

SONY®

LCD COLOR VIEW FINDER

DVF-L700

SERVICE MANUAL

1st Edition (Revised 1)

警告

このマニュアルは、サービス専用です。
お客様が、このマニュアルに記載された設置や保守、点検、修理などを行うと感電や火災、人身事故につながる可能性があります。
危険をさけるため、サービストレーニングを受けた技術者のみご使用ください。

WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

AVERTISSEMENT

Ce manuel est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

Table of Contents

Manual Structure

Purpose of this manual.....	3
Related manuals.....	3
Trademarks.....	3

1. Service Overview

1-1. Location of Printed Wiring Boards.....	1-1
1-2. Connector Input/Output Signals.....	1-2
1-3. Onboard Switch.....	1-4
1-3-1. PR-331 Board.....	1-4
1-4. Circuit Description.....	1-5
1-4-1. PR-331 Board.....	1-5
1-4-2. CN-3600/CN-3600S Board.....	1-8
1-5. Coaxial Cable.....	1-9
1-5-1. Disconnecting/Connecting Fine-Wire Coaxial Cable.....	1-9
1-5-2. Disconnecting/Connecting Coaxial Cable.....	1-9
1-6. Service Tools/Equipment.....	1-11
1-6-1. Service Tools.....	1-11
1-6-2. Equipment.....	1-11
1-7. Firmware and PLD Upgrading.....	1-12
1-7-1. Software and ROM Versions Check.....	1-12
1-7-2. Writing and Rewriting the Software Data.....	1-12
1-7-3. Writing and Rewriting the PLD Internal Data.....	1-12
1-8. Notes on Replacing the Board.....	1-14
1-9. Circuit Protection Parts.....	1-15
1-9-1. Replacing Fuses.....	1-15
1-10. Lead-free Solder.....	1-16

2. Replacement of Main Parts

2-1. Tightening Torque.....	2-1
2-2. Rear Panel Assembly.....	2-2
2-3. CN-3600 Board Block/Coaxial Cables.....	2-3
2-4. DC Fan.....	2-5
2-5. PR-331 Board.....	2-6
2-6. LCD Module.....	2-7

3. Diagnostics

3-1. Troubleshooting.....	3-1
3-1-1. Displaying the Error Message.....	3-1
3-1-2. Device Check.....	3-1

4. Setup Menu

4-1.	SERVICE Menu.....	4-1
4-1-1.	Operation Keys.....	4-1
4-1-2.	Displaying the SERVICE Menu.....	4-1
4-2.	SERVICE MENU List.....	4-2

5. Electrical Alignment

5-1.	Actions to Be Taken When Replacing the LCD Module.....	5-1
------	--	-----

6. Spare Parts

6-1.	Note on Repair Parts.....	6-1
6-2.	Exploded Views.....	6-2
6-3.	Electrical Parts List.....	6-7
6-4.	Supplied Accessories.....	6-15

7. Block Diagrams and Frame Wiring

Overall (1/2).....	7-1
Overall (2/2).....	7-2

8. Schematic Diagrams

CN-3600.....	8-1
CN-3600S.....	8-1
PR-331.....	8-2

9. Board Layouts

CN-3600.....	9-1
CN-3600S.....	9-1
PR-331.....	9-1
Board Parts Location.....	9-2

Manual Structure

Purpose of this manual

This manual is the service manual for LCD Color View Finder DVF-L700.

This manual describes the information items that premise the service based on the components parts assuming use of system and service engineers.

Related manuals

Besides this service manual the following manual is available for this unit.

- Operating Instructions (Included on the CD-ROM)

This manual is necessary for application and operation of this unit.

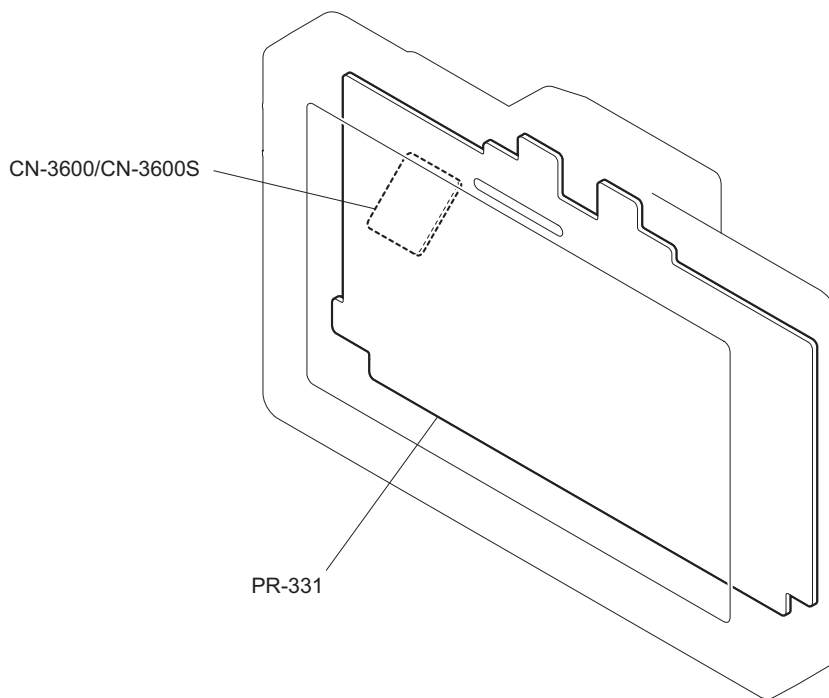
Trademarks

System names and product names written in this manual are usually registered trademarks or trademarks of respective development manufacturers.

Section 1

Service Overview

1-1. Location of Printed Wiring Boards



1-2. Connector Input/Output Signals

1. SDI IN

BNC type

3G-SDI: 0.8 V_{p-p}, 75 Ω, 2.970 Gbps/2.967 Gbps

HD-SDI: 0.8 V_{p-p}, 75 Ω, 1.485 Gbps/1.4835 Gbps

2. MONITOR OUT

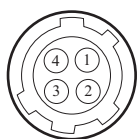
BNC type

3G-SDI: 0.8 V_{p-p}, 75 Ω, 2.970 Gbps/2.967 Gbps

HD-SDI: 0.8 V_{p-p}, 75 Ω, 1.485 Gbps/1.4835 Gbps

3. DC IN

4-pin, Male



- External View -

SY: Serial No.501001 and higher

CN: Serial No.101001 and higher

No.	Signal	I/O	Specification
1	UNREG GND	—	GND for UNREG-IN
2	TALLY IN	IN	ON: GND OFF: High impedance (Open collector)
3	NC	—	No connection
4	UNREG IN	IN	+10.5 V dc to 17 V dc, 2 A (max)

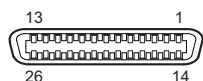
SY: Serial No.500001 through 500999

CN: Serial No.100001 through 100999

No.	Signal	I/O	Specification
1	UNREG IN	IN	+10.5 V dc to 17 V dc, 2 A (max)
2	NC	—	No connection
3	TALLY IN	IN	ON: GND OFF: High impedance (Open collector)
4	UNREG GND	—	GND for UNREG-IN

4. VF

Rectangular, 26-pin



- External View -

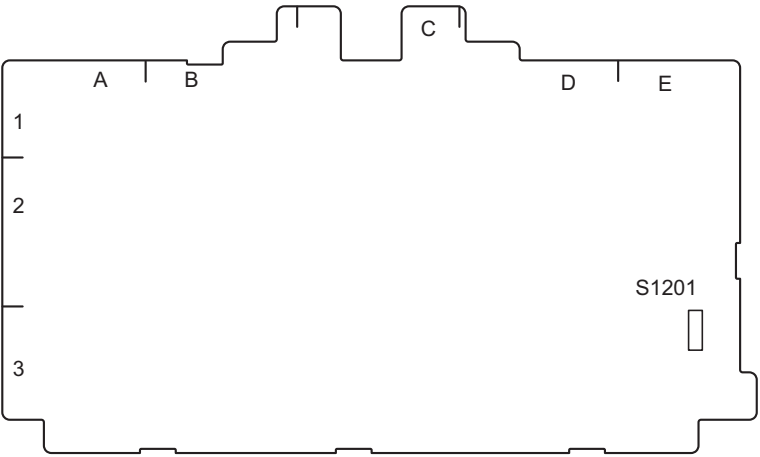
No.	Signal	I/O
1	SHIELD_GND	—
2	LVDS_1-	IN
3	LVDS_2-	IN
4	LVDS_3-	IN
5	LVDS_CLK-	IN

Continued

No.	Signal	I/O
6	LVDS_4-	IN
7	LVDS_5-	IN
8	VF_ON	OUT
9	B_SDA	IN /OUT
10	UNREG	IN
11	UNREG	IN
12	GND	—
13	GND	—
14	GND	—
15	LVDS_1+	IN
16	LVDS_2+	IN
17	LVDS_3+	IN
18	LVDS_CLK+	IN
19	LVDS_4+	IN
20	LVDS_5+	IN
21	SRX	OUT
22	SCL	IN
23	UNREG	IN
24	UNREG	IN
25	GND	—
26	SHIELD_GND	—

1-3. Onboard Switch

1-3-1. PR-331 Board



PR-331 board (Side A)

Ref. No.	Bit	Description	Factory setting
S1201	1	Not used	All OFF
	2	OFF: Normal ON: During upgrading (IC1201)	
	3 to 8	Not used	

1-4. Circuit Description

This unit consists of the following boards.

- PR-331 board
- CN-3600/CN-3600S board

1-4-1. PR-331 Board

The PR-331 board is equipped with functions to output the VF_ON signal that informs the camera of the connection with the viewfinder, decode digital video signals (LVDS, SDI), read switch information and perform communication with the camera by using the sub-microcomputer, and generate power voltages required in this unit.

