
102	XQN2+BJ4FJK	SCREW	13	
103	XQN2+B4FN	SCREW	8	
104	XQN2+CJ6FJK	SCREW	3	
105	XSS2+4FJK	SCREW	4	
106	XSN2+4FC	SCREW	1	
107	XSB3+6FJK	SCREW	2	
108	XYN2+F5FJ	SCREW	1	
109	XQN2+BJ4FJ	SCREW	2	
E18	VEP04906A	HANDLE C.B.A.	1	
E19	VEP001M3A	REMOCON F C.B.A.	1	
E20	VEP29166A	EVF CONNECT C.B.A.	1	

LCD PARTS ASSEMBLY



Obsolete Manuals

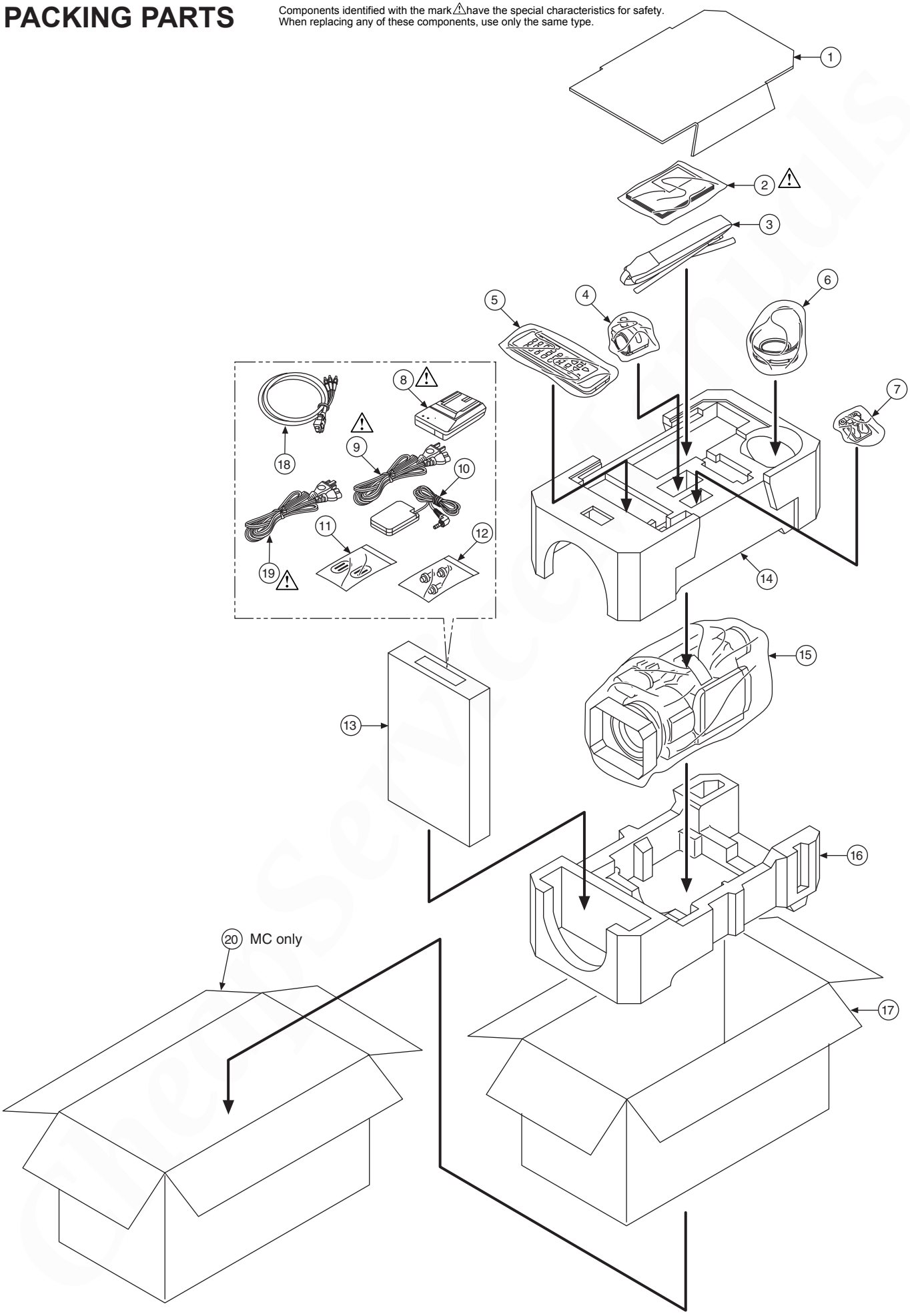
LCD PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYK1U47	LCD U	1	
1-1	VGP6152	LCD CASE BOTTOM	1	
1-2	VMT1717	WATER PROOF PAD	1	
1-3	VMZ3610	LCD PCB INSULATION SHEET	1	
1-4	VYK1U67	LCD CASE U	1	
1-5	VXD0465	HINGE	1	
1-6	VGQ8616	HINGE COVER (LOWER)	1	
1-7	VGQ8775	HINGE COVER TOP	1	
1-8	VMG1286	CUSHION RUBBER	1	
101	XQN16+B4FJK	SCREW	6	
E25	VEP08346A	LCD LEV	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

PACKING PARTS

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.



PACKING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VPN6400	PARTITION	1	
⚠ 2	VQT0S52	OPERATING INSTRUCTIONS	1	FOR AG-HVX200P
⚠ 2	VQT0S53	OPERATING INSTRUCTIONS	1	FOR AG-HVX200E
⚠ 2	VQT0S54	OPERATING INSTRUCTIONS	1	FOR AG-HVX200MC
⚠ 2	VQT0X70	OPERATING INSTRUCTIONS	1	FOR AG-HVX202EN
⚠ 2	VQT0X72	OPERATING INSTRUCTIONS	1	FOR AG-HVX200AN
3	VFC3891	SHOULDER BELT	1	
4	VYC0936	MIC HOLDER U	1	
5	VFA0463	WIRERESS REMOTE CONTROLLER	1	FOR AG-HVX200P
5	VFA0466	WIRERESS REMOTE CONTROLLER	1	FOR AG-HVX200E/MC/AN/202EN
6	VMG1458	EYE CAP	1	
7	VYC0890	MIC HOLDER ADAPTOR	1	
⚠ 8	DE-A20BA	AC ADAPTOR	1	FOR AG-HVX200P
⚠ 8	DE-A20CA	AC ADAPTOR	1	FOR AG-HVX200E/MC/202EN
⚠ 9	VYC0944	AC CORD U	1	FOR AG-HVX200P
⚠ 9	VYC0945	AC CORD U	1	(TYPE C)FOR AG-HVX200E/202E
⚠ 9	VYC0947	AC CORD U	1	FOR AG-HVX200MC
10	K2GJ2DZ00024	DC CORD	1	FOR AG-HVX200P/E/MC/202EN
11	VFC4182	FERRITECORE U	1	
12	K2RYYYYY0001	ADAPTOR PLUG	1	
13	VPK0825	ACCESSORY BOX	1	
14	VPN6398	CUSHION (TOP)	1	
15	VPF0884	POLYETHYLENE BAG	1	
16	VPN6399	CUSHION (BOTTOM)	1	
17	VPG1G03	PACKING CASE	1	FOR AG-HVX200P
17	VPG1G04	PACKING CASE	1	FOR AG-HVX200E
17	VPG1G06	PACKING CASE	1	FOR AG-HVX200MC
17	VPG1H68	PACKING CASE	1	FOR AG-HVX202EN
17	VPG1K33	PACKING CASE	1	FOR AG-HVX200AN
18	K1EY06YY0001	COMPONENT CABLE	1	
⚠ 19	VYC0946	AC CORD U	1	TYPE BF(UK)FOR AG-HVX200E
20	VPG1G05	PACKING CASE (OUT)	1	FOR AG-HVX200MC

ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP03G90C	VTR C.B.A.	1	(RTL)FOR AG-HVX200P/AN
■ E1	VEP03G90D	VTR C.B.A.	1	(RTL)FOR AG-HVX200E/MC/202E
■ E2	VEP23655A	CAMERA C.B.A.	1	(RTL)FOR AG-HVX200P/AN
■ E2	VEP23655B	CAMERA C.B.A.	1	(RTL)FOR AG-HVX200E/MC/202E
■ E3	VEP03G89A	CODEC C.B.A.	1	(RTL)FOR AG-HVX200P/AN
■ E3	VEP03G89B	CODEC C.B.A.	1	(RTL)FOR AG-HVX200E/MC/202E
■ E4	VEP001M6A	R SIDE C.B.A.	1	(RTL)
■ E5	VEP06G20A	CAM OP1 C.B.A.	1	(RTL)
■ E6	VEP06G21A	CAM OP2 C.B.A.	1	(RTL)
■ E7	VEP06G22A	CAM OP3 C.B.A.	1	(RTL)
■ E8	VEP01978A	POW C.B.A.	1	(RTL)
■ E9	VEP03G92B	P2 CARD C.B.A.	1	(RTL)
■ E10	VEP03G91A	MECHA IF C.B.A.	1	(RTL)
■ E11	VEP04904A	SIDE JACK C.B.A.	1	(RTL)
■ E12	VEP001P2A	SD CARD C.B.A.	1	(RTL)
■ E13	VEP001N3A	BOTTOM CON C.B.A.	1	(RTL)
■ E14	VEP001M1A	TOP OP C.B.A.	1	(RTL)
■ E15	VEP001M2B	BACK PANEL C.B.A.	1	(RTL)
■ E16	VEP04902A	SIDE JACK C.B.A.	1	(RTL)
■ E17	VEP04903A	EXT MIC2 C.B.A.	1	(RTL)
■ E18	VEP04906A	HANDLE C.B.A.	1	(RTL)
■ E19	VEP001M3A	REMOCON C.B.A.	1	(RTL)
■ E20	VEP29166A	EVF CONNECT C.B.A.	1	(RTL)
■ E21	VEP001M4A	POWER SW C.B.A.	1	(RTL)
■ E22	VEP01979A	BATTERY C.B.A.	1	(RTL)
■ E23	VEP01971A	DC IN C.B.A.	1	(RTL)
■ E24	VEP001M5A	ZOOM SW C.B.A.	1	(RTL)
■ E25	VEP08346A	LCD LEV C.B.A.	1	(RTL)
■ E26	VEP22370A	GYRO C.B.A.	1	(RTL)
■ E27	VEP03G96A	CAMERA TOP FPC C.B.A.	1	(RTL)
■ E28	VEP03G94A	CODEC P2 FPC C.B.A.	1	(RTL)
■ E29	VEP001N2A	TOP CON C.B.A.	1	(RTL)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP03G90C	VTR C.B.A.	1	(RTL)FOR AG-HVX200P/AN
■ E1	VEP03G90D	VTR C.B.A.	1	(RTL)FOR AG-HVX200E/MC/202E
C1	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C2,C3	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C5,C6	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C7	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C8	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C9	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C10	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C11-13	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	3	
C15	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C16	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C17,18	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C19	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C20	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C21	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C22,23	ECJ0EC1H100D	C.CAPACITOR CH 50V 10P	2	
C24	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C31	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C33-35	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C36	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C37	F1H0J1050022	C.CAPACITOR CH6.3V 1U	1	
C38	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C39	F1H0J1050022	C.CAPACITOR CH6.3V 1U	1	
C40	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C41-43	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C44,45	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	2	
C46	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C47	F1H0J1050022	C.CAPACITOR CH6.3V 1U	1	
C48	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C49	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C50	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C51	F1H0J1050022	C.CAPACITOR CH6.3V 1U	1	
C52	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C53	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C54	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C55	F1H0J1050022	C.CAPACITOR CH6.3V 1U	1	
C56	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C57,58	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C59	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	
C60	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C62	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C63-67	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C68,69	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C70	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C73	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C74,75	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C76,77	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C78-80	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	3	
C81	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C82	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C83	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C84	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C85	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C86	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C87	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C88	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C89,90	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	2	
C91	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C92	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C93	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C94,95	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	2	
C96	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C97	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C98	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C99-01	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C102,03	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C104-06	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	3	
C107,08	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C109	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C110-12	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C114,15	ECJOEB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C117	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C118	F1JOJ475A008	C.CAPACITOR CH6.3V 4.7U	1	
C119,20	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C121	F1JOJ475A008	C.CAPACITOR CH6.3V 4.7U	1	
C122	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C124,25	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C126	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C127-30	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C131	F1JOJ475A008	C.CAPACITOR CH6.3V 4.7U	1	
C132-34	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C135	ECJOEB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C136-54	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	19	
C156,57	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C158	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C159-61	ECJOEB1A104K	C.CAPACITOR CH 10V 0.1U	3	
D3	B0JCDD000002	DIODE	1	
D8	MA3S13300L	DIODE	1	
D10	MA2SD2400L	DIODE	1	
IC1	C0CBABC00094	IC	1	
IC2	C0JBAZ002392	IC	1	
IC3	C0JBAZ001466	IC	1	
IC5	C1ZBZ0002602	IC	1	
IC6	C0JBAZ002390	IC	1	
IC9	C1AB00002028	IC	1	
IC11	C0JBAC000342	IC	1	
IC12	C0ZBZ0000830	IC	1	
IC13,14	C0JBAZ002390	IC	2	
IC15,16	C1AB00001487	IC	2	
IC17	C1AB00000647	IC	1	
IC18	C0ABAA000046	IC	1	
IC19	C1AB00000647	IC	1	
IC20	C1AB00001904	IC	1	
IC21	C1AB00001695	IC	1	
IC22	C0JBAZ002585	IC	1	
IC23	C0JBAZ002390	IC	1	
ID1	VVVSI4567C	SOFTWARE	1	DOWNLOADONLY(VEP03G90C)
ID1	VVVSI4594C	SOFTWARE	1	DOWNLOADONLY(VEP03G90D)
IP1	C2DBYY000107	IC	1	FOR VEP03G90C
IP1	C2DBYY000120	IC	1	FOR VEP03G90D
IP2	C3EBGG000016	IC	1	
L1	G1C100KA0055	COIL 10UH	1	
L2	J0JAC0000014	FILTER	1	
L3	G1C100KA0055	COIL 10UH	1	
L5	J0JBC0000026	FILTER	1	
L6,L7	G1C100KA0055	COIL 10UH	2	
L8-13	G1C330K00017	COIL 33UH	6	
L14,15	J0JAC0000014	FILTER	2	
L16	G1C101KA0055	COIL 100UH	1	
P1	K1MR70B00004	CONNECTOR	1	
P2	K1MN71BA0132	CONNECTOR	1	
P3	K1MN30BA0149	CONNECTOR	1	
P4	K1KA40AA0594	CONNECTOR (MALE)	1	
P5	K1KA30BA0028	CONNECTOR (MALE)	1	
Q5	2SB0970X0L	TRANSISTOR	1	
Q6	2SB1218A0L	TRANSISTOR	1	
Q7	B1ABBE000002	TRANSISTOR	1	
Q8	2SB1218A0L	TRANSISTOR	1	
QR3	UNR921FJ0L	TRANSISTOR	1	
QR4	UNR911FJ0L	TRANSISTOR-RESISTOR	1	
QR5	UNR9212J0L	TRANSISTOR	1	
R3	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R4-R7	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	4	
R10-13	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	4	
R14	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R16-19	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R20-31	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	12	
R35	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R36	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R40	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R41,42	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R44	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R46	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R47	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R48	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R49	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R54	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R55	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R56	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R57	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R58	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R59	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R60,61	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R67	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R69,70	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R71	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R73,74	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	2	
R76	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R77	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R78	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
R79	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R80,81	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R83-86	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	4	
R87	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R88	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R89,90	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R91-93	ERJ2RHD331	M.RESISTOR CH 1/16W 330	3	
R94	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R95	ERJ2RHD331	M.RESISTOR CH 1/16W 330	1	
R97	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R98	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R99	ERJ2RHD472	M.RESISTOR CH 1/16W 4.7K	1	
R100-02	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R103	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R104	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R105-08	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R110	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R111	ERJ2RHD221	M.RESISTOR CH 1/16W 220	1	
R112-14	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R115	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R116-36	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	21	
R137	ERJ2RHD822	M.RESISTOR CH 1/16W 8.2K	1	
R138	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R139	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R140	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R141	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R142	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R143	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R144	ERJ2RHD822	M.RESISTOR CH 1/16W 8.2K	1	
R146,47	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R149	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R150	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R151	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R152	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R153	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R154	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R155	ERJ2RHD822	M.RESISTOR CH 1/16W 8.2K	1	
R158	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R159-61	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R162	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R163	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R164	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R166	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R167	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R176	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R177	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R178,79	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R180-83	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R185	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R186,87	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R189	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R192	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R193	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R194,95	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R196,97	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	2	
R200	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R202	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R203	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R204	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R205	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R206	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R207	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R208	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	1	
R209	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R210,11	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R212	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R213	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R214	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R215-17	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	3	
R218,19	ERJ2RKD560	M.RESISTOR CH 1/16W 56	2	
R220	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R221	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R222	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R223-25	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	3	
R226,27	ERJ2RKD560	M.RESISTOR CH 1/16W 56	2	
R228	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R229,30	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R231-38	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	8	
R239	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R240-43	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	4	
R244	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R245	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R246	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R247-49	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	3	
R250	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R252	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R254-57	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	4	
R259	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R260,61	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R262-67	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	6	
R268,69	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	2	
R270,71	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	2	
R272,73	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	2	
R274	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R275	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R276	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R277	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R278	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R279	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R280	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R281	ERJ2RHD122	M.RESISTOR CH 1/16W 1.2K	1	
R282,83	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	2	
R284	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R285	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R286	ERJ2RHD331	M.RESISTOR CH 1/16W 330	1	
R287	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R288	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R289	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R290	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R291	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R293	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R294	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R295	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R299	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R300	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R301-08	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	8	
R309	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R311	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R312	ERJ2RHD221	M.RESISTOR CH 1/16W 220	1	
R313	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R314	ERJ2RHD271	M.RESISTOR CH 1/16W 270	1	
R315	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R316	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R317	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R318	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R319	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R320	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R321,22	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R323	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R324	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R325	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R326	ERJ2RHD221	M.RESISTOR CH 1/16W 220	1	
R327	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R328	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R329-33	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	5	