Connection to the camera

Communication with the camera is performed through the VF cable connected to the VF connector.

The VF_ON signal to inform the camera of the connection to the viewfinder turns high from low when power is supplied to this unit. The VF_ON signal is controlled by IC1201.

Decoding digital video signals

The IC302 (FPGA) decodes the LVDS signals encoded in the camera to digital video signals, serial control signal, and TALLY control signal. Decoded digital video signals are processed in IC302, and are then converted to the LVDS signal by IC1101 (LVDS transmitter). After that, the LVDS signal is sent to CN1101 that is connected to the LCD module with a fine-wire coaxial cable.

Decoding SDI signal

Impedance matching for the SDI signal that is input from the SDI IN connector to CN201 is made with L201, R201, and R202 in the input circuit, and its return loss is adjusted. Then the SDI signal is input to IC201 (SDI equalizer) in which impedance conversion and level adjustment are made. After that, the SDI signal is sent to IC203 (SDI receiver) in which the input SDI signal is processed for the LCD module display signal and the SDI OUT signal.

The LCD module display signal is converted to Y/C parallel signals by IC203, and the parallel signals are sent together with the clock signal to IC302 (FPGA) in which these signals are processed. Then the processed signals are sent to IC801 (image processor IC) in which IP conversion and scaling conversion processing are performed. The converted signals are sent again to IC302. The LCD module display signal and the clock signal are processed again in IC302, and are then converted to the LVDS signal in IC1101 (LVDS transmitter IC). After that, the LVDS signal is sent to CN1101 that is connected to the LCD module with a fine-wire coaxial cable.

The SDI OUT signal is sent to IC205 (SDI driver) in which impedance conversion is made. After that, the impedance is compensated with R221 and L202, and then the SDI OUT signal is output from CN202 to the SDI OUT connector. IC202 converts level of data that is output from IC203 to IC1201 (microcomputer). IC204 converts levels of data and clock that are output from IC1201 to IC203.

Sub-microcomputer

The sub-microcomputer performs communication, control, and setting shown below.

- Reads information of switches and sends it to the camera sub-microcomputer through the I2C bus.
- Performs serial communication with IC203 (SDI receiver), IC302 (FPGA), and IC801 (image processor IC).

- Performs I2C communication with IC302 (FPGA), IC1208 (temperature sensor), 1209 (temperature sensor), and IC1211 (EEPROM). (The EEPROM stores individual production adjustment data (including color temperature and brightness) of the LCD module.)
- Controls LEDs D1313 to D1320.
- Sets the maximum current value of the backlight driver (IC1405).

Input power

This unit has two power supply channels: one is from the VF connector and the other is from the DC IN connector. The power input from the VF connector is directly connected to S1402. The power input from the DC IN connector is supplied through the CN-3600/CN-3600S board to the PR-331 board and is connected to S1402 in which these two power channels are switched, and then the selected power is supplied to the power circuit.

The power selected by S1402 is sent to the protection circuits and is supplied to the LED driver, 5 V regulator, and 3.3 V regulator that directly switch the input voltage. 2.5 V, 1.8 V, and 1.2 V are generated from 5 V. 1.5 V and 0.9 V are generated from 3.3 V.

Power is turned on and off by turning on/off the input voltage control circuit by S1401.

Furthermore, S1402 sends a signal that indicates whether to display video signals (that are input from the VF connector or the SDI IN connector) to the CPU. Based on this signal, IC1201 controls IC302 (FPGA) and IC801 (image processor IC) for switching the signal processing from the VF connector and the SDI IN connector. Thus power consumption is suppressed by shutting down unused circuits. Since both power and signal processing circuit are switched by S1402, when the VF connector is selected, power and video signals are received from the VF connector. When the SDI IN connector is selected, power is received from the DC IN connector and video signals are received from the SDI IN connector.

Input protection circuits

The power selected by S1402 passes through the inverse input voltage protection circuit, inrush current control circuit, and the input voltage control circuit, and is then supplied to each voltage regulator circuit.

The inverse input voltage protection contains Q1438. When an inverse voltage is applied, the G-S voltage is turned off to prevent current from flowing in the subsequent circuit. When a forward voltage is applied, Q1438 is turned on and the input voltage is directly output.

The inrush current control circuit mainly consists of Q1401, Q1402, and R1404. When power is turned on, Q1401 and Q1402 are turned off and current flows through R1404. Therefore, current is restricted by R1404. When +3.3 V is activated, Q1401 and Q1402 are turned on and the resistance between pins D and S of Q1402 becomes low. Therefore, the voltage is sent to the subsequent circuit nearly as it is.

The input voltage control circuit mainly consists of IC1402, Q1407, Q1410, and Q1411. This circuit has a function to prevent invalid input voltages to be sent to the subsequent circuit.

IC1402 detects voltages on the low-voltage side and the high-voltage side, providing hysteresis on both sides. The hysteresis on the high-voltage side is created whether to short-circuit R1423 and R1424 by Q1403. The hysteresis on the low-voltage side is created by R1429 and the voltage dividing resistor in the input circuit.

This power for circuits is generated from the voltage immediately after the overcurrent protection circuit because this power must be provided before the power switch S1401.

When raising voltage from a low voltage, it is turned on when it exceeds approx. 9 V on the low-voltage side and it is turned off when it becomes approx. 19 V on the high-voltage side. On the other hand, when lowering voltage from a high voltage, Q1407 and Q1410 are controlled so that the voltage is turned on at approx. 18 V on the high-voltage side and is turned off at approx. 7.5 V on the low-voltage side. When Q1410 is turned on, Q1411 is also turned on. When the drain voltage of Q1411 becomes 0 V, regulators to generate each voltage start working. When power switch S1401 is set to OFF, the drain voltage of Q1411 becomes high, deactivating each regulator.

LCD backlight drive circuit

The LCD backlight is driven by IC1405. With the brightness setting made in the shipping process, the level of the DC voltage output from IC1201 (CPU) is converted in IC1412 and the current on pin 7 of IC1405 is controlled by the DC signal. The brightness control when adjusting contrast is performed using the PWM signal that is input to pin 10 of IC1405. There are three channels of the LCD backlight and also three output channels. Circuits in each channel can accept current of up to 150 mA.

Regulator circuits

- 3.3 V/5 V regulator circuit
Voltages 3.3 V and 5 V are generated by IC1406 that has two regulators. The phase of switching timing is shifted 180 degrees to reduce the ripple current caused by switching in the input circuit. This IC raises the power conversion efficiency by using the external switching device with low on-resistance.
- 1.8 V/1.2 V/0.9 V regulator circuit
Voltages 1.8 V, 1.2 V, and 0.9 V are generated by internal switching device-type ICs (1.8 V: IC1407, 1.2 V: IC1408, 0.9 V: IC1409). These three regulators are same configuration.
This circuit is equipped with the soft start function and an error output circuit to output an error when an IC operation error occurs. When an error has occurred, the level of error output connector pin 14 turns low. The software start time is determined by the capacitance connected to pin 9, which is set to 5 ms. The output voltage is determined by the voltage that returns from output to pin 6. The oscillation frequency is determined by the resistance connected to pin 8. The oscillation frequency is set to a frequency at which the best efficiency is obtained.
- 2.5 V regulator circuit
A 2.5 V voltage is generated by the internal switching device-type IC1410. A small IC is used because of low output current. No error output circuit is provided.
- 1.5 V regulator circuit
Since the load current of this circuit is low (approx. 30 mA), 1.5 V is generated from 3.3 V by the series regulator.

3.3 V for LCD module

Since the ON/OFF control for 3.3 V for the LCD module is required, the 3.3 V ON/OFF control is performed by the independent FET switch Q1430. Q1430 ON/OFF is controlled by activating Q1431 using the ON/OFF control signal from IC302 (FPGA). The voltage falling time when 3.3 V for the LCD module is turned off is specified. Therefore, charge remaining in C1475 and the LCD module is removed by using Q1437. Setting has been made so that Q1437 is turned on when power is turned off and charge is removed through R1569 to R1571 within approx. 200 ms.

Fan drive circuit

The fan power voltage 5 V is supplied through L1421. A relatively large L1421 value (47 uH) is given to reduce effects of ripple current on other circuits while the fan is rotating.

To drive the fan, its revolution speed is controlled by turning on and off Q1432 with the PWM control signal. PWM control is performed by detecting temperature sensor output, LCD module operating mode, and high-brightness mode or normal mode.

Protective operation in case each IC malfunctions

Regulator ICs except for 2.5 V and 1.5 V regulator ICs have a function to output information in case they malfunction (output overvoltage or SW FET overcurrent).

When an error occurs, each regulator IC turns the level of each error output pin low to output the error. Since these outputs are open-drain outputs, they are connected in wired-OR form and the wired-OR output is input to IC1404. When a regulator malfunctions, the level of this line turns low and IC1404 turns the level of pin 7 high when it detects an error. When pin 7 becomes high, the latch circuit consisting of Q1413 to Q1415 outputs high level and turns off Q1407 to shut off voltages supplied to each regulator to turn off all outputs. Since voltages for IC1404 and Q1413 to Q1415 are supplied in another channel, this state is retained unless power voltage is turned off and on or the power supply source is turned off and on.

1-4-2. CN-3600/CN-3600S Board

The power and TALLY signals sent from the power cable are received by the DC IN connector and are then sent to the PR-331 board. The CN-3600 board consists of a connector (CN002) to send power to the EMI filter and the PR-331 board and a connector (CN003) to send the TALLY signal.

1-5. Coaxial Cable

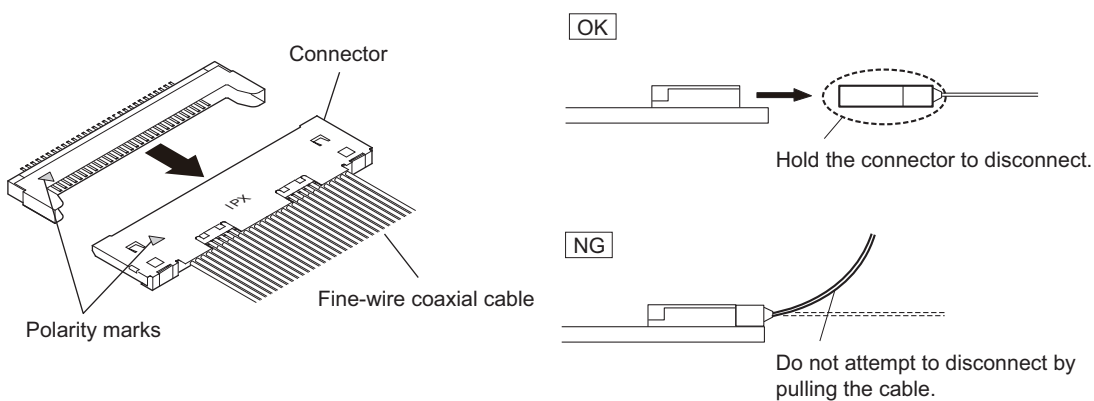
1-5-1. Disconnecting/Connecting Fine-Wire Coaxial Cable

Note

- Be very careful when handling the fine-wire coaxial cable so that fine wires are not disconnected.
- When disconnecting the fine-wire coaxial cable, be sure to hold the connector. Do not attempt to pull the cable.
- Check that the contact surface of the fine-wire coaxial cable connector is free from dirt or dust.

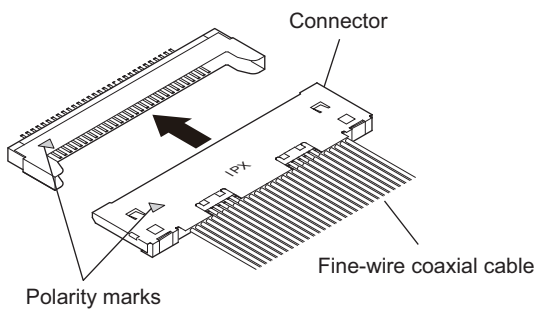
Type

Disconnecting



1. Hold both sides of the fine-wire coaxial cable connector, and pull the connector straight to disconnect it.

Connecting



Note

Firmly insert the connector straight as far as it will go.

1. Insert the connector straight matching the polarity marks.

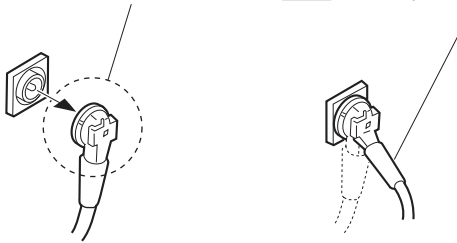
1-5-2. Disconnecting/Connecting Coaxial Cable

Note

Be sure to hold the plug when disconnecting the coaxial cable. Do not pull the cable.

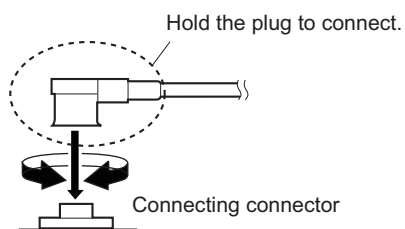
Disconnecting

OK Hold the plug to remove. **NG** Do not pull the cable.



1. Hold the plug of the coaxial cable.
2. Pull the plug straight in the arrow direction to disconnect the coaxial cable.

Connecting



1. Hold the plug of the coaxial cable.
2. Push the plug perpendicularly to the connector while slightly turning the plug clockwise and counterclockwise.

1-6. Service Tools/Equipment

1-6-1. Service Tools

Parts No.	Name	Use
J-6510-120-A	RS232 interface cable	Used for software data downloading
J-7120-220-A	PLD download tool (for USB)	Used for PLD data downloading

1-6-2. Equipment

Equipment	Model name
Solid-state memory camcorder	PMW-F5/55 or the equivalent
General-purpose personal computer	—

1-7. Firmware and PLD Upgrading

Note

Do not version down the ROM. Equipment may not operate normally.

ROM is mounted on the PR-331 board of this unit.

Board	Ref.No.	Address
PR-331	IC301	C1 (side A)

1-7-1. Software and ROM Versions Check

1. Display the SERVICE menu. (Refer to [“4. Setup Menu”](#))
2. Display the VERSION screen in the SERVICE menu.
3. Confirm the version of software and ROM.

1-7-2. Writing and Rewriting the Software Data

If software data needs to be upgraded, contact your local Sony Sales Office/Service Center.

1-7-3. Writing and Rewriting the PLD Internal Data

This unit uses the PLD (Programmable Logic Device) that supports the e-Production (EPR2) system to write and rewrite the internal data.

If the parts listed below needs to be replaced or if PLD needs to be upgraded, contact your local Sony Sales Office/Service Center.

Note

The part number of PLD (or ROM for PLD) in which data is not written yet, is shown in [“6. Spare Parts”](#).

Therefore, if part replacement is required, write the data by the following procedure.

In the case of the PLD type that runs on the program stored in external ROM, the PLD has only to be replaced and data needs not to be written only.

e-Production Method

- To write/rewrite the PLD internal data:
 1. The standard fixture (cable) can be used.
 2. The standard software (PLD Download Tool) can be used.
- The PLD internal data is controlled in the Sony Database Server under the name Project file (E_XXX_XXX_XX_XX).
- A standard connector (EPR2 connector) for writing PLD internal data is provided on the board with an indication“EPR2.”

Corresponding PLDs and ROM for PLDs

Board name	PLD/ROM	EPR connector	Project file name
PR-331	IC302/IC301	CN301	E_XXX_XXX_XX_XX

Tip

IC301/PR-331 is a ROM for IC302/PR-331.

Equipment/Service Tools

- PLD download tool (Part No.: J-7120-220-A)

- Personal computer (referred to as PC hereafter):
 - A PC having USB port.
 - A PC in which the PLD Download Tool software is already installed.

Tip

For the applicable OS and the operating environment, refer to “Download Tool Operating Instruction for Device Programming”.

Data writing procedure

Data writing procedure in the PLD (or ROM for PLD) is outlined below.

For details of data writing procedure, refer to “Download Tool Operating Instruction for Device Programming”, which is available in the same site where the PLD Download Tool software is available.

1. Prepare the Project file.

Note

The Project file is made available by downloading it from the Sony database server.

2. With the power of the device turned off, connect the USB port on the PC and the EPR2 connector on the target board with the PLD download tool (cable).
3. Turn on the power of the device.
4. Launch the PLD Download Tool software, and import the Project file.
5. Program the PLD (or the ROM for the PLD) by using the PLD Download Tool software.
6. When the programming completes correctly (without an error message), restart the device.

1-8. Notes on Replacing the Board

The EEPROM (IC1211) is mounted on the PR-331 board. This IC stores adjustment data. When replacing only the PR-331 board, IC1211 on this board must be transferred. For how to replace the PR-331 board, refer to [“2-5. PR-331 Board”](#).

Note

Perform this transfer of IC1211 when replacing only the PR-331 board.

When replacing the LED module, do not transfer IC1211. (Refer to [“5-1. Actions to Be Taken When Replacing the LCD Module”](#))

Tip

When replacing the PR-331 board, electrical adjustment is not required.

1. Remove the PR-331 board from the unit.
2. Remove IC1211 from the PR-331 board before replacing it.
3. Remove IC1211 from the new PR-331 board.
4. Mount IC1211 removed in step 2 on the new PR-331 board.
5. Install the PR-331 board to the unit.
6. Connect the unit to the camera and turn on the power of the unit.
Check that video image is displayed.

1-9. Circuit Protection Parts

1-9-1. Replacing Fuses

WARNING

Fuses are essential parts for safe operation. Be sure to use the parts specified in this manual. Replacing a fuse with an unspecified one may cause fire or electric shock.

CAUTION

Replacing any fuse is replaced while power is supplied to the unit may cause electric shock.
Before replacing any fuse, not only turn off the POWER switch but also disconnect the cable that is connected to the DC IN connector and remove this unit from a camera.

This unit is equipped with fuses. The fuses blow if overcurrent flows in the unit due to an abnormality. In that case, turn off the power of the unit and remove this unit from a camera, inspect inside of the unit, and then remove the cause of the overcurrent. After that, replace the defective parts.

Board name	Ref. No.	Address	Part No.	Rating
PR-331	F1401	A2 (Side A)	△ 1-576-798-11	5 A/125 V

1-10. Lead-free Solder

All boards mounted in this unit use lead-free solder. Be sure to use lead-free solder when repairing the boards of this unit. A lead free mark (LF) indicating that the solder contains no lead is printed on each board. (Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)



: LEAD FREE MARK

Note

- The lead-free solder melts at a temperature about 40 °C higher than the ordinary solder, therefore, it is recommended to use the soldering iron having a temperature regulator.
- The ordinary soldering iron can be used but the iron tip has to be applied to the solder joint for a slightly longer time. The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful.