R334	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R335,36	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R337	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R339	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R343	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R345	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R348	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R349	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R350,51	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R354	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R356	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
X1	H0J327200115	CRYSTAL OSCILLATOR	1	
X2	H0J135500008	CRYSTAL OSCILLATOR	1	
■ E2	VEP23655A	CAMERA C.B.A.	1	(RTL)FOR AG-HVX200P/AN
■ E2	VEP23655B	CAMERA C.B.A.	1	(RTL)FOR AG-HVX200E/MC/202E
C20,21	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C23	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C24	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C33-37	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C38	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C39	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C100	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C103	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C104	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C105-10	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	6	
C111	F3F0J106A055	T.CAPACITOR CH6.3V 10U	1	
C112	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C114,15	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C116	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C117-26	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	10	
C151	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C152	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C153	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
C154	F3F1V105A032	T.CAPACITOR CH 35V 1U	1	
C156	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C162-64	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	3	
C165	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C166	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C167	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C168	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C169	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C170	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C171,72	F1L1E1060018	C.CAPACITOR CH 25V 10U	2	
C173	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C174,75	F1L1E1060018	C.CAPACITOR CH 25V 10U	2	
C176	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C177,78	F1L1E1060018	C.CAPACITOR CH 25V 10U	2	
C179	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C200	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C201	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C202	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
C203	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C204	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C205	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C206,07	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C208	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C209	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C210	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C211	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C212	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C213	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C214	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C215	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C216,17	F3F1A106A046	T.CAPACITOR CH 10V 10U	2	
C218,19	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C220,21	F3F1A106A046	T.CAPACITOR CH 10V 10U	2	
C222,23	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C224,25	F3F1A106A046	T.CAPACITOR CH 10V 10U	2	
C226,27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C228,29	ECJ1VB1H472K	C.CAPACITOR CH 50V 4700P	2	
C230	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C231	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	1	
C232,33	F3F1V105A032	T.CAPACITOR CH 35V 1U	2	
C234	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C235	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C236	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C240-44	F1L1E1060018	C.CAPACITOR CH 25V 10U	5	
C247	F1L1E1060018	C.CAPACITOR CH 25V 10U	1	
C252-54	F1L1E1060018	C.CAPACITOR CH 25V 10U	3	
C255,56	F3G1A336A035	T.CAPACITOR CH6.3V 33U	2	
C258	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C259	F3G1A336A035	T.CAPACITOR CH6.3V 33U	1	
C260,61	F1L1E3350001	C.CAPACITOR CH 25V 0.33U	2	
C300	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C301	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C302	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C303	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C304	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C305,06	F3F1A106A046	T.CAPACITOR CH 10V 10U	2	
C307	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C308	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C309	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C310	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C311,12	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C313,14	F3F1A106A046	T.CAPACITOR CH 10V 10U	2	
C315-17	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C318,19	F3F1A106A046	T.CAPACITOR CH 10V 10U	2	
C320,21	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C322	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C323	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C324	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C330	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C333	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C336-38	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C339,40	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C341,42	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C343,44	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C345,46	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C347,48	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C401,02	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C403	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C404-06	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C407	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C408-11	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C412-18	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	7	
C419,20	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C421	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C422-24	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C425	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C426,27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C428-31	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	4	
C432-34	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C436,37	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C440-43	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C444	F3G1A336A035	T.CAPACITOR CH6.3V 33U	1	
C500	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C501	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C502,03	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C504,05	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	2	
C506	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C508	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C509,10	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C511	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C512	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C513	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C514	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C515	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C516	ECJ0EC1H080D	C.CAPACITOR CH 50V 8P	1	
C517-20	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	4	
C521	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C522,23	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C524-34	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	11	
C537	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C701,02	F3F0J106A055	T.CAPACITOR CH6.3V 10U	2	
C703	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C704	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C705	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C707-10	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C711	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	FOR VEP23655B
C712	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C713,14	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C715	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C716-18	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C719	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C720	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C721,22	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C723-26	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C727,28	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C729,30	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C731	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C800,01	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C802,03	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C804	ECJ0EC1H330J	C.CAPACITOR CH 50V 33P	1	
C805	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C806	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C807	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C808	F3F1C106A039	T.CAPACITOR CH 16V 10U	1	
C809-13	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C814	F3F1D475A034	T.CAPACITOR CH 20V 4.7U	1	
C815	ECJ0EC1H151J	C.CAPACITOR CH 50V 150P	1	
C816	ECJ0EB1H222K	C.CAPACITOR CH 50V 2200P	1	
C817	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C818	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C819	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C820	F3F1C106A039	T.CAPACITOR CH 16V 10U	1	
C821	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C823,24	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C825,26	F3G1A476A029	T.CAPACITOR CH 10V 47U	2	
C827	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C829	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C831	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C833,34	ECJ0EB1H471K	C.CAPACITOR CH 50V 470P	2	
C835	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C836,37	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	2	
C838,39	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C841	F1G1E392A056	C.CAPACITOR CH 25V 3900P	1	
C842	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C843	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	F1J1C105A118
C844	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C845	F1G1E392A056	C.CAPACITOR CH 25V 3900P	1	
C846	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C848	F3F1C106A039	T.CAPACITOR CH 16V 10U	1	
C850	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C851	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C852	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C853	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C854	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	F1J1C105A118
C855	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C856	F3F1C106A039	T.CAPACITOR CH 16V 10U	1	
C857	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C858	ECJ0EB1H471K	C.CAPACITOR CH 50V 470P	1	
C859	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C860	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C861	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C862	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C863	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C864	F3F1C106A039	T.CAPACITOR CH 16V 10U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C865	F1G1C822A040	C.CAPACITOR CH 16V 8200P	1	
C866	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C867	ECJ0EB1H272K	C.CAPACITOR CH 50V 2700P	1	
C868	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C869	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C870	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C871	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C872	F1G1C822A040	C.CAPACITOR CH 16V 8200P	1	
C873	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C874	F3F1C106A039	T.CAPACITOR CH 16V 10U	1	
C875	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C876,77	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	2	F1J1C105A118
C878	F3F1C106A039	T.CAPACITOR CH 16V 10U	1	
C879	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C881-84	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C950	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C951	F3G1A476A029	T.CAPACITOR CH 10V 47U	1	
C953	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C954	ECUX1C105KBN	C.CAPACITOR CH 10V 1U	1	F1J1C105A118
C955	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C956	F3F1C106A039	T.CAPACITOR CH 16V 10U	1	
C957	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1000	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1001	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C1002	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1003,04	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C1005	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1006	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C1007-09	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	3	
C1010	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1011	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1012	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1013,14	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C1015	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1016	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1017,18	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C1019	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C1020	ECUX1H121JCQ	C.CAPACITOR CH 50V 120P	1	
C1021	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C1022	ECUX1H121JCQ	C.CAPACITOR CH 50V 120P	1	
C1025	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C1026	ECJ0EC1H030C	C.CAPACITOR CH 50V 3P	1	
C1027	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C1028	ECJ0EC1H330J	C.CAPACITOR CH 50V 33P	1	
C1029	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C1030	ECJ0EC1H030C	C.CAPACITOR CH 50V 3P	1	
C1031	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C1032	ECJ0EC1H100D	C.CAPACITOR CH 50V 10P	1	
C1033	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C1034	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C1035	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	FOR VEP23655A
C1036	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	FOR VEP23655A
C1037	ECJ0EC1H680J	C.CAPACITOR CH 50V 33P	1	FOR VEP23655A
C1037	ECJ0EC1H680J	C.CAPACITOR CH 50V 68P	1	FOR VEP23655B
C1038	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1039	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C1040	ECJ0EC1H470J	C.CAPACITOR CH 50V 47P	1	
C1041	ECJ0EC1H080C	C.CAPACITOR CH 50V 8P	1	
C1042	ECJ0EC1H180J	C.CAPACITOR CH 50V 18P	1	
C1043,44	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C1045	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1046	ECJ2FB1A475K	C.CAPACITOR CH 10V 4.7U	1	
C1047	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1048	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1049	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1050	ECJ0EC1H220J	C.CAPACITOR CH 50V 22P	1	
C1051	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C1052	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1053	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1054-57	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C1058-60	F1K0J1060002	C.CAPACITOR CH6.3V 10U	3	
C1061	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1062	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1063	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1064	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1065	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1066-68	F3H1A107A072	T.CAPACITOR CH 10V 100U	3	
C1069	F3G1A476A029	T.CAPACITOR CH 10V 47U	1	
C1070,71	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	FOR VEP23655B
D150	MA121	DIODE	1	
D500	B0JCDD000002	DIODE	1	
D504	MA3J14300L	DIODE	1	
D1000,01	MA142K	DIODE	2	
IC20	C0CBABC00060	IC	1	
IC23	C0JBAB000722	IC	1	
IC29	C0JBAA000374	IC	1	
IC30	C0JBAF000625	IC	1	
IC31	C0JBAB000673	IC	1	
IC40	C0CBABC00060	IC	1	
IC101	TVHC157FT	IC	1	
IC153-55	C1AB00002039	IC	3	
IC200-02	C0CBCBC00053	IC	3	
IC203	NJM431U	IC	1	C0DBEZC00003
IC300-02	C0CBCBC00053	IC	3	
IC303-05	C0FBAY000008	IC	3	
IC400	C0CBCAC00072	IC	1	
IC401	C1AB00002486	IC	1	
IC403	C0JBAA000344	IC	1	
IC404	C0JBAA000350	IC	1	
IC405	C0JBAA000344	IC	1	
IC406	C0JBAZ002162	IC	1	
IC501,02	C0JBAB000629	IC	2	
IC503	C0JBAA000356	IC	1	
IC505,06	C0JBAA000356	IC	2	
IC700	C1AB00002493	IC	1	
IC800	C0ABHZ000004	IC	1	
IC801	C0GBF0000016	IC	1	
IC802	C1BB00001090	IC	1	
IC803	C0CBAEC00006	IC	1	
IC804	C0FBAG000068	IC	1	
IC805	C1AB00002145	IC	1	
IC806	C1AB00002150	IC	1	
IC807	C0CBADC00034	IC	1	
IC808	C0ABCA000058	IC	1	
IC809,10	C0CBADC00034	IC	2	
IC950	C1AB00002150	IC	1	
IC1000	C0JBAA000344	IC	1	
IC1001	C1AB00000647	IC	1	
IC1002	C0JBAS000214	IC	1	
IC1003-05	C1AB00001487	IC	3	
IC1006	C0JBAS000214	IC	1	
IC1007	C1AB00001705	IC	1	
ID101	VVVSI4606A	SOFTWARE	1	DOWNLOADONLY(VEP23655A)
ID101	VVVSI4647A	SOFTWARE	1	DOWNLOADONLY(VEP23655B)
ID500	VVVSI4560F	SOFTWARE	1	DOWNLOADONLY(VEP23655A)
ID500	VVVSI4588F	SOFTWARE	1	DOWNLOADONLY(VEP23655B)
ID504	VVVSI4587F	SOFTWARE	1	DOWNLOADONLY(VEP23655B)
IP100	C1ZBZ0003190	IC	1	
IP500	C3EBJG000001	IC	1	
IP504	C2DBYY000135	IC	1	FOR VEP23655A
IP504	C2DBYY000051	IC	1	FOR VEP23655B
L20	J0JCC0000119	FILTER	1	
L21	J0JCC0000405	FERRITE CORE	1	
L24-27	J0JCC0000405	FERRITE CORE	4	
L32	J0JCC0000119	FILTER	1	
L100,01	J0JCC0000119	FILTER	2	
L150-52	J0JCC0000119	FILTER	3	
L200-07	J0JCC0000119	FILTER	8	
L300-08	G1C100KA0092	COIL 10UH	9	
L400	J0JCC0000119	FILTER	1	
L402,03	J0JCC0000119	FILTER	2	
L404	J0JCC0000405	FERRITE CORE	1	
L406-12	J0JCC0000405	FERRITE CORE	7	
L500-02	J0JCC0000119	FILTER	3	
L700,01	G1C100KA0068	COIL 10UH	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L702	J0JCC0000119	FILTER	1	
L800	G1C100KA0068	COIL 10UH	1	
L801,02	G1C220KA0068	COIL 22UH	2	
L803-07	G1C100KA0068	COIL 10UH	5	
L950	G1C220KA0068	COIL 22UH	1	
L1000	G1C100KA0068	COIL 10UH	1	
L1001	J0JCC0000119	FILTER	1	
L1002,03	G1C6R8JA0041	COIL 6.8UH	2	
L1004	G1C2R2JA0041	COIL 2.2UH	1	
L1005	G1C4R7JA0041	COIL 4.7UH	1	
L1006	G1C1R0JA0041	COIL 1UH	1	
L1007	G1C2R2JA0041	COIL 2.2UH	1	
L1009,10	J0JCC0000119	FILTER	2	
P1	K1KA60A00148	CONNECTOR (MALE)	1	
P2	K1MN51B00014	CONNECTOR	1	
P3	K1MN10BA0059	CONNECTOR	1	
P4	K1MN51B00014	CONNECTOR	1	
P6	K1KA80A00125	CONNECTOR (MALE)	1	
P7	K1MY20BA0071	CONNECTOR	1	
P8	K1KA70A00051	CONNECTOR (MALE)	1	
P9	K1KBA0AA0169	CONNECTOR (FEMALE)	1	
P10	K1KA70A00051	CONNECTOR (MALE)	1	
P11	K1KB60A00141	CONNECTOR (FEMALE)	1	
Q200	2SB1462J0L	TRANSISTOR	1	
Q201,02	2SD2216J0L	TRANSISTOR	2	
Q203	XP1501	TRANSISTOR-RESISTOR	1	XP0150100L
Q204	XP1401	TRANSISTOR-RESISTOR	1	XP0140100L
Q205	2SD1819A-R	TRANSISTOR	1	
Q206	2SB1462J0L	TRANSISTOR	1	
Q207	2SD2216J0L	TRANSISTOR	1	
Q208	2SB1218A0L	TRANSISTOR	1	
Q209	2SD2216J0L	TRANSISTOR	1	
Q500-02	XN0460100L	TRANSISTOR-RESISTOR	3	