Section 2

Replacement of Main Parts

2-1. Tightening Torque

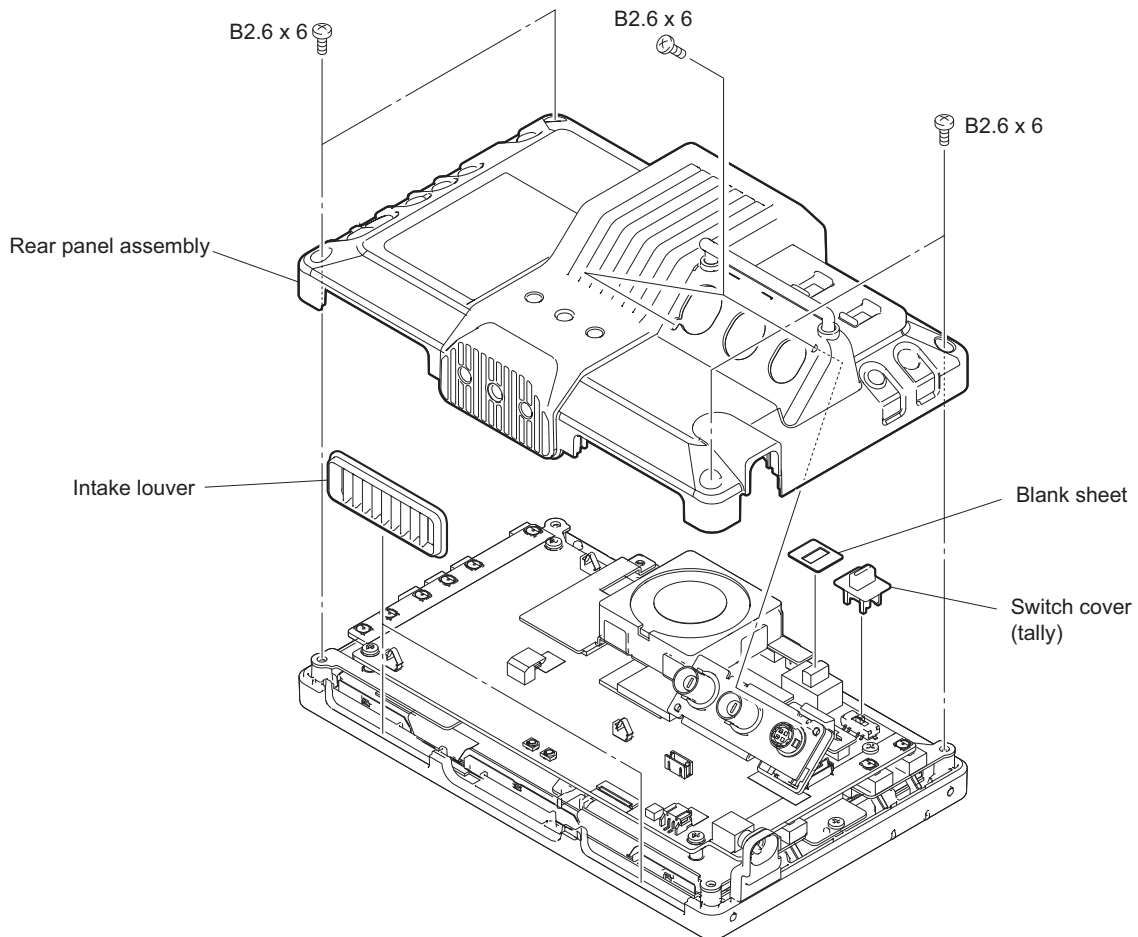
Tighten the following screws to the specified tightening torque.

- PSW2 : 0.19 ± 0.02 N·m
- B2.6 : 0.53 ± 0.07 N·m

2-2. Rear Panel Assembly

Procedure

1. Remove the six screws to detach the rear panel assembly.
2. Remove the blank sheet and the switch cover (tally).
3. Remove the two intake louvers.



4. Install the removed parts by reversing the steps of removal.

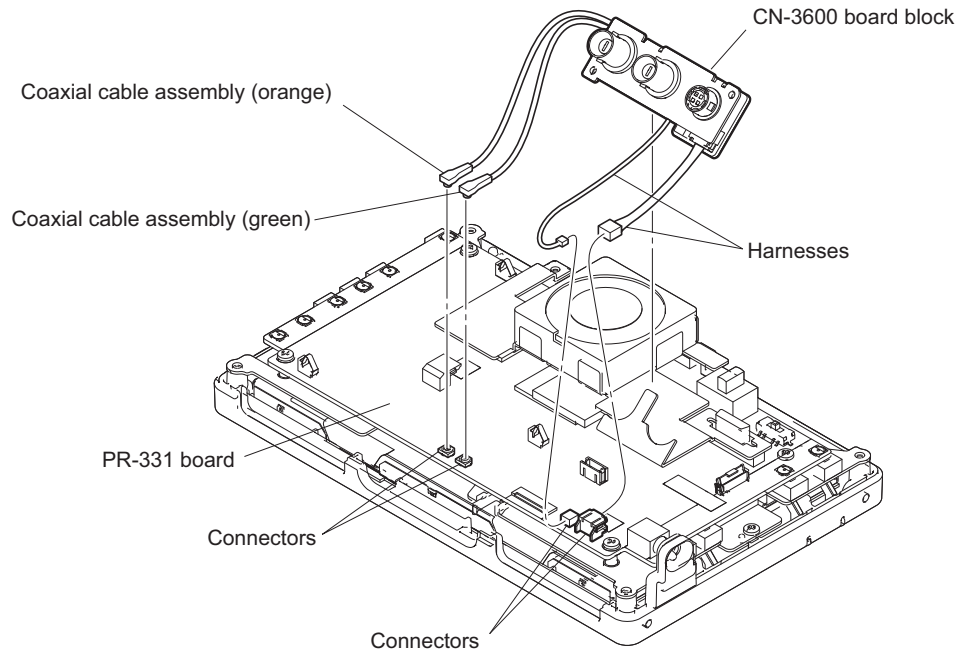
2-3. CN-3600 Board Block/Coaxial Cables

Preparation

1. Remove the rear panel assembly. (Refer to “2-2. Rear Panel Assembly”)

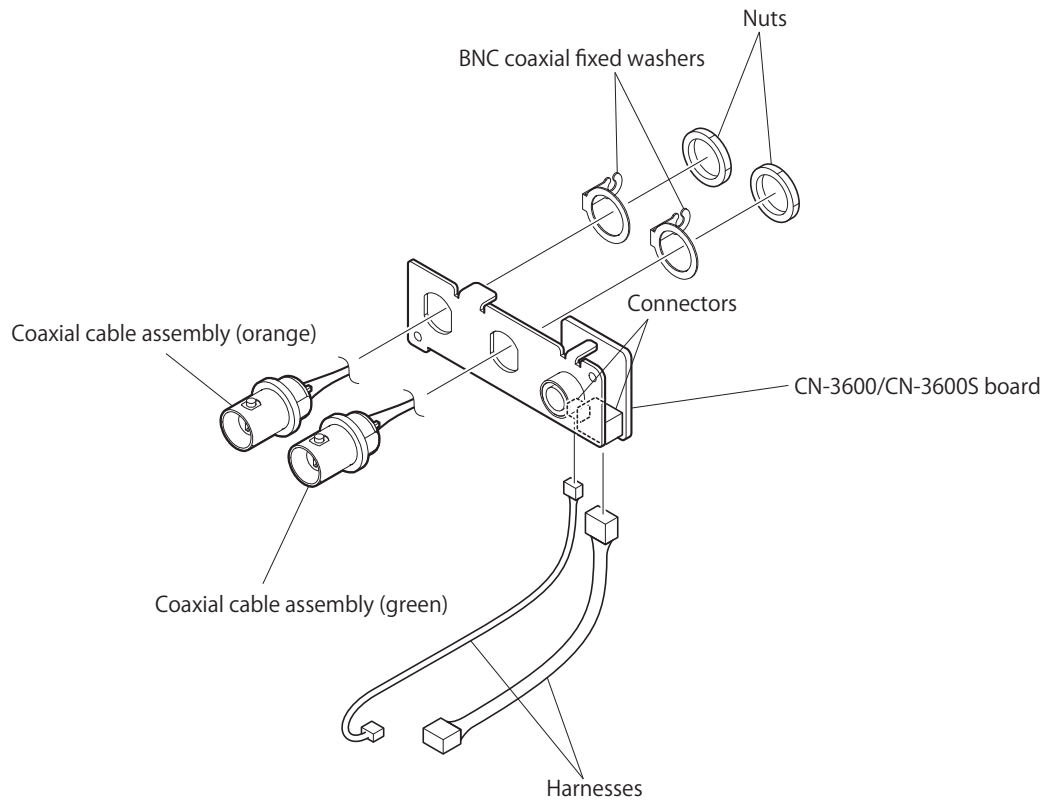
Procedure

1. Disconnect the coaxial cable assembly (orange) and coaxial cable assembly (green) from the connectors on PR-331 board.
2. Disconnect the two harnesses from the connectors on the PR-331 board, and then remove the CN-3600 board block.



3. Remove the two nuts to detach the two BNC coaxial fixed washers and the two coaxial cable assemblies.

4. Disconnect the two harnesses from the connectors on the CN-3600/CN-3600S board.



Note

When connecting coaxial cable assemblies, pay attention to their colors.