Q700	2SB1462J0L	TRANSISTOR	1	
Q800	2SD2210O0L	TRANSISTOR	1	
Q801	2SB0970X0L	TRANSISTOR	1	
Q1000,01	2SB1462J0L	TRANSISTOR	2	
Q1002,03	2SD2216J0L	TRANSISTOR	2	
Q1004	2SB1462J0L	TRANSISTOR	1	
Q1005	XP6401	TRANSISTOR-RESISTOR	1	XP0640100L
Q1006	2SB1462J0L	TRANSISTOR	1	
Q1007	XP0460100L	TRANSISTOR	1	
Q1008	2SB1462J0L	TRANSISTOR	1	FOR VEP23655A
Q1009	2SB1462J0L	TRANSISTOR	1	
Q1011,12	2SD2216J0L	TRANSISTOR	2	
Q1013	XP0460100L	TRANSISTOR	1	
Q1014	XP6401	TRANSISTOR-RESISTOR	1	XP0640100L
Q1015	XP0450100L	TRANSISTOR	1	
Q1016	2SB1462J0L	TRANSISTOR	1	
Q1017	2SD2216J0L	TRANSISTOR	1	
Q1018	2SD2216J0L	TRANSISTOR	1	FOR VEP23655B
QR200,01	UNR9113J0L	TRANSISTOR	2	
QR500	B1GDBEJG0003	TRANSISTOR-RESISTOR	1	
QR501	UNR9211J0L	TRANSISTOR	1	
QR800-05	UNR9212J0L	TRANSISTOR	6	
QR806,07	UNR9215J0L	TRANSISTOR	2	
QR1000	B1GBBEMM0001	TRANSISTOR	1	
QR1001,02	UNR9213J0L	TRANSISTOR	2	
QR1003	UNR9211J0L	TRANSISTOR	1	
QR1004,05	UNR9213J0L	TRANSISTOR	2	
R2	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R7,R8	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R9-13	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	5	
R21	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R24	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R28	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R34,35	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	2	
R37	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R41,42	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	2	
R43-45	J0JDC0000102	FILTER	3	
R46-48	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R102,03	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R104	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R105	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R106	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R109,10	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R112,13	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R116	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R117,18	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R120	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R172-74	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	3	
R200	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R201	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R202	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R203	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R204	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R205	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R206	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R207	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R208	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R210	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R211	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R212	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R214	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R215	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R217	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R218	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	1	
R220	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R221	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R222	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R224	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R225	ERJ2RKD274	M.RESISTOR CH 1/16W 270K	1	
R226	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R227	ERJ2RHD563	M.RESISTOR CH 1/16W 56K	1	
R228	ERJ2RKD154	M.RESISTOR CH 1/16W 150K	1	
R229	ERJ2RHD563	M.RESISTOR CH 1/16W 56K	1	
R230	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R232,33	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R300-11	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	12	
R313-16	EXB28V330J	COMBI.R-R 33	4	
R318-21	EXB28V330J	COMBI.R-R 33	4	
R323-26	EXB28V330J	COMBI.R-R 33	4	
R327-29	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R403,04	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	2	
R407	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R411	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP23655B
R413	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP23655B
R414-16	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R417	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP23655A
R418	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R419	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	FOR VEP23655A
R420,21	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	2	
R422	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R423	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R424,25	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R427	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R431	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R440	EXB28V330J	COMBI.R-R 33	1	
R442-50	EXB28V330J	COMBI.R-R 33	9	
R451	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R454	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R459,60	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R461	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R463-67	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	5	
R468,69	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	2	
R470,71	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	2	
R472-74	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R476	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R477-92	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	16	
R493	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R494	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R500,01	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R502,03	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R504,05	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R506	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R508	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R509,10	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	2	
R511	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R512	ERJ2RHD681	M.RESISTOR CH 2W 680	1	
R513	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R515,16	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R517,18	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R519-21	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	3	
R522,23	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R524	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R525	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R526	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R529	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R530-34	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	5	
R535	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R537,38	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	
R539	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R540	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R541,42	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R543,44	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R545	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R546	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R547-49	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	3	
R551-53	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R554-57	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	4	
R558-60	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	3	
R561	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R562	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R563	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R564-70	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	7	
R571,72	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R573	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R574	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R575,76	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R577	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R579,80	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R581	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R582-85	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	4	
R586	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R587	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R588	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R590,91	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	
R592-94	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R595,96	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	2	
R597,98	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R599	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R600	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R601-05	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	5	
R606-08	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R609	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R610	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R611	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R612,13	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	2	
R614	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R615	ERJ2GEJ153	M.RESISTOR CH 1/16W 15K	1	
R616	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R617-19	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R620	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R621	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R622,23	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R624	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R625	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R626	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R627-29	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	3	
R631,32	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R633	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R634-37	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	4	
R638	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R639-41	ERJ2RHD681	M.RESISTOR CH 2W 680	3	
R642,43	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R644,45	ERJ2RHD681	M.RESISTOR CH 2W 680	2	
R648	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R649	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R650-54	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	5	
R655-57	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	3	
R701	ERJ2GEJ680	M.RESISTOR CH 1/16W 68	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R703	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R704	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R705	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R706-12	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	7	
R713,14	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	2	
R715-19	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	5	
R720	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R721,22	EXB28V330J	COMBI.R-R 33	2	
R723-27	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	5	
R728	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R729	ERJ2RHD271	M.RESISTOR CH 1/16W 270	1	
R730	ERJ2RHD221	M.RESISTOR CH 1/16W 220	1	
R731	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R732	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R733	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R748	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R749	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	FOR VEP23655A
R800	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R801	ERJ2RHD113	M.RESISTOR CH 1/16W 11K	1	
R802	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R803	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R804,05	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R806	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R807	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R808	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R809	ERJ2RHD122	M.RESISTOR CH 1/16W 1.2K	1	
R810	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R811	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R812	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R813	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R814	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R815,16	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R817	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R818	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R819,20	ERAS39J5R6	M.RESISTOR 5.6	2	
R821	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R822	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R823	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R828	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R829	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R830	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R831	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	1	
R837	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R838	ERJ2GEJ124	M.RESISTOR CH 1/16W 120K	1	
R839	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R840	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R841	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R844	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R845	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R846	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R847	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R848	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R849,50	ERJ2RHD472	M.RESISTOR CH 1/16W 4.7K	2	
R851-53	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R854,55	ERJ2GEJ154	M.RESISTOR CH 1/16W 150K	2	
R856-58	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R859,60	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	2	
R861,62	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	2	
R863	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R864	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R865	ERJ2GEJ682	M.RESISTOR CH 1/16W 6.8K	1	
R866	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R867	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R868	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R869	ERJ3GEYJ2R2	M.RESISTOR CH 1/16W 2.2	1	
R870	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R871	ERJ2GEJ273	M.RESISTOR CH 1/16W 27K	1	
R872,73	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	2	
R874	ERJ3GEYJ2R2	M.RESISTOR CH 1/16W 2.2	1	
R875	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R876-78	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	3	
R879	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R880	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R881	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R882	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R883	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R884	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R885	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R886,87	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R888	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R889	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R890	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R891	ERJ2GEJ154	M.RESISTOR CH 1/16W 150K	1	
R892	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R893	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R894	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R895	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R896	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R897,98	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R900	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R901	ERJ2GEJ224	M.RESISTOR CH 1/16W 220K	1	
R902	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R903	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R904	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R905	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R906	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R907	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R908	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R909	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R910	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R911	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R912	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R913,14	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	2	
R915,16	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R917	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R918,19	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	2	
R920	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R921	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R922	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R923	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R924	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R925	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
R926	ERJ2GEJ181	M.RESISTOR CH 1/16W 180	1	
R928,29	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R932,33	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R936-38	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R951,52	ERJ2RHD472	M.RESISTOR CH 1/16W 4.7K	2	
R953,54	ERJ2GEJ392	M.RESISTOR CH 1/16W 3.9K	2	
R955-61	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	7	
R962	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1000	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R1001,02	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R1003	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1004,05	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R1006	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1007	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1008	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R1009	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1010,11	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R1012	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1013	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1014	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R1015	ERJ2RHD101	M.RESISTOR CH 1/16W 100	1	
R1016	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1017	ERJ2RHD101	M.RESISTOR CH 1/16W 100	1	
R1018	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1019	ERJ2RHD151	M.RESISTOR CH 1/16W 150	1	
R1020	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1021	ERJ2RHD822	M.RESISTOR CH 1/16W 8.2K	1	
R1022	ERJ2RHD561	M.RESISTOR CH 1/16W 560	1	
R1023	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R1024	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	1	
R1025	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1026	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1029,30	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R1031	ERJ2RHD561	M.RESISTOR CH 1/16W 560	1	
R1032,33	ERJ2RHD271	M.RESISTOR CH 1/16W 270	2	
R1034	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	
R1035	ERJ2RHD681	M.RESISTOR CH 2W 680	1	
R1036	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1037,38	ERJ2RHD821	M.RESISTOR CH 1/16W 820	2	
R1039	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	FOR VEP23655A
R1040	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1041	ERJ2RHD681	M.RESISTOR CH 2W 680	1	
R1042	ERJ2RHD682	M.RESISTOR CH 1/16W 6.8K	1	
R1043	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	FOR VEP23655A
R1044	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1045	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1046	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R1047	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R1048-50	ERJ2RHD152	M.RESISTOR CH 1/16W 1.5K	3	