5. Install the removed parts by reversing the steps of removal.

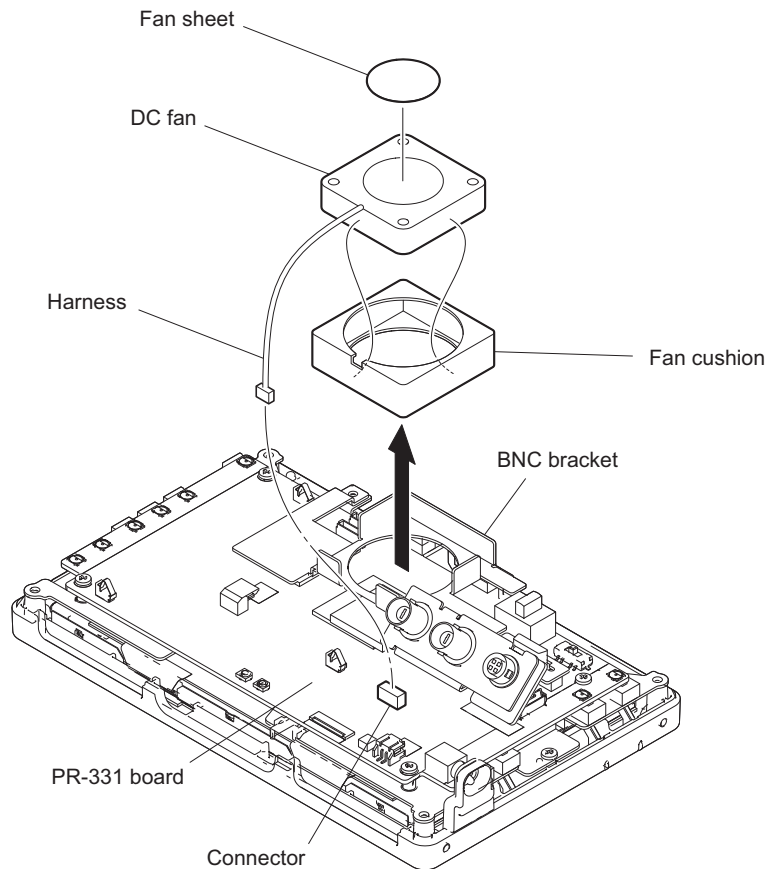
2-4. DC Fan

Preparation

1. Remove the rear panel assembly. (Refer to “2-2. Rear Panel Assembly”)

Procedure

1. Disconnect the harness from the connector on the PR-331 board.
2. Remove the fan cushion and the DC fan from the BNC bracket in the arrow direction.
3. Remove the fan sheet from the DC fan.



4. Install the removed parts by reversing the steps of removal.

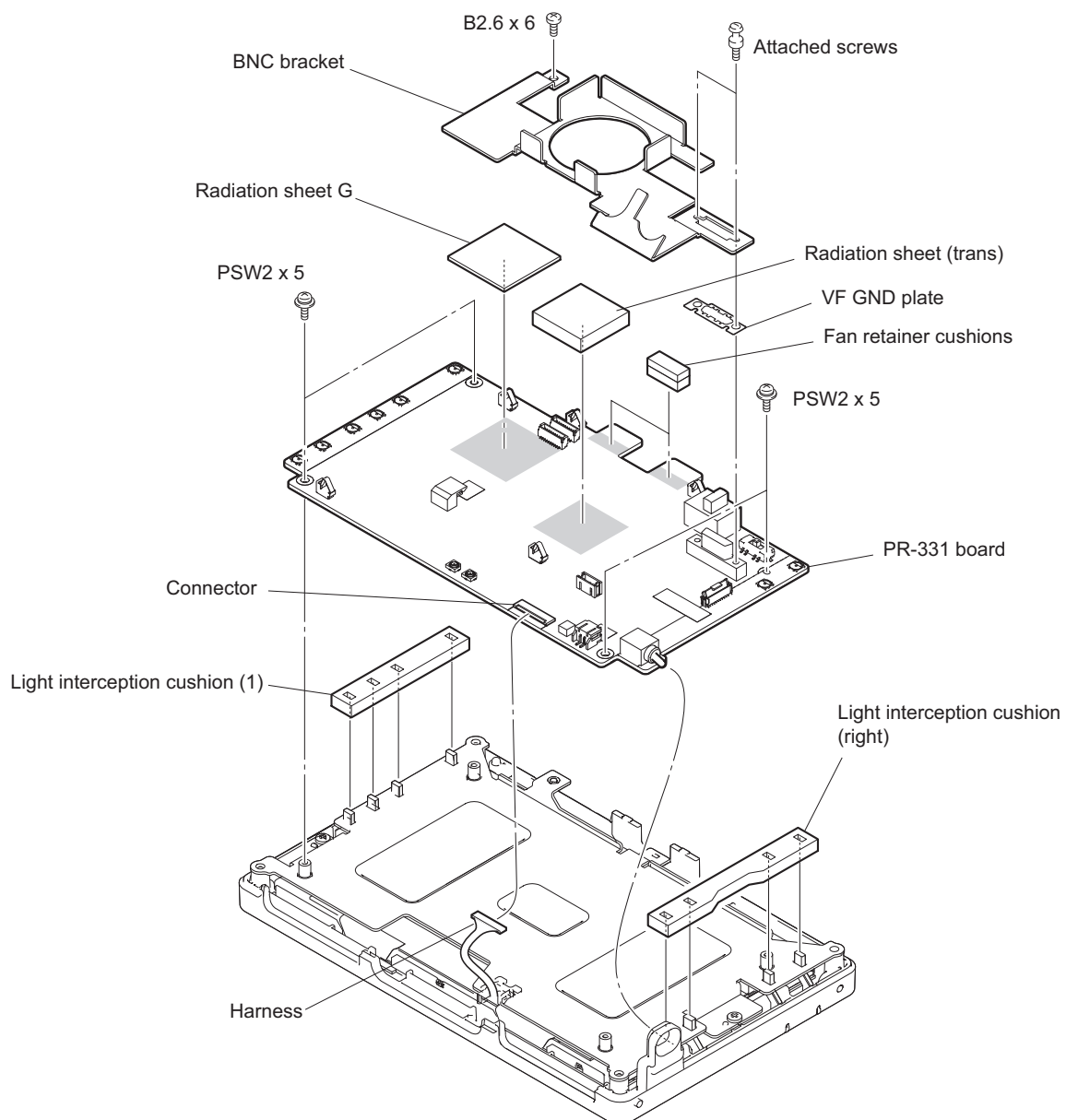
2-5. PR-331 Board

Preparation

1. Remove the rear panel assembly. (Refer to “2-2. Rear Panel Assembly”)
2. Remove the CN-3600 board block. (Refer to “2-3. CN-3600 Board Block/Coaxial Cables”)
3. Remove the DC fan. (Refer to “2-4. DC Fan”)

Procedure

1. Remove the two attached screws and the screw (B2.6 x 6), and then remove the BNC bracket and VF GND plate.
2. Disconnect the harness from the connector on the PR-331 board.
3. Remove the four screws (PSW2 x 5) to detach the PR-331 board.
4. Remove the radiation sheet G, the radiation sheet (trans), and the two fan retainer cushions.
5. Remove the light interception cushion (right) and light interception cushion (1).



Note

Carefully handle the removed PR-331 board so as not to damage any mount components.

6. Install the removed parts by reversing the steps of removal.

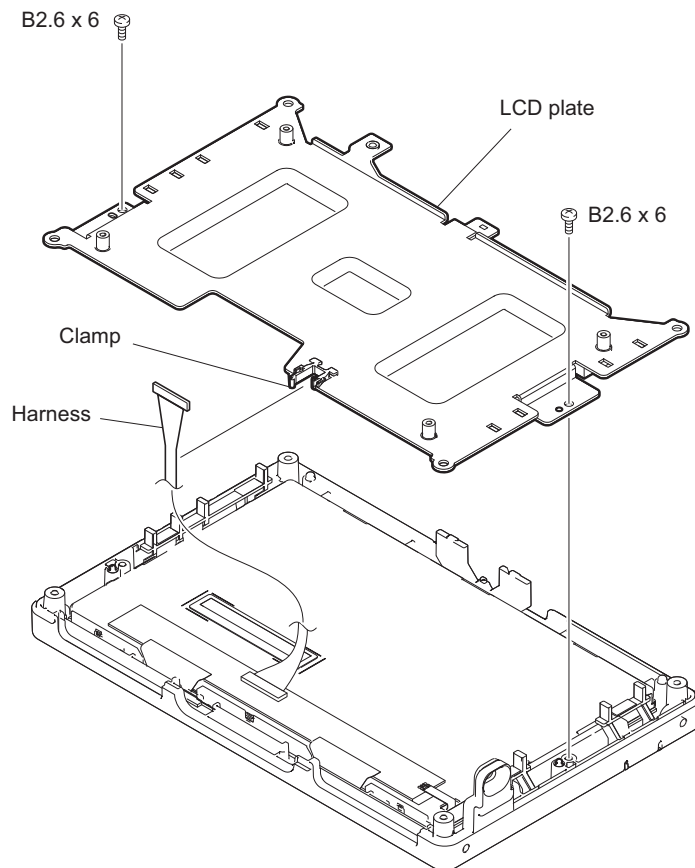
2-6. LCD Module

Preparation

1. Remove the rear panel assembly. (Refer to “2-2. Rear Panel Assembly”)
2. Remove the CN-3600 board block. (Refer to “2-3. CN-3600 Board Block/Coaxial Cables”)
3. Remove the DC fan. (Refer to “2-4. DC Fan”)
4. Remove the PR-331 board. (Refer to “2-5. PR-331 Board”)

Procedure

1. Open the clamp and release the harness.
2. Remove the two screws to detach the LCD plate.

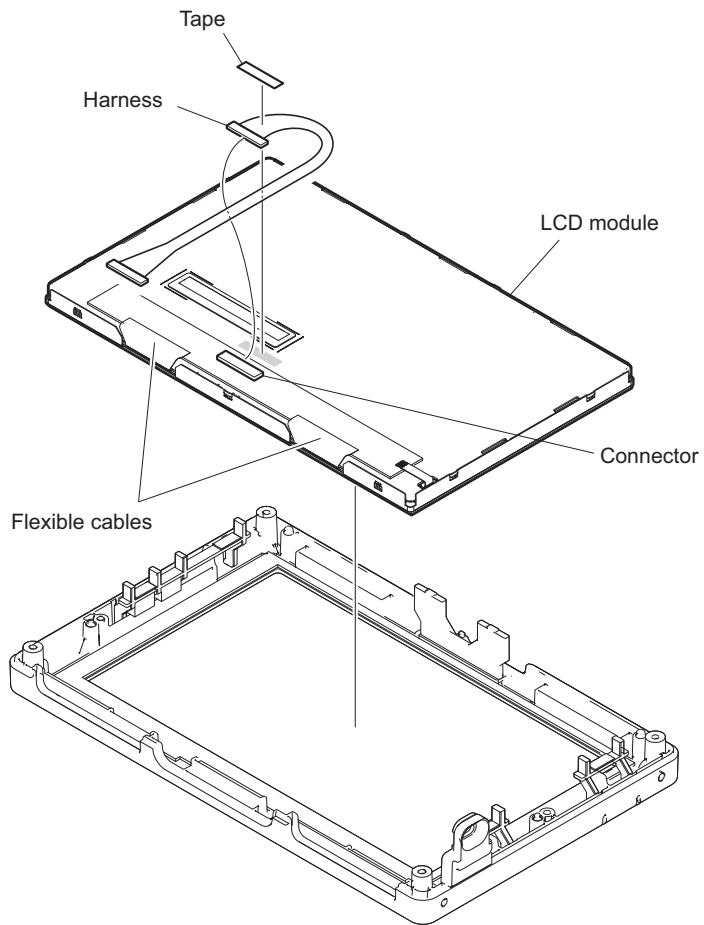


3. Remove the LCD module.

4. Remove the tape and disconnect the harness from the connector on the LCD module.

Note

When removing the LCD module, do not touch the flexible cables.