R1051	ERJ2RHD222	M.RESISTOR CH 1/16W 2.2M	1	
R1052	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1053	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1054	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1055	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1057	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R1058	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R1059	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R1060	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1061	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R1062,63	ERJ2RHD222	M.RESISTOR CH 1/16W 2.2M	2	
R1064	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R1066	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1067	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R1068	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R1069	ERJ2GEJ181	M.RESISTOR CH 1/16W 180	1	
R1070,71	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R1073	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R1074,75	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	2	
R1076	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1077-79	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R1080,81	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	2	
R1082,83	ERJ2GEJ561	M.RESISTOR CH 1/16W 560	2	
R1084	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	FOR VEP23655B
R1085,86	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	2	FOR VEP23655B
R1087	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	FOR VEP23655B
R1088	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	FOR VEP23655B
R1089	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	FOR VEP23655B
R1200-20	J0JCC0000317	FILTER	21	
R1222,23	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R1224-31	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	8	
X20	H1A7425B0001	CRYSTAL OSCILLATOR	1	
X500	H0J135500008	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC5855	BE HEAT SINK	1	
	VMG1749	COOLING PAD A	1	
	XQN2+B4FN	SCREW	1	
	VGQ8925	COOLING SHEET C3	1	
■ E3	VEP03G89A	CODEC C.B.A.	1	(RTL)FOR AG-HVX200P/AN
■ E3	VEP03G89B	CODEC C.B.A.	1	(RTL)FOR AG-HVX200E/MC/202E
C1-C5	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C7-11	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C13-15	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C16,17	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C50-54	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C55	ECJ0EC1H070C	C.CAPACITOR CH 50V 7P	1	
C56	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C57	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C58,59	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C60	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C61-66	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	6	
C67	ECJ0EC1H070C	C.CAPACITOR CH 50V 7P	1	
C68	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C69	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C70,71	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C72	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C73-75	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C76	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C77-85	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	9	
C86,87	ECJ0EC1H040C	C.CAPACITOR CH 50V 4P	2	
C88	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C89	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C90	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C91	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C92	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C94,95	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C200	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C201,02	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C203,04	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C205,06	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C207	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C208,09	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C300	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C301	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C302	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C303	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C304	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C305	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C306	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C309,10	F3G1A226A035	T.CAPACITOR CH6.3V 22U	2	
C311	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C312,13	ECJ0EC1H180J	C.CAPACITOR CH 50V 18P	2	
C314	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C315-18	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	4	
C319	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C320	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C321-41	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	21	
C342	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C343,44	F3G1A476A029	T.CAPACITOR CH 10V 47U	2	
C345	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C400,01	ECJ0EC1H060C	C.CAPACITOR CH 50V 6P	2	
C402-30	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	29	
C431	F1J1C105A091	C.CAPACITOR CH 16V 1U	1	
C432,33	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	2	
C434	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C435,36	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	FOR VEP03G89B
C437	F1J1C105A091	C.CAPACITOR CH 16V 1U	1	FOR VEP03G89B
C438	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	FOR VEP03G89B
C441	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C444	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C550,51	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C552-55	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C556-59	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	4	
C560-63	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C564-66	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	3	
C567,68	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C569	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C600,01	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C602	F1J1C105A091	C.CAPACITOR CH 16V 1U	1	
C603	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C604,05	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C606	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C607-09	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	3	
C611,12	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C613	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C614,15	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C616	ECJ0EC1H330J	C.CAPACITOR CH 50V 33P	1	
C617	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C618	ECJ0EC1H330J	C.CAPACITOR CH 50V 33P	1	
C619	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C620,21	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	2	
C622-27	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	6	
C700-12	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	13	
C714	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C716,17	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	2	
C718	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C719	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C720	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C721,22	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C723	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C724	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C725-29	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C730	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C731	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C732	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C733	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C734	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C735	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C736	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C738,39	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C801,02	ECJ0EC1H080C	C.CAPACITOR CH 50V 8P	2	
C805	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C806	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C808	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
C809-22	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	14	
C824	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C825	ECJ0EB1H221K	C.CAPACITOR CH 50V 220P	1	
C826	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C901	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C902,03	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C904,05	ECUX1H120JCQ	C.CAPACITOR CH 50V 12P	2	
C906,07	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C908	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C909,10	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C911	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C912,13	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C914-16	ECJ0EB1H221K	C.CAPACITOR CH 50V 220P	3	
C917-19	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	3	
D1	MA147	DIODE	1	
D302,03	MA2SD2400L	DIODE	2	
D400	MA704A	DIODE	1	
D600	MA704A	DIODE	1	
IC1	C0JBAZ001466	IC	1	
IC2-C5	C0JBAZ001728	IC	4	
IC6,C7	C0JBAA000358	IC	2	
IC9	C0JBAB000614	IC	1	
IC10,11	C0JBAZ001728	IC	2	
IC12	C0JBAZ002585	IC	1	
IC50	C0JBAA000340	IC	1	
IC51	C0JBAB000662	IC	1	
IC52	C0JBAF000545	IC	1	
IC53,54	C0JBAZ001537	IC	2	
IC55	C0JBAB000662	IC	1	
IC56	C0JBAZ001537	IC	1	
IC60	C0JBZZ000336	IC	1	
IC61	C2GBC0000173	IC	1	
IC62	C0JBAZ002363	IC	1	
IC64	C0JBAZ002192	IC	1	
IC66	C0JBAA000359	IC	1	
IC200,01	C3ABRG000072	IC	2	
IC300	C0JBAA000359	IC	1	
IC301	C1ZBZ0002602	IC	1	
IC302	C0JBAA000359	IC	1	
IC303	C0EBE0000240	IC	1	
IC304	C0EBK0000066	IC	1	
IC307	C0JBAA000344	IC	1	
IC400	C1AB00002377	IC	1	
IC401	C0JBAZ002610	IC	1	
IC409	C0CBCAC00072	IC	1	
IC411	C0CBCBC00157	IC	1	FOR VEP03G89B
IC412	C0JBAZ002449	IC	1	FOR VEP03G89B
IC414	C0JBAZ002610	IC	1	
IC550-54	C3ABRG000072	IC	5	
IC600	C0CBCBC00156	IC	1	
IC601	C0JBAZ002261	IC	1	
IC602	C0ZBZ0000830	IC	1	
IC603	BH7086KV	IC	1	C1ZBZ0001649
IC604,05	C0JBAZ002261	IC	2	
IC606-09	C0JBAB000614	IC	4	
IC610	C1BB00000861	IC	1	
IC700	C1ZBZ0002976	IC	1	
IC703	C0JBAZ002192	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC705	C0JBAZ002261	IC	1	
IC710	C0JBAZ002261	IC	1	
IC801	C1DB00000956	IC	1	
IC900	C1DB00001535	IC	1	
ID202,03	VVVSI4592C	SOFTWARE	2	DOWNLOADONLY
ID305	VVVSI4590D	SOFTWARE	1	DOWNLOADONLY
ID306	VVVSI4591A	SOFTWARE	1	DOWNLOADONLY
ID706	VVVSI4593A	SOFTWARE	1	DOWNLOADONLY
IP202,03	C3FBQY000004	IC	2	
IP305	C2DBYY000107	IC	1	
IP306	C3EBGG000016	IC	1	
IP706	C3ZBJ0000011	IC	1	
L50	J0JCC0000119	FILTER	1	
L51,52	J0JBC0000019	FILTER	2	
L54	J0JBC0000019	FILTER	1	
L55	J0JCC0000119	FILTER	1	
L56	J0JBC0000019	FILTER	1	
L57	J0JCC0000119	FILTER	1	
L58	J0JBC0000019	FILTER	1	
L60	J0JBC0000019	FILTER	1	
L61	J0JKC0000009	FILTER	1	
L62-68	J0JDC0000102	FILTER	7	
L200,01	J0JCC0000119	FILTER	2	
L202,03	J0JBC0000019	FILTER	2	
L300-04	J0JCC0000119	FILTER	5	
L305	J0JAC0000014	FILTER	1	
L400,01	J0JCC0000119	FILTER	2	
L402-04	J0JKC0000009	FILTER	3	
L405	J0JCC0000119	FILTER	1	FOR VEP03G89B
L550-54	J0JCC0000119	FILTER	5	
L600	J0JKC0000009	FILTER	1	
L601	G1C120JA0036	COIL 12UH	1	
L602	J0JCC0000119	FILTER	1	
L700-02	J0JCC0000119	FILTER	3	
L800	G1C470K00019	COIL 47UH	1	
L802	G1C470K00019	COIL 47UH	1	
L803	J0JKC0000009	FILTER	1	
L804,05	J0JCC0000119	FILTER	2	
L806,07	J0MAB0000140	EMI FILTER	2	
L900	J0JCC0000119	FILTER	1	
L901,02	G1C470K00019	COIL 47UH	2	
L903-08	J0MAB0000140	EMI FILTER	6	
L909	J0JKC0000009	FILTER	1	
P1	K1KB60A00131	CONNECTOR (FEMALE)	1	
P3	K1KY70A00001	CONNECTOR	1	
P4	K1FA170A0004	CONNECTOR (MALE)	1	
P5	K1KY70A00001	CONNECTOR	1	
P6	K1FA170A0004	CONNECTOR (MALE)	1	
P7	K1KA50BA0028	CONNECTOR (MALE)	1	
P8	K1MN24AA0018	CONNECTOR	1	
P9	K1KA05B00201	CONNECTOR (MALE)	1	
P10	K1KA70BA0028	CONNECTOR (FEMALE)	1	
Q2	B1DHCC000035	TRANSISTOR	1	
Q3	B1DFCC000012	TRANSISTOR	1	
Q300	2SB0970X0L	TRANSISTOR	1	
Q301-03	XP0411500L	TRANSISTOR	3	
QR1	UNR9213J0L	TRANSISTOR	1	
QR2	UNR9113J0L	TRANSISTOR	1	
QR301,02	UNR9213J0L	TRANSISTOR	2	
R1	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R2	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R3,R4	EXB28V560J	COMBI.R-R 56	2	
R5	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R6	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R7	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R8	EXB28V330J	COMBI.R-R 33	1	
R9	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R10	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R11-14	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	4	
R15	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R16	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R17	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R18,19	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R20,21	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	2	
R22	EXB28V330J	COMBI.R-R 33	1	
R25-28	EXB28V330J	COMBI.R-R 33	4	
R31	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R32	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R33	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R35	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R36	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R37	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R38-40	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R44	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R47,48	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R50-62	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	13	
R63	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R64	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R65	ERJ2GEJ681	M.RESISTOR CH 1/16W 680	1	
R66	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R67	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R71	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R72	EXB28V103J	COMBI.R-R 10K	1	
R73,74	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R75,76	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	2	
R80	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R82	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R83	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R84	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R85-88	EXB28V100J	COMBI.R-R 10	4	
R89-91	EXB28V220J	COMBI.R-R 22	3	
R92,93	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R94	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R95,96	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	2	
R97,98	ERJ2GEJ680	M.RESISTOR CH 1/16W 68	2	
R99,00	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R101	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R102	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R103	EXB28V103J	COMBI.R-R 10K	1	
R105,06	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R108	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R110	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R111	EXB28V220J	COMBI.R-R 22	1	
R114	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R115	EXB28V100J	COMBI.R-R 10	1	
R117	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R118	EXB28V100J	COMBI.R-R 10	1	
R119	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R121	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R122,23	EXB28V100J	COMBI.R-R 10	2	
R126	EXB28V470J	COMBI.R-R 47	1	
R127	EXB28V680J	COMBI.R-R 68	1	
R128	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R129-34	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	6	
R135,36	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	2	
R137-40	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	4	
R141	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R142	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R143	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R144	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R145	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R148	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R149	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R150	EXB28V473J	COMBI.R-R 47K	1	
R151	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R152	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R153	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R154	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R155,56	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	2	
R157	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R158-61	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	4	
R162-65	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	4	
R166-68	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R169	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R177	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R178,79	EXB28V473J	COMBI.R-R 47K	2	
R180-88	EXB28V330J	COMBI.R-R 33	9	
R189	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R190,91	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R192	EXB28V330J	COMBI.R-R 33	1	
R193-95	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	3	
R196	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R197	ERJ2GEJ680	M.RESISTOR CH 1/16W 68	1	
R210-13	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	4	
R214-17	EXB28V330J	COMBI.R-R 33	4	
R218-21	EXB28V470J	COMBI.R-R 47	4	
R301	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R302	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R304	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R305	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R306-10	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	5	
R311	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R312	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R313	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R314,15	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R316	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R317	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R318	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R319	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R320	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R322	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R323	EXB28V473J	COMBI.R-R 47K	1	
R324	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R325,26	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R327	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R328-30	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R331	EXB28V473J	COMBI.R-R 47K	1	
R333	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R334	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R336	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R337	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R338	ERJ2GEJ393	M.RESISTOR CH 1/16W 39K	1	
R339	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R341	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R342-44	EXB28V103J	COMBI.R-R 10K	3	
R345-47	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	3	
R348	EXB28V103J	COMBI.R-R 10K	1	
R350	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R351,52	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	2	