5. Install the removed parts by reversing the steps of removal.

Section 3

Diagnostics

3-1. Troubleshooting

This unit is provided with a fault diagnosis function for internal errors. When the unit detects an error, it displays an error message on the screen.

This section describes troubleshooting.

3-1-1. Displaying the Error Message

This unit has a warning system based on error message display. When an error occurs, the following message appears on the screen.

Display	Description	Remedy
VF TEMP HIGH	Internal temperature error	Turn off the power once or move the unit to a cool place.
DEVICE ERROR	A failure was detected during self-diagnosis.	Check the contents of a failure in "04: DIAGNOSIS" of a SERVICE menu. (Refer to " 4-2. SERVICE MENU List ")

3-1-2. Device Check

This unit has a self-diagnosis function that checks the communication function of each device.

The result of diagnosis is displayed in "04: DIAGNOSIS" of a SERVICE menu. As for the details of the SERVICE menu, refer to "[4-2. SERVICE MENU List](#)".

Section 4

Setup Menu

4-1. SERVICE Menu

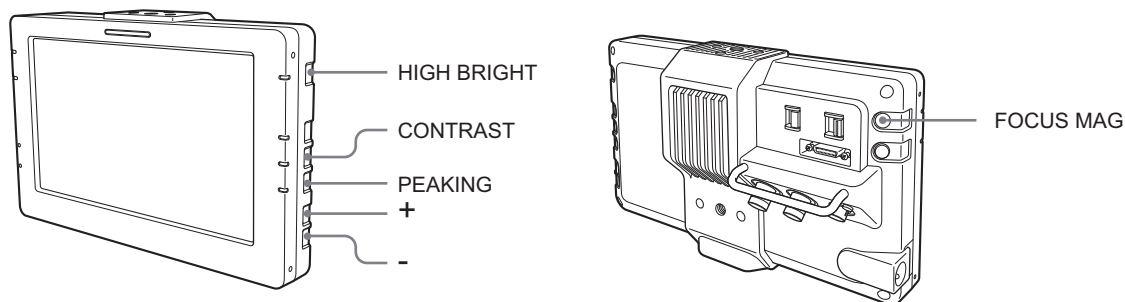
Only the SERVICE menu is available for settings of the unit. The SERVICE menu is used for making electrical adjustments of the unit, checking software and ROM versions, and checking the self-diagnosis function.

The SERVICE menu consists of the following four service menus.

- COLOR TEMP
- BACK LIGHT
- VERSION
- DIAGNOSIS

4-1-1. Operation Keys

The following are descriptions of the keys used in SERVICE menu.



Name	Function
HIGH BRIGHT	Used to start the SERVICE menu.
CONTRAST	Used to start the SERVICE menu or display the higher menu hierarchy again.
PEAKING	Used to execute the menu or an item in the menu.
+	Moves the cursor or page on the display. Also used to change a set value.
—	Moves the cursor or page on the display. Also used to change a set value.
FOCUS MAG	Used to start the SERVICE menu.

4-1-2. Displaying the SERVICE Menu

1. Turn off the power of the unit.
2. Turn on the power while pressing the HIGH BRIGHT button and the FOCUS MAG button.
3. Press the CONTRAST button.

The SERVICE menu is displayed.

Tip

When the power is turned off, the screen returns to the normal screen.

4-2. SERVICE MENU List

The following table lists all SERVICE MENU items.

Tip

Device functions of items for which "-" is shown in the DIAGNOSIS menu are disabled.

Page	Menu	Item	Setting	Function
01	COLOR TEMP	GAIN R	0 to xx to 255 xx: Factory shipment adjustment value	Adjusts the color balance (GAIN R)
		GAIN G	0 to xx to 255 xx: Factory shipment adjustment value	Adjusts the color balance (GAIN G)
		GAIN B	0 to xx to 255 xx: Factory shipment adjustment value	Adjusts the color balance (GAIN B)
02	BACK LIGHT	DIMMER HIGH	0 to xx to 255 xx: Factory shipment adjustment value	Brightness level adjustment in the high-brightness mode
		DIMMER LOW	0 to xx to 255 xx: Factory shipment adjustment value	Brightness level adjustment in the normal-brightness mode
03	VERSION	CPU	Display only	Displays the version of software (IC1201) on the PR-331 board.
		FPGA	Display only	Displays the version of FPGA (IC302) on the PR-331 board.
04	DIAGNOSIS	FPGA	Display only	Displays the self-diagnosis state of FPGA (IC302) on the PR-331 board. OK: Normal NG: A problem exists in communication.
		SCALER	Display only	Displays the self-diagnosis result of an image processing IC (IC801) on the PR-331 board. OK: Normal NG: A problem exists in communication.
		EEP ACCESS	Display only	Displays the self-diagnosis result of EEPROM (IC1211) on the PR-331 board. OK: Normal NG: A problem exists in communication.
		EEP SW DATA	Display only	The diagnosis result of the data (SW) stored in the EEPROM (IC1211) on the PR-331 board is displayed. OK: Normal NG: A problem exists in saved data.
		EEP AN DATA	Display only	The diagnosis result of the data (AN) stored in the EEPROM (IC1211) on the PR-331 board is displayed. OK: Normal NG: A problem exists in saved data.
		FAN	Display only	Displays the fan self-diagnosis result. OK: Normal NG: Failure
		TEMP1 ACCESS	Display only	Displays the self-diagnosis result of a temperature sensor (IC1208) on the PR-331 board. OK: Normal NG: A problem exists in communication.
		TEMP2 ACCESS	Display only	Displays the self-diagnosis result of a temperature sensor (IC1209) on the PR-331 board. OK: Normal NG: A problem exists in communication.

Section 5

Electrical Alignment

5-1. Actions to Be Taken When Replacing the LCD Module

Tip

An adjustment data label is stuck to a new LCD module. Information required for settings is written on the adjustment data label.

1. Replace the LCD module. (Refer to [“2-6. LCD Module”](#))
2. Connect the unit to the camera and turn on the power of the unit. Check that a video image is displayed on the LCD.
3. Display the SERVICE menu. (Refer to [“4-1-2. Displaying the SERVICE Menu”](#))
4. Enter the set values written on the adjustment data label in all items of the "S01: COLOR TEMP" menu.
5. Enter the set values written on the adjustment data label in all items of the "S02: BACK LIGHT" menu.
6. Check that the set values entered in step 4 and step 5 are the same as the set values written on the adjustment data label.
7. Turn off and on the power and check that a video image is displayed.

Section 6

Spare Parts

6-1. Note on Repair Parts

1. Safety Related Components Warning

WARNING

Components marked △ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.

3. Stock of Parts

Parts marked with “o” at SP (Supply Code) column of the spare parts list may not be stocked. Therefore, the delivery date will be delayed.

4. Harness

Harnesses with no part number are not registered as spare parts.

1. 安全重要部品

△警告

△印のついた部品は安全性を維持するために重要な部品です。したがって、交換する時は必ず指定の部品を使ってください。

2. 部品の共通化

ソニーから供給する補修用部品は、セットに使われているものと異なることがあります。これは部品の共通化、改良等によるものです。

3. 部品の在庫

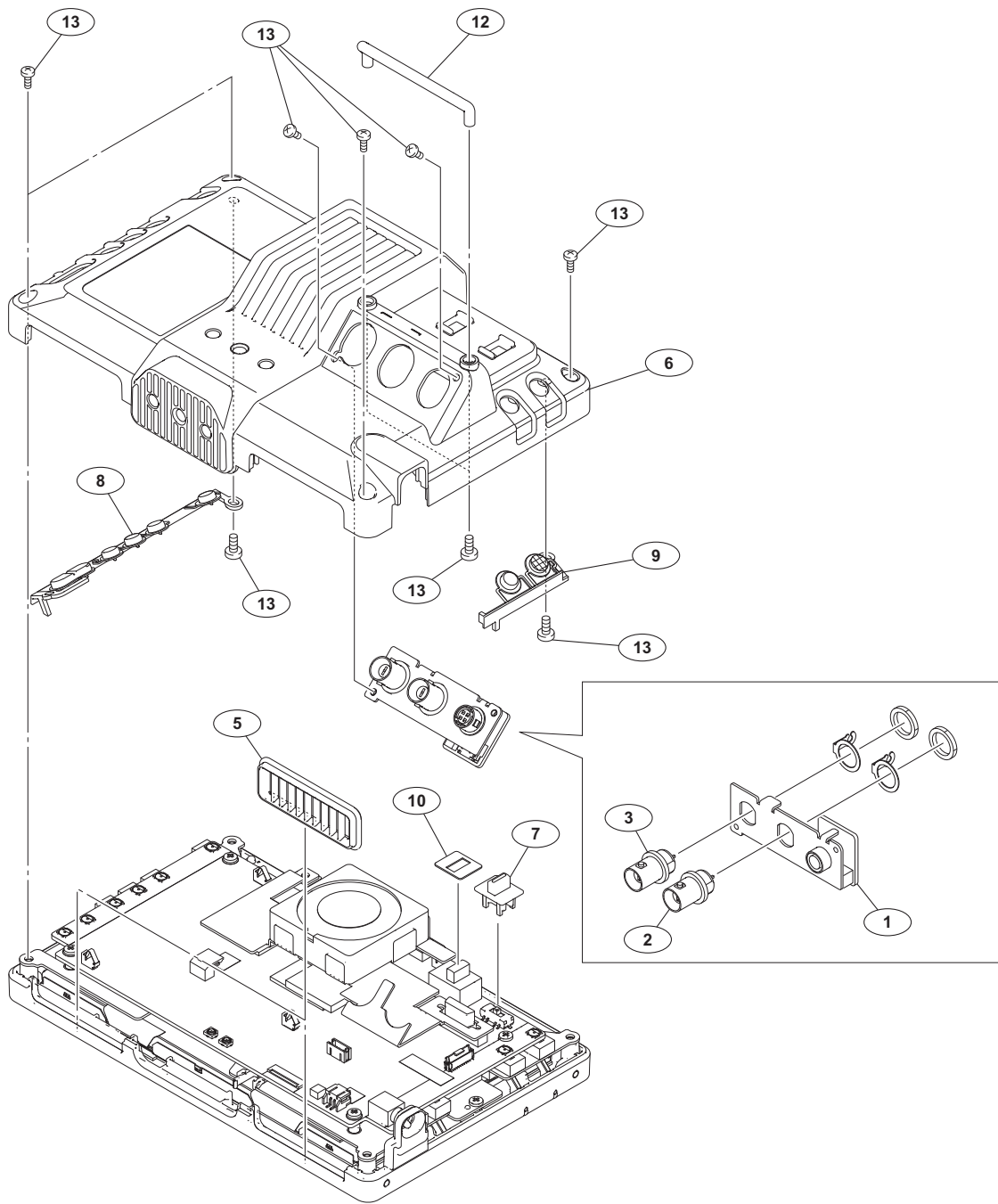
部品表の SP (Supply code) 欄に “o” で示される部品は在庫していないことがあります。納期が長くなる場合があります。

4. ハーネス

部品番号の記載されていないハーネスは、サービス部品として登録されていません。

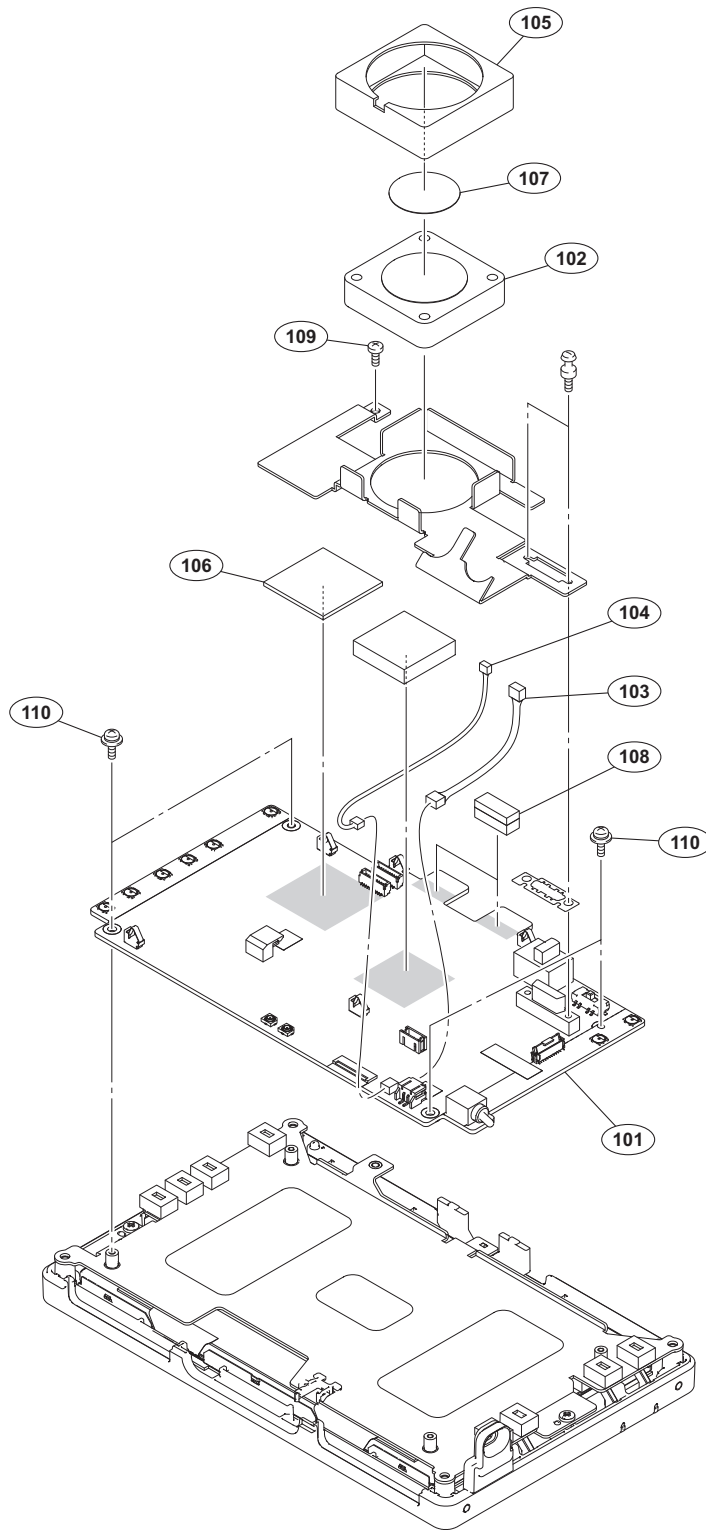
6-2. Exploded Views

Rear Panel



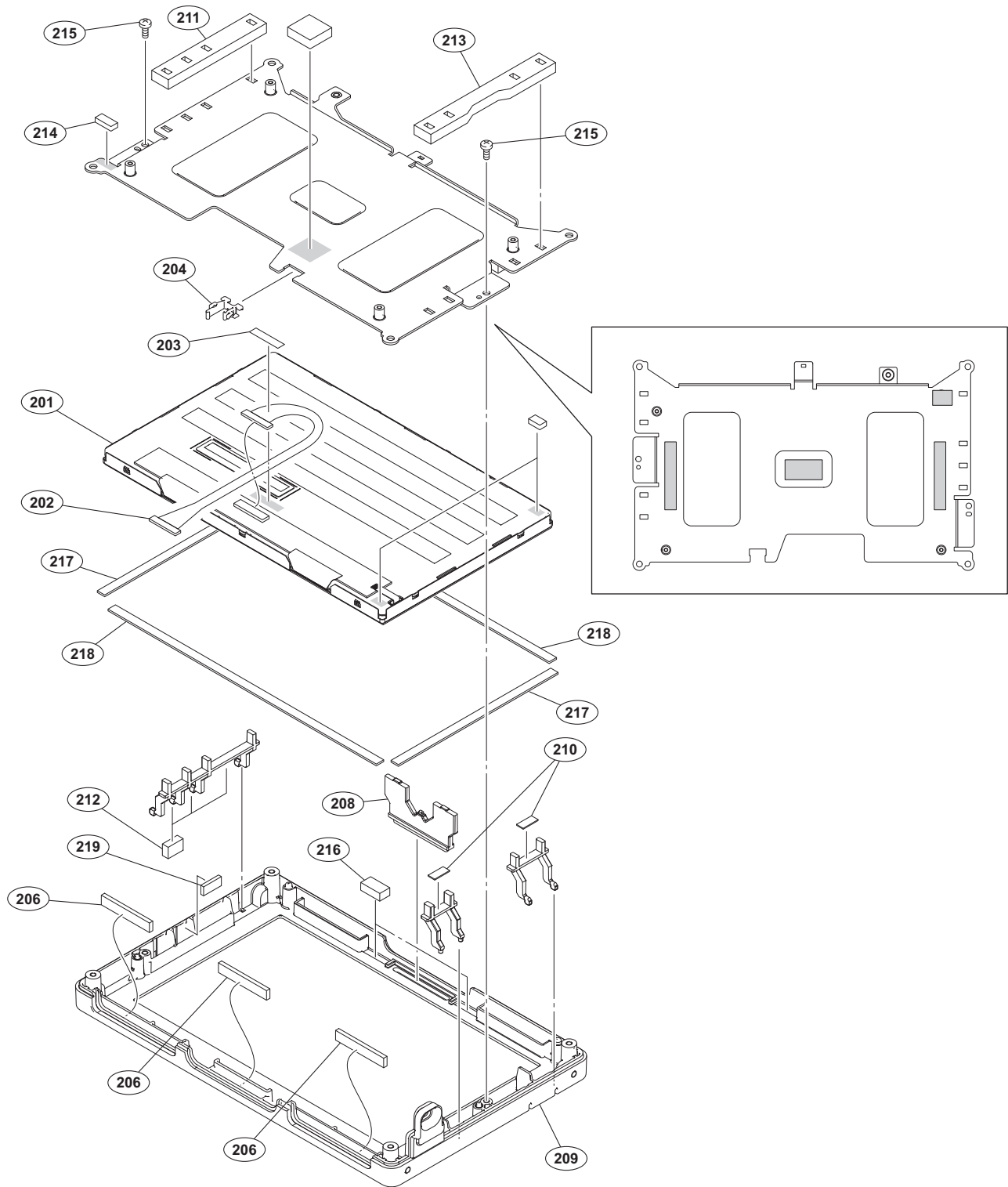
No.	Part No.	SP Description	No.	Part No.	SP Description
1	A-1929-932-A s	MOUNTED CIRCUIT BOARD, CN-3600 (SY: Serial No.500001 through 500999 CN: Serial No.100001 through 100999)	9	4-459-393-01 s	SWITCH (MAG)
	A-1962-686-A s	MOUNTED CIRCUIT BOARD, CN-3600S (SY: Serial No.501001 and higher CN: Serial No.101001 and higher)	10	4-459-394-01 s	BLANK SHEET
2	1-757-641-11 o	CABLE ASSEMBLY, COAXIAL	12	4-460-606-01 s	GUARD, CN
3	1-832-333-11 s	CABLE ASSEMBLY, COAXIAL	13	4-673-655-01 s	SCREW +B
5	4-459-140-01 s	LOUVER, INTAKE			
6	4-459-390-03 s	REAR PANEL			
7	4-459-391-01 s	SWITCH COVER (TALLY)			
8	4-459-392-02 s	SWITCH (HIGH)			