R353	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R356	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R357,58	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R359	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R360	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R361	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R362	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R363	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R364	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R365,66	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R367	EXB28V473J	COMBI.R-R 47K	1	
R368	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R369	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R371-73	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R374	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R375-77	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R378-81	EXB28V330J	COMBI.R-R 33	4	
R382	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R383	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R384	ERJ2GEJ822	M.RESISTOR CH 1/16W 8.2K	1	
R385-88	EXB28V330J	COMBI.R-R 33	4	
R389	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R390-93	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	4	
R394,95	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R396	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R397	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R398	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R399	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R400-03	EXB28V820J	COMBI.R-R 82	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R404-07	EXB28V470J	COMBI.R-R 47	4	
R409	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R410-12	EXB28V100J	COMBI.R-R 10	3	
R417	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R418	EXB28V100J	COMBI.R-R 10	1	
R419-25	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	7	
R426,27	ERJ2GEJ150	M.RESISTOR CH 1/16W 15	2	
R428-31	EXB28V100J	COMBI.R-R 10	4	
R433-35	EXB28V100J	COMBI.R-R 10	3	
R436-39	EXB28V470J	COMBI.R-R 47	4	
R440	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R441	EXB28V100J	COMBI.R-R 10	1	
R442-47	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	6	
R448	ERJ2GEJ471	M.RESISTOR CH 1/16W 470	1	
R449	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R450	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R451	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R452-60	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	9	
R461-64	EXB28V100J	COMBI.R-R 10	4	
R465	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R466	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R468-71	EXB28V100J	COMBI.R-R 10	4	
R472-79	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	8	
R482	EXB28V103J	COMBI.R-R 10K	1	
R487	EXB28V103J	COMBI.R-R 10K	1	
R490-93	EXB28V100J	COMBI.R-R 10	4	
R494	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	FOR VEP03G89B
R495,96	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	2	
R498-00	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	FOR VEP03G89B
R501-03	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	3	
R504	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	FOR VEP03G89B
R508	EXB28V100J	COMBI.R-R 10	1	
R511	EXB28V100J	COMBI.R-R 10	1	
R513	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	FOR VEP03G89B
R515-17	EXB28V100J	COMBI.R-R 10	3	
R518	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R519	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R521,22	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R524	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R525-27	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R528-30	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	3	
R536-38	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	3	
R539-41	ERJ2GEJ820	M.RESISTOR CH 1/16W 82	3	
R542	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R543	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R550-65	EXB28V220J	COMBI.R-R 22	16	
R601-03	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R604	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R606	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R607	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R608	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R609,10	ERJ2GEJ183	M.RESISTOR CH 1/16W 18K	2	
R611	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R612	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R613	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R614,15	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R616-18	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	3	
R619	ERJ2RHD101	M.RESISTOR CH 1/16W 100	1	
R620	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R621	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R624	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R625-27	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R628	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R630,31	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	2	
R632	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R633	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R634	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R635	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R636	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R637	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R638,39	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R701	EXB28V330J	COMBI.R-R 33	1	
R702	EXB28V102J	COMBI.R-R 1K	1	
R703	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R704,05	EXB28V330J	COMBI.R-R 33	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R708	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R709	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R710-12	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	3	
R714	EXB28V472J	COMBI.R-R 4.7K	1	
R716-19	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	4	
R720	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R724-27	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	4	
R736	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	1	
R800,01	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R802	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R803,04	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R805	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R807,08	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R809	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R810	ERJ2RHD471	M.RESISTOR CH 1/16W 470	1	
R811	ERJ2RHD562	M.RESISTOR CH 1/16W 5.6K	1	
R812	ERJ2RHD271	M.RESISTOR CH 1/16W 270	1	
R813	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R814	EXB28V103J	COMBI.R-R 10K	1	
R816-20	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	5	
R821-23	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	3	
R824	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R825	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	1	
R826	ERJ2GEJ512	M.RESISTOR CH 1/16W 5.1K	1	
R827	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R828,29	EXB28V100J	COMBI.R-R 10	2	
R830-38	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	9	
R839-46	EXB28V100J	COMBI.R-R 10	8	
R900	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R901	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R903,04	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	2	
R905,06	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R907	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R908	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R910	EXB28V103J	COMBI.R-R 10K	1	
R911	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R913,14	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R915	ERJ2RKD100	M.RESISTOR CH 1/16W 10	1	
R916	ERJ2RHD121	M.RESISTOR CH 1/16W 120	1	
R917	ERJ2RHD682	M.RESISTOR CH 1/16W 6.8K	1	
R918	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R919-27	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	9	
R928	ERJ2GEJ512	M.RESISTOR CH 1/16W 5.1K	1	
R929,30	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	2	
R931	ERJ2GEJ512	M.RESISTOR CH 1/16W 5.1K	1	
R932	ERJ2GEJ560	M.RESISTOR CH 1/16W 56	1	
R933	ERJ2GEJ512	M.RESISTOR CH 1/16W 5.1K	1	
R935,36	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R937	ERJ2RKD100	M.RESISTOR CH 1/16W 10	1	
R940	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R950	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R954	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R958	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R959-66	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	8	
R967	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R969	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
X50	H0J330500002	CRYSTAL OSCILLATOR	1	
X52	H0J327200115	CRYSTAL OSCILLATOR	1	
X300	H0J327200115	CRYSTAL OSCILLATOR	1	
X301	H0J135500008	CRYSTAL OSCILLATOR	1	
X400	H0J180500011	CRYSTAL OSCILLATOR	1	
X800	H0J245500021	CRYSTAL OSCILLATOR	1	
X900	H0J245500021	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC5802	BE HEAT SINK	1	
	VMG1728	HEAT SINK PAD	1	
	C3FBQY000004	IC	1	
	C3FBQY000004	IC	1	
	VGQ8094	COOLING SHEET CR	5	
	XQN2+B4FN	SCREW	2	
	VJF1256	CABLE CLAMPER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E4	VEP001M6A	R SIDE C.B.A.	1	(RTL)
C1000	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1001-03	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	3	
C1004	F3H1C476A049	T.CAPACITOR CH 16V 47U	1	
C1005	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C1006	F1K1E225A047	C.CAPACITOR CH 25V 2.2U	1	
C1007	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1008	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C1011	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C1012	F3H1V106A040	T.CAPACITOR CH 35V 10U	1	
C1014	F3G1A476A029	T.CAPACITOR CH 10V 47U	1	
C1015	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C1016	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1017-19	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	3	
C1021	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C1022,23	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C1024,25	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	2	
C1026-28	F1H0J2250003	C.CAPACITOR CH6.3V 2.2U	3	
C1029	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1035	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1036,37	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
D1000-06	MA142WA	DIODE	7	
D1008-11	MA142WA	DIODE	4	
D1013,14	MA142WA	DIODE	2	
IC1000	C0JBAS000249	IC	1	
IC1001	C0JBAC000338	IC	1	
IC1002	C0JBAZ001003	IC	1	
IC1003	C0JBAZ001591	IC	1	
IC1004	C0JBAZ002162	IC	1	
IC1005	C0CBAGE00012	IC	1	
IC1006	C1AB00002422	IC	1	
L1000	G1C100KA0055	COIL 10UH	1	
L1001,02	J0JCC0000405	FERRITE CORE	2	
L1003	G1C100KA0068	COIL 10UH	1	
L1004	G1C220KA0055	COIL 22UH	1	
L1005	J0JCC0000405	FERRITE CORE	1	
L1006	G1C100KA0055	COIL 10UH	1	
L1008	G1C100KA0068	COIL 10UH	1	
P1000	K1MN45B00029	CONNECTOR	1	
P1001	K1MN12BA0059	CONNECTOR	1	
P1002	K1MN06BA0252	CONNECT	1	
P1003	K1MN30BA0059	CONNECTOR	1	
Q1000-02	XP0431N00L	TRANSISTOR	3	
Q1003	2SB09560HL	TRANSISTOR	1	
Q1004	2SD2216J0L	TRANSISTOR	1	
R1000-05	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	6	
R1006,07	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R1008	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R1009	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R1011	ERJ2GEJ332	M.RESISTOR CH 1/16W 3.3K	1	
R1012	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1014-16	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	3	
R1017,18	J0JCC0000407	FILTER	2	
R1019	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1020,21	J0JCC0000407	FILTER	2	
R1023-25	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	3	
R1026	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1028-44	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	17	
R1045,46	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R1047-54	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	8	
R1055-67	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	13	
R1068-79	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	12	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
SW1000,01	K0H1BA000442	SWITCH	2	
SW1002	K0D123A00076	SWITCH	1	
SW1003-06	K0H1BA000442	SWITCH	4	
SW1007	K0D122A00126	SWITCH	1	
SW1008	EVQPLPA08	SWITCH	1	
SW1009	K0D122A00126	SWITCH	1	
SW1010	EVQPLPA08	SWITCH	1	
SW1011	K0D112B00055	SWITCH	1	
SW1012	K0D122A00126	SWITCH	1	
SW1013,14	EVQPLPA08	SWITCH	2	
SW1015	K0KABA000013	SWITCH	1	
SW1016	EVQPLPA08	SWITCH	1	
SW1017-19	K0H1BA000442	SWITCH	3	
■ E5	VEP06G20A	CAM OP1 C.B.A.	1	(RTL)
D100-02	MA142WA	DIODE	3	
P100	K1MN12BA0059	CONNECTOR	1	
P101	K1MN06BA0252	CONNECT	1	
R102,03	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R106,07	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
SW100	K0D113B00029	SWITCH	1	
SW101,02	EVQPLPA08	SWITCH	2	
■ E6	VEP06G21A	CAM OP2 C.B.A.	1	(RTL)
D200	MA142WA	DIODE	1	
P200	K1MN06BA0252	CONNECT	1	
SW200	EVQPLPA08	SWITCH	1	
SW201	K9AA01500015	SWITCH	1	
■ E7	VEP06G22A	CAM OP3 C.B.A.	1	(RTL)
D300,01	MA142WA	DIODE	2	
P300	K1MN06BA0252	CONNECT	1	
SW300,01	K0E112A00124	SWITCH	2	
■ E8	VEP01978A	POW C.B.A.	1	(RTL)
C1002,03	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C1008	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1009	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1010,11	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	2	
C1104	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1106	ECJ0EB1C153K	C.CAPACITOR CH 16V 0.015U	1	
C1107	ECUX1C683KBV	C.CAPACITOR CH 16V 0.068U	1	
C1108	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C1109	ECUX1H181JCQ	C.CAPACITOR CH 50V 180P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1112	ECJ0EB1E682K	C.CAPACITOR CH 25V 6800P	1	
C1116	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1117	ECJ0EB1E682K	C.CAPACITOR CH 25V 6800P	1	
C1118	ECJ0EB1C153K	C.CAPACITOR CH 16V 0.015U	1	
C1120	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1122	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1124	ECJ0EB1E682K	C.CAPACITOR CH 25V 6800P	1	
C1125	ECJ0EC1H330J	C.CAPACITOR CH 50V 33P	1	
C1126	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1127	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	
C1129	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1132,33	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	2	
C1134-38	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	5	
C1139-43	ECJ0EB1H331K	C.CAPACITOR CH 50V 330P	5	
C1144,45	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C1156,57	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	2	
C1158,59	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	2	
C1160	ECJ2FB1A475K	C.CAPACITOR CH 10V 4.7U	1	
C1161-63	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	3	
C1164,65	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	2	
C1166	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1167	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C1168	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C1169	ECJ2FB1E105K	C.CAPACITOR CH 25V 1U	1	
C1172	ECJ2FB1E105K	C.CAPACITOR CH 25V 1U	1	
C1173	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1176	ECJ2FB1E105K	C.CAPACITOR CH 25V 1U	1	
C1177	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1179	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C1180	F1H1E154A050	C.CAPACITOR CH 25V 0.15U	1	
C1181	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C1184	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1186	F3G1C226A022	T.CAPACITOR CH 16V 22U	1	
C1188	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1192	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1195	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1196	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1198,99	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C1200	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1201	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1205,06	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C1208	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1209	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1210	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1214,15	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C1216	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1217	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1218	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1220-22	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	3	
C1224	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1225	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1226	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C1227	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1228	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1232	F1G1C473A004	C.CAPACITOR CH 16V 0.047U	1	
C1233,34	ECJ0EB1C822K	C.CAPACITOR CH 16V 8200P	2	
C1235	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1236,37	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	2	
C1238	F1G1C473A004	C.CAPACITOR CH 16V 0.047U	1	
C1302	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C1304	ECJ0EB1C153K	C.CAPACITOR CH 16V 0.015U	1	
C1305	ECUX1C683KBV	C.CAPACITOR CH 16V 0.068U	1	
C1306	ECJ0EC1H560J	C.CAPACITOR CH 50V 56P	1	
C1307	ECUX1H181JCQ	C.CAPACITOR CH 50V 180P	1	
C1310	ECJ0EB1E682K	C.CAPACITOR CH 25V 6800P	1	
C1314	ECJ0EB1E682K	C.CAPACITOR CH 25V 6800P	1	
C1315	ECJ0EB1C153K	C.CAPACITOR CH 16V 0.015U	1	
C1316	ECJ0EC1H390J	C.CAPACITOR CH 50V 39P	1	
C1318	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1319	ECJ0EB1H332K	C.CAPACITOR CH2.5V 3300P	1	
C1322	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1323	ECUX1H120JCQ	C.CAPACITOR CH 50V 12P	1	
C1324	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C1325	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1327	ECJ0EC1H820J	C.CAPACITOR CH 50V 82P	1	

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1329	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C1331	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C1332-35	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	4	
C1336-39	ECJ0EB1H331K	C.CAPACITOR CH 50V 330P	4	
C1340	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1349	ECJ0EB1H331K	C.CAPACITOR CH 50V 330P	1	
C1350	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C1352	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C1353	EEFUE0J151	E.CAPACITOR 6.3V 150P	1	
C1354-57	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	4	
C1358-61	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	4	
C1366,67	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C1368	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C1369,70	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C1371	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1372	EEFUE0J151	E.CAPACITOR 6.3V 150P	1	
C1373	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1374	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1375	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1377	F1G1C473A004	C.CAPACITOR CH 16V 0.047U	1	
C1378,79	ECJ0EB1C822K	C.CAPACITOR CH 16V 8200P	2	
C1380	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1381,82	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	2	
C1383	F1G1C473A004	C.CAPACITOR CH 16V 0.047U	1	
C1388	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1390	EEFCD1C8R2R	E.CAPACITOR 16V 8.2U	1	
C1601	F1J1A2250009	C.CAPACITOR CH 10V 2.2U	1	
C1602	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1603	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	