PR Board



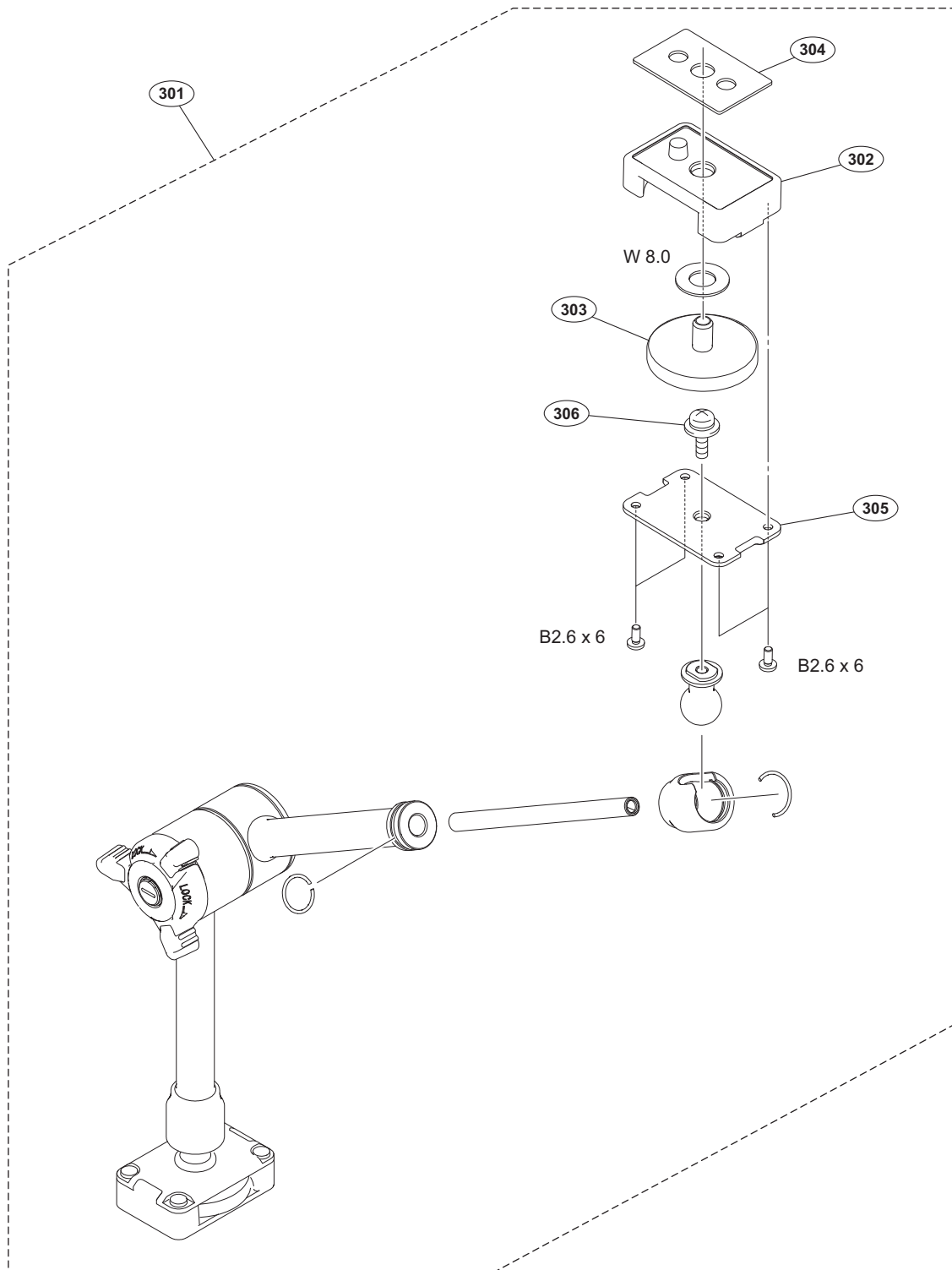
No.	Part No.	SP Description	No.	Part No.	SP Description
101	A-1929-933-A	s MOUNTED CIRCUIT BOARD, PR-331	110	3-855-938-01	s SCREW
102	⚠ 1-763-256-41	s FAN, DC (40 SQUARE)			
103	1-969-503-11	s HARNESS, SUB (DC IN)			
104	1-969-504-11	s HARNESS, SUB (TALLY)			
105	3-097-054-13	s CUSHION, FAN (40X10)			
106	4-275-244-01	s RADIATION SHEET G			
107	4-459-419-01	s SHEET, FAN			
108	4-461-529-01	s CUSHION, FAN RETAINER			
109	4-673-655-01	s SCREW +B			

LCD



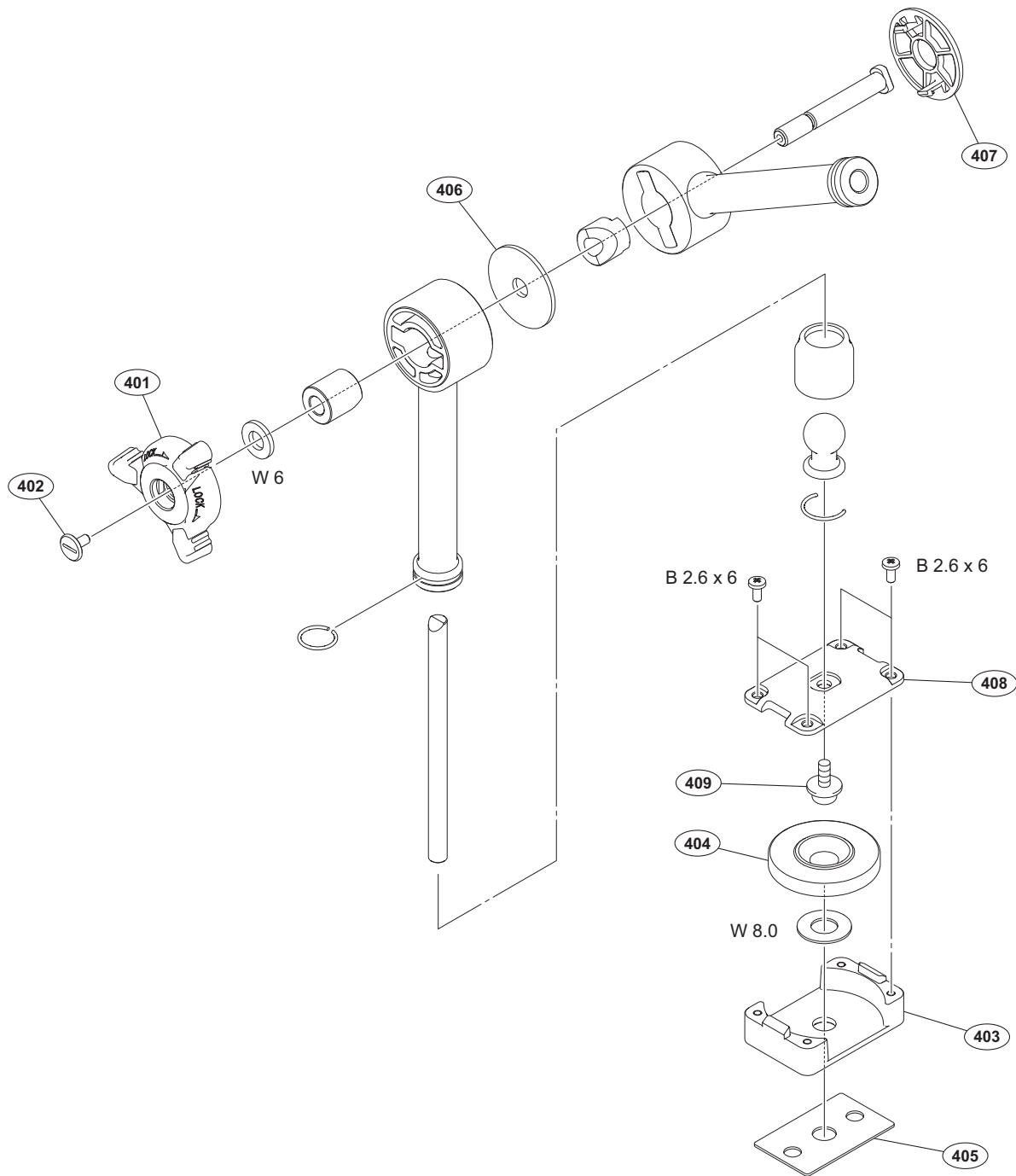
No.	Part No.	SP Description	No.	Part No.	SP Description
201	1-811-811-11