C1606	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1607	F1H1C224A074	C.CAPACITOR CH 16V 0.22U	1	
C1609	F1J1A2250009	C.CAPACITOR CH 10V 2.2U	1	
C1611	ECJ0EB1H331K	C.CAPACITOR CH 50V 330P	1	
C1641	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C1657	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1658-62	F1L2A105A010	C.CAPACITOR CH100V 1U	5	
C1664	F1L2A105A010	C.CAPACITOR CH100V 1U	1	
C1666,67	ECJ2FB1C225K	C.CAPACITOR CH 16V 2.2U	2	
C1668	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
D1001,02	B0ADDJ000019	DIODE	2	
D1003	MAZ80620HL	DIODE	1	
D1004	B0BC4R200016	DIODE	1	
D1005	MA8130-M	DIODE	1	MAZ8130ML
D1006	NSD03A20	DIODE	1	
D1007	MA2S11100L	DIODE	1	
D1009	MA8100-M	DIODE	1	MAZ8100ML
D1010,11	MA2S11100L	DIODE	2	
D1012	MAZ80620HL	DIODE	1	
D1013-16	MA2S11100L	DIODE	4	
D1020	MA2S11100L	DIODE	1	
D1101-07	MA2S11100L	DIODE	7	
D1109,10	MA22D2800L	DIODE	2	
D1111,12	MA2Z00100L	DIODE	2	
D1113	B0HCMM000014	DIODE	1	
D1114	MA2Z00100L	DIODE	1	
D1115	MA2S11100L	DIODE	1	
D1117	MAZ81800HL	DIODE	1	
D1118	MA2S11100L	DIODE	1	
D1120	MA2S11100L	DIODE	1	
D1122,23	MA2S11100L	DIODE	2	
D1128,29	MA22D2800L	DIODE	2	
D1301-06	MA2S11100L	DIODE	6	
D1308	B0JCPD000030	DIODE	1	
D1309,10	MA22D2800L	DIODE	2	
D1311	MA3J70000L	DIODE	1	
D1312	MA8130-M	DIODE	1	MAZ8130ML
D1313	MA2S11100L	DIODE	1	
D1315,16	MA2S11100L	DIODE	2	
D1317	MA22D2800L	DIODE	1	
D1601	MA2S11100L	DIODE	1	
D1642	MA3S132E0L	DIODE	1	
D1651	B0HCMM000014	DIODE	1	
D1652,53	MAZ82700ML	DIODE	2	
D1654	MA2S11100L	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1655	MAZ82200ML	DIODE	1	
⚠ F1001	K5H402300003	FUSE	1	
IC1001	C0EBH0000254	IC	1	
IC1103	C0DBAZZ00094	IC	1	
IC1105	C0CBCAC00207	IC	1	
IC1301	C0DBAZZ00094	IC	1	
IC1651	BA9743AFV	IC	1	C0DBAZC00010
L1005	G1C3R7MA0240	COIL 3.7UH	1	
L1101-05	J0JBC0000107	FILTER	5	
L1106	G1C330MA0085	COIL 33UH	1	
L1107	G1C181MA0024	COIL 180UH	1	
L1108	G1A470EA0018	COIL 47UH	1	
L1109	G1A680EA0017	COIL 68UH	1	
L1110	G1A220F00008	COIL 22UH	1	
L1111	G1C220M00044	COIL 22UH	1	
L1112-15	G1C100KA0055	COIL 10UH	4	
L1116	G1C4R7MA0072	COIL 4.7UH	1	
L1117	G1C4R7MA0076	COIL 4.7UH	1	
L1118	G1C4R7MA0072	COIL 4.7UH	1	
L1120	G1C3R9MA0024	COIL 3.9UH	1	
L1122	G1C3R9MA0024	COIL 3.9UH	1	
L1124-26	G1C4R7MA0076	COIL 4.7UH	3	
L1127	G1C4R7MA0072	COIL 4.7UH	1	
L1129,30	G1C4R7MA0076	COIL 4.7UH	2	
L1132	G1C3R9MA0024	COIL 3.9UH	1	
L1133,34	G1C4R7MA0076	COIL 4.7UH	2	
L1301-05	J0JBC0000107	FILTER	5	
L1306	G1A470EA0018	COIL 47UH	1	
L1308	G1C220Z00008	COIL 22UH	1	
L1309	G1A220HA0032	COIL 22UH	1	
L1310	G1C150MA0182	COIL 15UH	1	
L1311	G1A220HA0032	COIL 22UH	1	
L1312	G1C100KA0055	COIL 10UH	1	
L1313	G1C4R7MA0076	COIL 4.7UH	1	
L1314	G1C3R9MA0024	COIL 3.9UH	1	
L1316	G1C2R2ZA0040	COIL 2.2UH	1	
L1317	G1C2R2MA0182	COIL 2.2UH	1	
L1318	G1C3R9MA0024	COIL 3.9UH	1	
L1319	G1C100KA0055	COIL 10UH	1	
L1601	J0JBC0000107	FILTER	1	
L1652	G1C150ZA0059	COIL 15UH	1	
L1653	G1C100KA0055	COIL 10UH	1	
P1001	K1KA05BA0104	CONNECTOR (MALE)	1	
P1011	K1KAA0AA0592	CONNECTOR (MALE)	1	
P1012	K1KB40AA0181	CONNECTOR (FEMALE)	1	
Q1001	2SD2216J0L	TRANSISTOR	1	
Q1003	B1DHEC000011	TRANSISTOR	1	
Q1010	B1DHEC000011	TRANSISTOR	1	
Q1011	2SB1462J0L	TRANSISTOR	1	
Q1101-05	2SD2216J0L	TRANSISTOR	5	
Q1106-10	XP4401	TRANSISTOR-RESISTOR	5	
Q1111,12	B1ZBZ0000040	TRANSISTOR	2	
Q1113-16	B1DHCC000035	TRANSISTOR	4	
Q1117	B1DFDL000003	TRANSISTOR	1	
Q1118,19	B1DFCD000012	TRANSISTOR	2	
Q1120	2SD2216J0L	TRANSISTOR	1	
Q1124	B1DHCC000035	TRANSISTOR	1	
Q1125	2SD2216J0L	TRANSISTOR	1	
Q1126	B1DHCC000035	TRANSISTOR	1	
Q1127,28	B1DFCC000012	TRANSISTOR	2	
Q1129	2SD2216J0L	TRANSISTOR	1	
Q1130	B1DHCC000035	TRANSISTOR	1	
Q1301-05	2SD2216J0L	TRANSISTOR	5	
Q1306-09	XP4401	TRANSISTOR-RESISTOR	4	
Q1310	B1DHCC000035	TRANSISTOR	1	
Q1311	XP4401	TRANSISTOR-RESISTOR	1	
Q1312	B1DHCC000035	TRANSISTOR	1	
Q1313,14	B1CHRC000001	TRANSISTOR	2	
Q1315	B1CFRD000002	TRANSISTOR	1	
Q1316	B1CHRC000001	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q1317	B1CFRD000002	TRANSISTOR	1	
Q1323	B1DFCD000012	TRANSISTOR	1	
Q1331	2SD2216J0L	TRANSISTOR	1	
Q1601	2SB1462J0L	TRANSISTOR	1	
Q1602	2SD2216J0L	TRANSISTOR	1	
Q1641	B1DHCC000035	TRANSISTOR	1	
Q1651	XP0460100L	TRANSISTOR	1	
Q1653	B1DFDL000003	TRANSISTOR	1	
Q1656	2SD1979	TRANSISTOR	1	
Q1657	2SB1220-R	TRANSISTOR	1	
Q1658	2SD2216J0L	TRANSISTOR	1	
QR1001	UNR9115J0L	TRANSISTOR	1	
QR1002,03	UNR9113J0L	TRANSISTOR	2	
QR1004	UNR911DJ0L	TRANSISTOR	1	
QR1005	UNR9214J0L	TRANSISTOR	1	
QR1007	UNR9213J0L	TRANSISTOR	1	
QR1008	UNR9113J0L	TRANSISTOR	1	
QR1009	UNR9213J0L	TRANSISTOR	1	
QR1101	UNR9113J0L	TRANSISTOR	1	
QR1102	UNR9211J0L	TRANSISTOR	1	
QR1103	UNR9213J0L	TRANSISTOR	1	
QR1104	UNR9113J0L	TRANSISTOR	1	
QR1105	UNR9213J0L	TRANSISTOR	1	
QR1107	UNR9213J0L	TRANSISTOR	1	
QR1301	UNR9113J0L	TRANSISTOR	1	
QR1303	UNR9213J0L	TRANSISTOR	1	
QR1641,42	UNR9213J0L	TRANSISTOR	2	
QR1651	UNR9111J0L	TRANSISTOR	1	
R1001	ERJ2GEJ151	M.RESISTOR CH 1/16W 150	1	
R1002,03	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	2	
R1004	ERJ2RHD222	M.RESISTOR CH 1/16W 2.2M	1	
R1005,06	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	2	
R1007	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1008	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1009	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R1011	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R1012	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1013	ERJ2RHD222	M.RESISTOR CH 1/16W 2.2M	1	
R1015	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1016	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1017	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1018	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1020,21	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	2	
R1029	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R1104	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1105	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1106,07	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R1109,10	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R1111	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R1112	ERJ2RHD243	M.RESISTOR CH 1/16W 24K	1	
R1113	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	1	
R1114	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1116,17	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R1118	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R1119	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1120	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R1121	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R1122	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1123	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1124	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1125	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1126	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1127	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1129	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1130	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R1131	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1132	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1133	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R1134	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1135	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1136	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1137-39	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	3	
R1142	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1143,44	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	2	
R1145	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R1146	ERJ2RHD561	M.RESISTOR CH 1/16W 560	1	
R1147	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1148	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1150	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R1151	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1152	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1153	ERJ2RHD561	M.RESISTOR CH 1/16W 560	1	
R1154	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1155	ERJ2RKD224	M.RESISTOR CH 1/16W 220K	1	
R1156	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1157-61	ERJ8RSJR10	M.RESISTOR CH 1/8W 0.1	5	
R1162	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1163	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1164	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1165	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1166	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1167	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1168	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1169	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1170	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1171	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1172	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1173-76	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	4	
R1178	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1183-87	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
R1188,89	ERJ6GEYG220	M.RESISTOR CH 1/10W 22	2	D0GD220JA003
R1190,91	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R1194	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1195	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1200,01	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	D0YDR0000005
R1202	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
R1203	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1204	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
R1205	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1208	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1215	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1216	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1220	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1222	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1227	ERJ2GEJ824	M.RESISTOR CH 1/16W 820K	1	
R1229,30	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	2	
R1231	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1232,33	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R1234	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1236	ERJ2GEJ824	M.RESISTOR CH 1/16W 820K	1	
R1238	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1240	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1247,48	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R1251	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1252-58	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	7	
R1260	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1262	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1272	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1274	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1301	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1302	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1303	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1305	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1307,08	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	2	
R1309	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1310	ERJ2RHD113	M.RESISTOR CH 1/16W 11K	1	
R1311	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R1312	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1313	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1314	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1315	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1316	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R1317	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1318	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R1319	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	
R1320	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R1321	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1322	ERJ2GEOR00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1324	ERJ2RHD222	M.RESISTOR CH 1/16W 2.2M	1	
R1325	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1326	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1327	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1329	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R1330	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1331	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1332	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1333	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1334	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1335	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R1336	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1337	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1339	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1340	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1341	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R1342	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R1343	ERJ2RHD123	M.RESISTOR CH 1/16W 12K	1	
R1345	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1346	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1347	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1348	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1349	ERJ2RKD154	M.RESISTOR CH 1/16W 150K	1	
R1350	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1351	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1352	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1353-56	ERJ8RSJR10	M.RESISTOR CH 1/8W 0.1	4	
R1357	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1358	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1359	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1360	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1361	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1362	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1363	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1364	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1365	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1366-69	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	4	
R1374	ERJ8RSJR10	M.RESISTOR CH 1/8W 0.1	1	
R1375-78	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R1379	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1380	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1381	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1383	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1384	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1386-88	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	D0YDR0000005
R1395	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1409-15	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	7	
R1417	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1418	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1422	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1428	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1429	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1601	ERJ2RHD243	M.RESISTOR CH 1/16W 24K	1	
R1602	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R1603,04	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	2	
R1606	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1607	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
R1608	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1609	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1610	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
R1612	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
R1613	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R1614	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1615	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1616	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R1617	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1619	ERJ2RHD392	M.RESISTOR CH 1/16W 3.9K	1	
R1625	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1641	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R1642	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1644	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R1648	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1661	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R1662	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1669	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1672	ERJ6GEYJ5R6	M.RESISTOR CH 1/10W 5.6	1	D0GD5R6JA003
R1676	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1681	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R1682,83	ERJ6GEYJ1R0	M.RESISTOR CH 1/10W 1	2	
R1684	ERJ6GEYJ2R2	M.RESISTOR CH 1/10W 2.2	1	
R1685	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1686,87	ERJ2RKD224	M.RESISTOR CH 1/16W 220K	2	
R1688	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1689	ERJ2RHD102	M.RESISTOR CH 1/16W 1K	1	
R1693	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1694	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
T1101	G5DYA0000109	TRANSFORMER	1	
■ E9	VEP03G92B	P2 CARD C.B.A.	1	(RTL)
C106	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C107	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C108	EEFUE0J151	E.CAPACITOR 6.3V 150P	1	
C109	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C201	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C202-04	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	3	
C205	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C206,07	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C208	F1G1A474A018	C.CAPACITOR CH 10V 0.47U	1	
C209	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C210	F1G1A474A018	C.CAPACITOR CH 10V 0.47U	1	
C211	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C214	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C215	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C216	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C217	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C218,19	ECJ0EB1H271K	C.CAPACITOR CH 50V 270P	2	
C221	ECUX1H181JCQ	C.CAPACITOR CH 50V 180P	1	
C222	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C223	ECUX1H181JCQ	C.CAPACITOR CH 50V 180P	1	
C224	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C225,26	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C229	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C230-35	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	6	
C238-42	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	5	
C243,44	ECUX1H181JCQ	C.CAPACITOR CH 50V 180P	2	
C245	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C400	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C401,02	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	2	
C403-05	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	3	
C406	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C407-19	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	13	
C420	ECJ0EC1H080C	C.CAPACITOR CH 50V 8P	1	
C421	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C422	ECJ0EC1H080C	C.CAPACITOR CH 50V 8P	1	
C423	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C424	ECJ0EB1H102K	C.CAPACITOR CH 50V 1000P	1	
D100-03	LNJ115W88RA	DIODE	4	
D400	B0KB00000041	DIODE	1	
D401,02	D4ED12700007	DIODE	2	
IC200	C1DB00001181	IC	1	
IC201	C1DB00001179	IC	1	
IC202	C1DB00001209	IC	1	
IC203,04	C0JBAA000359	IC	2	
IC400	C0CBAAD00023	IC	1	
IC401	C1DB00001355	IC	1	
J100,01	K4CD01000017	TERMINAL	2	
L100	J0JBC0000019	FILTER	1	
L200-02	J0JBC0000019	FILTER	3	
L204	J0JBC0000019	FILTER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L205-08	J0JKC0000009	FILTER	4	
L209-11	J0JDC0000102	FILTER	3	
L400-03	J0JBC0000019	FILTER	4	
L405,06	J0JCC0000122	FILTER	2	
P100	K1KA70BA0028	CONNECTOR (FEMALE)	1	
P101	K1KA70A00051	CONNECTOR (MALE)	1	
P102	K1KA70BA0028	CONNECTOR (FEMALE)	1	
P104	K1MN16BA0059	CONNECTOR	1	
P200	K1NA68E00091	CONNECTOR	1	
P201	K1NA68E00090	CONNECTOR	1	
P400	K1FY105E0001	CONNECTOR	1	
Q100	B1DHCC000035	TRANSISTOR	1	
Q102,03	XP0411500L	TRANSISTOR	2	
QR100	UNR21150OL	TRANSISTOR	1	
R100-09	EXB28V330J	COMBI.R-R 33	10	
R110	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R111-15	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	5	
R117-20	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R121	ERJ2GEJ271	M.RESISTOR CH 1/16W 270	1	
R122	EXB28V330J	COMBI.R-R 33	1	
R123,24	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R126	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R127	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R128,29	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R134-40	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	7	
R145	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R146	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	DOYDR0000005
R148,49	ERJ2GEJ181	M.RESISTOR CH 1/16W 180	2	
R150	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R151	ERJ2GEJ181	M.RESISTOR CH 1/16W 180	1	
R152	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R153	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R154	EXB28V473J	COMBI.R-R 47K	1	
R155,56	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R157,58	ERJ2GEJ181	M.RESISTOR CH 1/16W 180	2	
R159,60	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	2	
R200-10	EXB28V100J	COMBI.R-R 10	11	
R211	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R212	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R213	ERJ2GEJ100	M.RESISTOR CH 1/16W 10	1	
R214	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	1	
R215	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R217	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R218	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R219	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R221	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R222	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R223	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R224	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R226	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R229-31	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R233	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R235	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R238	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R242-44	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	3	
R245	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R248,49	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R251	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R253	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R256	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R258	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R260	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R261	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R262-76	EXB28V750J	COMBI.R-R 75	15	
R277-79	ERJ2GEJ750	M.RESISTOR CH 1/16W 75	3	
R280,81	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R282	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R286	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R287	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R292	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R293	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R297	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R298,99	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R300-02	ERJ2GEJ750	M.RESISTOR CH 1/16W 75	3	
R303-17	EXB28V750J	COMBI.R-R 75	15	
R318	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R319	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R400-11	EXB28V100J	COMBI.R-R 10	12	
R412	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R413,14	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R416	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R417	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R418	ERJ6ENF2431	M.RESISTOR CH 1/10W 430	1	
R419,20	ERJ6ENF39R2	M.RESISTOR CH 1/10W 39	2	
R421	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R422	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R423	ERJ6ENF2432	M.RESISTOR CH 1/10W 4.3K	1	
R424	ERJ2GEJ1R0	M.RESISTOR CH 1/16W 1	1	
R426	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R427	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R428	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
R429	ERJ2GEJ1R0	M.RESISTOR CH 1/16W 1	1	
TH100	D4CC11030012	THERMISTOR	1	
U200	K1YYZZ000066	CONNECTOR ACCESSORY	1	
U202	K1YYZZ000065	CONNECTOR ACCESSORY	1	
X400	H0J300500011	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMP8554	P2 CARD ANGLE A	1	
	VMP8555	P2 CARD ANGLE B	1	
	VMZ3478	CARD SLOT BARRIER B	1	
	VMZ3630	P2 CAR4D BARRIER2	1	
	XQN2+B4FN	SCREW	4	
	VEE1C36	EGG LUG CABLE	1	
■ E10	VEP03G91A	MECHA IF C.B.A.	1	(RTL)
C2	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C4	ECJ0EC1H470J	C.CAPACITOR CH 50V 47P	1	
C5	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C6	ECJ0EB1H681K	C.CAPACITOR CH 50V 680P	1	
C7	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C8	F3H1C476A049	T.CAPACITOR CH 16V 47U	1	
C9	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C10	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C12-15	ECJ0EC1H080D	C.CAPACITOR CH 50V 8P	4	
C16-20	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C21	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C22	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C23	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C24	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C25	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C26	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C27	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C28	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C29	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C30	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C31	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C33	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C34	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C35	ECJ0EC1H470J	C.CAPACITOR CH 50V 47P	1	
C36-41	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	6	
C42	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C43-49	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	7	
D1	MA3S13300L	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC1	AN3732FJMEFV	IC	1	
IC2	C0ABAA000046	IC	1	
IC3	C1AB00002122	IC	1	
IC4-10	C0JBAB000634	IC	7	
L1	G1C220KA0055	COIL 22UH	1	
L2	G1C101KA0055	COIL 100UH	1	
P1	K1MN71BA0132	CONNECTOR	1	
P2	K1KA02BA0047	CONNECTOR (MALE)	1	
P3	K1MN08AA0068	CONNECTOR	1	
P4	K1MN08BA0060	CONNECTOR	1	
P5	K1MN10BA0051	CONNECTOR	1	
P6,P7	K1MN18BA0051	CONNECTOR	2	
Q1	2SD1820A0L	TRANSISTOR	1	
R2-R5	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R9-14	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	6	
R15,16	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2	
R17,18	ERJ2GEJ330	M.RESISTOR CH 1/16W 33	2	
R20	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R23	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R24	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R25	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R26-29	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	4	
R30-33	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	4	
R34	ERJ2RHD563	M.RESISTOR CH 1/16W 56K	1	
R35	ERJ2RHD393	M.RESISTOR CH 1/16W 39K	1	
R36	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R37,38	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	2	
R39	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R40,41	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	2	
R42	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R43	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R44	ERJ8GEYJR68	M.RESISTOR CH 1/8W 0.68	1	
R45,46	ERJ8RQJR27	M.RESISTOR CH 1/8W 0.27	2	
R47	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R48	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R49	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R50	ERJ2RHD273	M.RESISTOR CH 1/16W 27K	1	
R52-55	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	4	
R56	ERJ2GEJ474	M.RESISTOR CH 1/16W 470K	1	
R57	ERJ2GEJ824	M.RESISTOR CH 1/16W 820K	1	
R58	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R59-61	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	3	
R62	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	1	
SW1	K0L1BB000022	SWITCH	1	
■ E11	VEP04904A	SIDE JACK C.B.A.	1	(RTL)
C105,06	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	2	
C107	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C108	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	1	
C109	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	1	
C111,12	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	2	
J100	K2HD103B0015	JACK	1	
J101	K2HC106B0010	AC POWER PLUG	1	
P101	K1MN12AA0018	CONNECTOR	1	
R201-06	ERJ3RBD331	M.RESISTOR CH 1/16W 330	6	
■ E12	VEP001P2A	SD CARD C.B.A.	1	(RTL)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C400	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C401	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C402	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
D400	LNJ310M6URA	DIODE	1	
P400	K1NA13E00009	CONNECTOR	1	
P401	K1MN16AA0018	CONNECTOR	1	
R400	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R401-06	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	6	
R407-09	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
■ E13	VEP001N3A	BOTTOM CON C.B.A.	1	(RTL)
P601,02	K1KA70A00051	CONNECTOR (MALE)	2	
■ E14	VEP001M1A	TOP OP C.B.A.	1	(RTL)
C100,01	ECJ2FB1E105K	C.CAPACITOR CH 25V 1U	2	
C102-04	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	3	
C200	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C201	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C202	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C203,04	F3H1C226A063	T.CAPACITOR CH 25V 22U	2	
C205,06	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C207	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C208	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C210-13	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	4	
C214,15	F3H1A107A072	T.CAPACITOR CH 10V 100U	2	
C216	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C217	F1K1A225A007	C.CAPACITOR CH 10V 2.2U	1	
C218,19	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C220	F1K1A225A007	C.CAPACITOR CH 10V 2.2U	1	
C221	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C222	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C223	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C224-26	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	3	
C227-29	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	3	
C230	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C231	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C232	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C233,34	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	2	
C235	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C236	F3H1A107A072	T.CAPACITOR CH 10V 100U	1	
C237	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C238	ECJ1VB1A224K	T.CAPACITOR CH 10V 0.22U	1	
C239	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C240	ECJ1VB1A224K	T.CAPACITOR CH 10V 0.22U	1	
C241	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C242	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C243-45	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	3	
C246	F3H1A107A072	T.CAPACITOR CH 10V 100U	1	
C249,50	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C251,52	F3G1A226A035	T.CAPACITOR CH6.3V 22U	2	
C256	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C257,58	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C261,62	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	2	
C267	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C272	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C273	F1J0J475A008	C.CAPACITOR CH6.3V 4.7U	1	
C274	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C275	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C278	ECJ2FB0J106K	C.CAPACITOR CH 50V 10U	1	
C279	F3H1C476A064	T.CAPACITOR CH 16V 47U	1	
C284,85	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C286-89	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C300	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C301	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C302	ECJ0EB1E103K	C.CAPACITOR CH 25V 0.01U	1	
C303,04	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C305	F1K1E225A047	C.CAPACITOR CH 25V 2.2U	1	
C306-09	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	4	
C310	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C311,12	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C313	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C314,15	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C316	F1K1A225A007	C.CAPACITOR CH 10V 2.2U	1	
C317,18	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	2	
C319	F1K1A225A007	C.CAPACITOR CH 10V 2.2U	1	
C320	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C321	F1K1A225A007	C.CAPACITOR CH 10V 2.2U	1	
C322	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C323	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	1	
C324	F1K1E225A047	C.CAPACITOR CH 25V 2.2U	1	
C500-04	ECJ0EB1A104K	C.CAPACITOR CH 10V 0.1U	5	
C601	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	1	
C603	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C605	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C607	F3H1V106A049	T.CAPACITOR CH 35V 10U	1	
C608,09	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	2	
C610-13	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	4	
C618,19	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	2	
C620-24	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	5	
C625	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C626	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C627	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C700	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C702	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C724,25	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	2	
D200	MA2SD2400L	DIODE	1	
D202	MA3J142D0L	DIODE	1	
D203	MA142WK	DIODE	1	
D204	MA3J14300L	DIODE	1	
D205	MA142WK	DIODE	1	
D211	MA3J142D0L	DIODE	1	
D212	MA142WK	DIODE	1	
D300	MA111	DIODE	1	
D302	MA3S13300L	DIODE	1	
D400-05	MA3S781D0L	DIODE	6	
D601	MA111	DIODE	1	
IC100	C0CBCDC00008	IC	1	
IC200	C0JBAB000675	IC	1	
IC201,02	C1AB00001894	IC	2	
IC203	C0CBCBC00053	IC	1	
IC207	C0BBBA000024	IC	1	
IC210	C0ABZA000033	IC	1	
IC211	C0ABBA000163	IC	1	
IC300	C0JBAZ001003	IC	1	
IC301	C0JBAZ001591	IC	1	
IC303	C1AB00002422	IC	1	
IC304	C0JBAZ002162	IC	1	
IC500	C0JBAB000675	IC	1	
IC501,02	C0JBAQ000148	IC	2	
IC503	C0JBAS000251	IC	1	
IC504	C0JBAZ001648	IC	1	
IC601	AN77L09M	IC	1	
IC602,03	C0ZBZ0000043	IC	2	
IC604,05	C0ABBB000271	IC	2	
L200,01	J0JCC0000119	FILTER	2	
L202	G1C100KA0055	COIL 10UH	1	
L203	J0JCC0000119	FILTER	1	
L204,05	J0JAC0000014	FILTER	2	
L206-16	G1C100KA0055	COIL 10UH	11	
L218	G1C100KA0055	COIL 10UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L300,01	G1C220KA0055	COIL 22UH	2	
L302	G1C100KA0055	COIL 10UH	1	
L303-07	J0JCC0000405	FERRITE CORE	5	
L600,01	J0JBC0000019	FILTER	2	
P100	K1MN45B00033	CONNECTOR	1	
P101	K1KY70A00002	CONNECTOR	1	
P102	K1MN06BA0252	CONNECT	1	
P103	K1MN12BA0059	CONNECTOR	1	
P104	K1KA50AA0044	CONNECTOR (MALE)	1	
P105	K1MN06BA0252	CONNECT	1	
P107	K1KA80BA0028	CONNECTOR (MALE)	1	
P600	K1KA12BA0108	CONNECTOR (MALE)	1	
Q200-02	B1ABBE000002	TRANSISTOR	3	
Q203,04	2SD1979	TRANSISTOR	2	
Q205,06	2SB1219A	TRANSISTOR	2	
Q211,12	2SD1979	TRANSISTOR	2	
Q301,02	B1ADGD000005	TRANSISTOR	2	
Q303	2SB1218A0L	TRANSISTOR	1	
Q304	XP1501	TRANSISTOR-RESISTOR	1	XP0150100L
Q305	XP0431N00L	TRANSISTOR	1	
Q306	2SD2216J0L	TRANSISTOR	1	
Q307	2SB1462J0L	TRANSISTOR	1	
Q700	2SD1819A-R	TRANSISTOR	1	
QR200	UNR9113J0L	TRANSISTOR	1	
QR204	UNR9113J0L	TRANSISTOR	1	
QR205	UNR9213J0L	TRANSISTOR	1	
QR207,08	UNR9213J0L	TRANSISTOR	2	
QR300,01	UNR9213J0L	TRANSISTOR	2	
QR600-03	UNR9213J0L	TRANSISTOR	4	
QR604-07	UNR9113J0L	TRANSISTOR	4	
R100	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R102,03	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R105	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R107,08	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R110	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R111	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R113-19	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	7	
R120,21	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R200	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R201	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R203,04	ERJ2RKD100	M.RESISTOR CH 1/16W 10	2	
R205	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R206	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R207,08	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	2	
R209	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R210	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R211,12	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	2	
R213,14	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R218-20	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	3	
R224-26	ERJ3RED680	M.RESISTOR CH 1/16W 68	3	
R230,31	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R232,33	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R236	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R237	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R238	ERJ2GEJ562	M.RESISTOR CH 1/16W 5.6K	1	
R239	ERJ2GEJ272	M.RESISTOR CH 1/16W 2.7K	1	
R243	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R245	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R248,49	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R250	ERJ2GEJ203	M.RESISTOR CH 1/16W 20K	1	
R253	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R255,56	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R257	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R258	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R259	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R260	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R261	ERJ2GEJ105	M.RESISTOR CH 1/16W 1M	1	
R269,70	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	2	
R271	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R273	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R277,78	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R279	ERJ2RHD472	M.RESISTOR CH 1/16W 4.7K	1	
R280,81	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	2	
R282,83	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	2	
R284-87	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	4	
R288	ERJ2RHD472	M.RESISTOR CH 1/16W 4.7K	1	
R290	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R291,92	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R293	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R295	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R300	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R303	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R304	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R305	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R306	ERJ2GEJ222	M.RESISTOR CH 1/16W 2.2K	1	
R308	ERJ2RHD332	M.RESISTOR CH 1/16W 3.3K	1	
R309	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R310	ERJ2RHD153	M.RESISTOR CH 1/16W 15K	1	
R311	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R312	ERJ2RHD203	M.RESISTOR CH 1/16W 20K	1	
R313	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R314-16	ERJ2GEJ101	M.RESISTOR CH 1/16W 100	3	
R317	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R319	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R320	ERJ2RHD472	M.RESISTOR CH 1/16W 4.7K	1	
R321	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	1	
R322	ERJ2GEJ472	M.RESISTOR CH 1/16W 4.7K	1	
R323	ERJ2GEJ182	M.RESISTOR CH 1/16W 1.8K	1	
R324	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R325	ERJ2GEJ821	M.RESISTOR CH 1/16W 820	1	
R500-04	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	5	
R507,08	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
R509,10	ERJ2GEJ473	M.RESISTOR CH 1/16W 47K	2	
R600-03	ERJ2GEJ563	M.RESISTOR CH 1/16W 56K	4	
R604-11	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	8	
R612-15	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	4	
R620-23	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	4	
R626	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R700	ERJ2RHD333	M.RESISTOR CH 1/16W 33K	1	
R701	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R704	ERJ2GEJ103	M.RESISTOR CH 1/16W 10K	1	
R726,27	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	2	
SW400-11	K0H1BA000442	SWITCH	12	
		MISCELLANEOUS		
	VGQ8837	TOP OPERATION BUTTON	1	
	VMZ3629	TOP PB BARRIER	1	
	XQN2+BJ4FJK	SCREW	3	
■ E15	VEP001M2B	BACK PANEL C.B.A.	1	(RTL)
B1	N4EZH27Z0001	BATTERY	1	
C1	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C2	F3G1C156A028	T.CAPACITOR CH 16V 15U	1	
C50	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C51	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	1	
C52	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C54	F3H1C226A063	T.CAPACITOR CH 25V 22U	1	
C55	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C56,57	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	2	
C58	F3H1V106A049	T.CAPACITOR CH 35V 10U	1	
C59	F3H1C226A063	T.CAPACITOR CH 25V 22U	1	
D1	B3AAB0000037	DIODE	1	
D2	B3ABB0000086	LED	1	
D3	B3ADB0000026	LED	1	
D4	B3AAB0000129	LED	1	
D5,D6	MA142WA	DIODE	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D7-10	MA142K	DIODE	4	
D50	MA111	DIODE	1	
D300	B0KB00000041	DIODE	1	
IC1	VEK8283	REMOTE CONTROL RECEIVER	1	B3RZB0000001
IC50	C0ABBB000271	IC	1	
IC51	AN77L09M	IC	1	
J200	K2HC106B0010	AC POWER PLUG	1	
L201,02	J0JBC0000014	FILTER	2	
L300,01	J0MAB0000116	FILTER	2	
L309	J0JCC0000407	FILTER	1	
P1	K1MN24BA0050	CONNECTOR	1	
P50	K1KA12BA0108	CONNECTOR (MALE)	1	
P300	K2YZ04000023	PULG JACK	1	
P301	K1KA05B00201	CONNECTOR (MALE)	1	
R1-R5	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
R6	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R7	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R8	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R9	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R10	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R11,12	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	2	
R50	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R51	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R52	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R53	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R54	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R55	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R56,57	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	2	
R59,60	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	2	
R63,64	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R66	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R201,02	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R203,04	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
⚠ R300-03	K5H1012A0021	FUSE	4	
R308	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R310	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
SW1	K0G119A00024	SWITCH	1	
SW2	K0D112B00055	SWITCH	1	
SW3,W4	K0H1BA000442	SWITCH	2	
VR50,51	D2BBA14A0002	V.RESISTOR 10K	2	
		MISCELLANEOUS		
	VMZ3644	BACK PB SPACER	1	
■ E16	VEP04902A	SIDE JACK C.B.A.	1	(RTL)
C100,01	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	2	
C102	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C103,04	ECJ1VB1H682K	C.CAPACITOR CH 50V 6800P	2	
C119	EEEFK1K3R3R	C.CAPACITOR CH 80V 3.3U	1	
C120	F2A1J330A452	E.CAPACITOR 63V 33U	1	
C200	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	1	
C201	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	1	
C205	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	1	
C206	F3H1V106A049	T.CAPACITOR CH 35V 10U	1	
C207	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	1	
C208,09	ECJ1VC1H471J	C.CAPACITOR CH 50V 470P	2	
C210	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C211	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C212,13	F2A2A1050001	E.CAPACITOR 100V 1M	2	
C214	F1J2A104A023	C.CAPACITOR CH100V 0.1U	1	
C216	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C219,20	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	2	
C222	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C224	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	1	
C226	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	1	
C228	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C231	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C232	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
D100	MA3S132D0L	DIODE	1	
D101	B3GA00000053	DIODE	1	
D102,03	D4ED1220A006	VARISTOR	2	
D104-06	D4ED1270A008	VARISTOR	3	
D107	MA3062M	DIODE	1	
D111-13	D4ED1270A008	VARISTOR	3	
D203	MA111	DIODE	1	
D206,07	MA3J14300L	DIODE	2	
IC200	AN77L09M	IC	1	
IC204	C0ABBB000396	IC	1	
IC206	C0ABBB000271	IC	1	
IC209	C0JBAR000432	IC	1	
IC210	C0ABAB000121	IC	1	
J100	K2HA3YYA0001	JACK	1	
J101	K2HZ104A0002	S TERMINAL JACK	1	
J200	K1AB103A0011	CONNECTOR (FEMALE)	1	
L100,01	J0JBC0000014	FILTER	2	
L201	J0JBC0000014	FILTER	1	
L203,04	J0JBC0000014	FILTER	2	
L205,06	G1C100JA0036	COIL 10UH	2	
P100	K1MN45B00033	CONNECTOR	1	
P101	K1MN12BA0059	CONNECTOR	1	
P102	K1FY114A0001	CONNECTOR	1	
Q100	2SD1819A-R	TRANSISTOR	1	
Q101	2SD103000L	TRANSISTOR	1	
Q102	2SD182400L	TRANSISTOR	1	
Q201	2SB1220-R	TRANSISTOR	1	
Q202	2SD182400L	TRANSISTOR	1	
QR201	UNR9213J0L	TRANSISTOR	1	
QR204	UNR9113J0L	TRANSISTOR	1	
QR205-07	UNR9213J0L	TRANSISTOR	3	
QR208	UNR9113J0L	TRANSISTOR	1	
QR209	UNR9213J0L	TRANSISTOR	1	
R100	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R103	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R104	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R105	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R106	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R107	ERJ3GEYJ106	M.RESISTOR CH 1/16W 10M	1	
R108	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	D0GD225JA003
R109-13	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
R114	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R115-18	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R120,21	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R124	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R127-29	ERJ3RED680	M.RESISTOR CH 1/16W 68	3	
R130-32	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	D0YDR0000005
R137-42	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	6	
R143	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R200	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R203,04	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R206	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R207,08	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R209	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R210	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R211,12	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R213	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R214	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R216,17	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R218,19	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R221	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R223	ERJ3RBD391	M.RESISTOR CH 1/16W 390	1	
R226,27	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R230,31	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R233	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R235	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R236	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
R237	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R240	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R241,42	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R243	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R246	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
SW200	K0D142A00023	SWITCH	1	
TH100	D4CC11030012	THERMISTOR	1	
		MISCELLANEOUS		
	VGH4875	JACK NAME PLATE 1	1	
■ E17	VEP04903A	EXT MIC2 C.B.A.	1	(RTL)
C300	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	1	
C301	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	1	
C305	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	1	
C306	F3H1V106A049	T.CAPACITOR CH 35V 10U	1	
C307	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	1	
C308,09	ECJ1VC1H471J	C.CAPACITOR CH 50V 470P	2	
C310	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C311	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C312,13	F2A2A1050001	E.CAPACITOR 100V 1M	2	
C314	F1J2A104A023	C.CAPACITOR CH100V 0.1U	1	
C316	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C319,20	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	2	
C322	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C324	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	1	
C326	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	1	
C328	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
C331	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	1	
C332	ECJ1VF1E104Z	C.CAPACITOR CH 25V 0.1U	1	
D303	MA111	DIODE	1	
D306,07	MA3J14300L	DIODE	2	
IC300	AN77L09M	IC	1	
IC304	C0ABBB000396	IC	1	
IC306	C0ABBB000271	IC	1	
IC309	C0JBAR000432	IC	1	
IC310	C0ABAB000121	IC	1	
J300	K1AB103A0011	CONNECTOR (FEMALE)	1	
L301	J0JBC0000014	FILTER	1	
L303,04	J0JBC0000014	FILTER	2	
L305,06	G1C100JA0036	COIL 10UH	2	
P300	K1MN12BA0059	CONNECTOR	1	
Q301	2SB1220-R	TRANSISTOR	1	
Q302	2SD182400L	TRANSISTOR	1	
QR301	UNR9213J0L	TRANSISTOR	1	
QR304	UNR9113J0L	TRANSISTOR	1	
QR305-07	UNR9213J0L	TRANSISTOR	3	
QR308	UNR9113J0L	TRANSISTOR	1	
QR309	UNR9213J0L	TRANSISTOR	1	
R300	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R303,04	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R306	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R307,08	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R309	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R310	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R311,12	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R313	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R314	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R316,17	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R318,19	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	2	
R321	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R323	ERJ3RBD391	M.RESISTOR CH 1/16W 390	1	
R326,27	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R330,31	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R333	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R335	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R336	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
R337	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R340	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R341,42	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R343	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R346	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R349	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
SW300	K0D142A00023	SWITCH	1	
■ E18	VEP04906A	HANDLE C.B.A.	1	(RTL)
C1-C4	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	4	
C5	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C6	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C7	F3H1C226A063	T.CAPACITOR CH 25V 22U	1	
C8	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C9	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C12,13	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	2	
C14	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C15	ECUX1A224KBV	C.CAPACITOR CH 10V 0.22U	1	
C16,17	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	2	
C18	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C19,20	ECUV1C823KBV	C.CAPACITOR CH 16V 0.082U	2	F1H1C823A071
C21,22	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	2	
C23,24	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	2	
C25	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C26,27	F1J1A335A003	C.CAPACITOR CH 10V 3.3U	2	
C28	F3G1A226A035	T.CAPACITOR CH6.3V 22U	1	
C29	F3H1C226A063	T.CAPACITOR CH 25V 22U	1	
C31,32	ECJ3YB1E106K	C.CAPACITOR CH 25V 10U	2	
D1,D2	MA3S781D0L	DIODE	2	
IC1	C0ABCB000051	IC	1	
IC2,C3	C0ABBA000166	IC	2	
L1	G1C100KA0055	COIL 10UH	1	
P1	K1MN24BA0059	CONNECTOR	1	
P2	K1MN10BA0059	CONNECTOR	1	
P3,P4	K1KA04BA0014	CONNECTOR (MALE)	2	
Q1	2SD1824OOL	TRANSISTOR	1	
Q2,Q3	2SD1819A-R	TRANSISTOR	2	
Q4	2SD1824OOL	TRANSISTOR	1	
R2,R3	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	2	
R4-R8	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
R20-23	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	4	
R24-27	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	4	
R28,29	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	2	
R30	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R31	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R32-34	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R35-38	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	4	
R39,40	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R41-44	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	4	
R45,46	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R47,48	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R49,50	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	2	
R51,52	ERJ3RBD242	M.RESISTOR CH 1/16W 2.4K	2	
R53,54	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	
R55,56	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R57,58	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	2	
R59	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R60,61	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	2	
SW1	K0D123B00044	SWITCH	1	
SW2,W3	K0H1BA000433	SWITCH	2	
SW4	K0H1BA000303	REC SW	1	
		MISCELLANEOUS		
	VYQ3732	HANDLE ZOOM U	1	
	VGQ6881	T/W BUTTON HOLDER	1	
	VGU9208	HANDLE T/W BUTTON	1	
	VMG1480	HANDLE T/W BUTTON RUBBER	1	
	VMS7185	HANDLE ZOOM SHAFT	1	
	XUC15FP	E-RING	2	
	VGQ6880	HANDLE S/S HOLDER	1	
	XQN2+BJ4FJK	SCREW	2	
■ E19	VEP001M3A	REMOCON C.B.A.	1	(RTL)
C101	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C102	F3G1C156A028	T.CAPACITOR CH 16V 15U	1	
D101	B3AAB0000129	LED	1	
IC101	VEK8283	REMOTE CONTROL RECEIVER	1	B3RZB0000001
P101	K1MN10AA0058	CONNECTOR	1	
R101	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R102	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
■ E20	VEP29166A	EVF CONNECT C.B.A.	1	(RTL)
C651	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
D651	MA8056-MH	DIODE	1	
P651	K1MN22BA0080	CONNECTOR	1	
P652	K1MN20BA0081	CONNECTOR	1	
P653	K1KA02BA0014	CONNECTOR (MALE)	1	
R651-71	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	21	
■ E21	VEP001M4A	POWER SW C.B.A.	1	(RTL)
P101	K1MN06BA0252	CONNECT	1	
SW101	K0L1BA000015	SWITCH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		MISCELLANEOUS		
	VMG0763	SWITCH	1	
■ E22	VEP01979A	BATTERY C.B.A.	1	(RTL)
L3-L6	J0JHC0000018	FILTER	4	
P1	K1KA05BA0104	CONNECTOR (MALE)	1	
P3	K1KA02BA0104	CONNECTOR (MALE)	1	
R4	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
■ E23	VEP01971A	DC IN C.B.A.	1	(RTL)
J31	VJS3381	CONNECTOR (FEMALE)	1	K2EC2B000001
■ E24	VEP001M5A	ZOOM SW C.B.A.	1	(RTL)
P1	K1MN06BA0134	CONNECTOR	1	
SW1	EVQQW101M	SWITCH	1	
VR1	D2B1B15B0001	V.RESISTOR 100K	1	
■ E25	VEP08346A	LCD LEV C.B.A.	1	(RTL)
C1003	F3G1C106A028	T.CAPACITOR CH 16V 10U	1	
C1014	F3F1A106A046	T.CAPACITOR CH 10V 10U	1	
C1017	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1019	ECJ0EF1C104Z	C.CAPACITOR CH 16V 0.1U	1	
C1025	ECJ2FB1C225K	C.CAPACITOR CH 16V 2.2U	1	
C1026	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
D1001	MA8120-M	DIODE	1	MAZ8120OML
L1005	G1C100KA0068	COIL 10UH	1	
P1001	K1MN27B00036	CONNECTOR	1	
P1002	K1MN12BA0059	CONNECTOR	1	
P1003	K1MN26BA0059	CONNECTOR	1	
Q1005-12	2SD2216J0L	TRANSISTOR	8	
Q1014,15	B1ADBE000001	TRANSISTOR	2	
Q1016,17	2SD2216J0L	TRANSISTOR	2	
R1003	ERJ2GE0R00	M.RESISTOR CH 1/16W 0	1	
R1004	ERJ2GEJ102	M.RESISTOR CH 1/16W 1K	1	
R1005-11	ERJ2RKD270	M.RESISTOR CH 1/16W 27	7	
R1013	ERJ2RKD270	M.RESISTOR CH 1/16W 27	1	
R1018	ERJ2RHD472	M.RESISTOR CH 1/16W 4.7K	1	
R1020	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
R1024	ERJ2GEJ104	M.RESISTOR CH 1/16W 100K	1	
R1069,70	ERJ2RKD270	M.RESISTOR CH 1/16W 27	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
TG1023	EYF6CU	TEST POINT	1	
■ E26	VEP22370A	GYRO C.B.A.	1	(RTL)
C901	F3G1A476A029	T.CAPACITOR CH 10V 47U	1	
C902,03	F3F0J226A055	T.CAPACITOR CH6.3V 22U	2	
C904-07	F1J0J106A014	T.CAPACITOR CH6.3V 10U	4	
C908,09	ECUX1H471KBV	C.CAPACITOR CH 50V 470P	2	
C912	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C913	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	1	
C916,17	ECUX1H471KBV	C.CAPACITOR CH 50V 470P	2	
C920	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	1	
C921	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C922	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	1	
C923	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C924	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C925	F3G1C226A022	T.CAPACITOR CH 16V 22U	1	
IC903	C0ABCA000042	IC	1	
IC904	C0JBAS000251	IC	1	
IC905	C0ABAA000046	IC	1	
IC906	L2ES00000012	SENSOR U	1	
IC907	L2ES00000013	SENSOR U	1	
L901	G1C100K00019	COIL 10UH	1	
L903,04	G1C100K00019	COIL 10UH	2	
P901	K1MN10BA0134	CONNECTOR	1	
R901,02	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R903-06	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	4	
R907	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R910	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R911,12	ERJ3GEYJ274	M.RESISTOR CH 1/16W 270K	2	
R913,14	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R915-18	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R919-22	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
■ E27	VEP03G96A	CAMERA TOP FPC C.B.A.	1	(RTL)
P1004	K1KB80AA0006	CONNECTOR (FEMALE)	1	
P1005	K1KA80AA0044	CONNECTOR (MALE)	1	
PB1	VJB03G96	TOP OP TO CAMERA FPC	1	
		MISCELLANEOUS		
	VMT1746	FPC CUSHION2	1	
	VMT1745	FPC CUSHION	1	
■ E28	VEP03G94A	CODEC P2 FPC C.B.A.	1	(RTL)
P1002	K1KY70A00001	CONNECTOR	1	
P1003	K1KA70AA0044	CONNECTOR (MALE)	1	
PB1	VJB03G94	P2 CARD TO CODEC FPC	1	
		MISCELLANEOUS		
	VMT1754	PB CUSHION 3	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	J0ZZZ0000053	FILTER	2	
■ E29	VEP001N2A	TOP CON C.B.A.	1	(RTL)
P500	K1MN24BA0059	CONNECTOR	1	
P501	K1MN22BA0059	CONNECTOR	1	
P502	K1KA02BA0047	CONNECTOR (MALE)	1	
P503	K1KB50BA0015	CONNECTOR (FEMALE)	1	
		MISCELLANEOUS		
	VMP8560	CONNECT PCB ANGLE	1	
	XQN2+B4FN	SCREW	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks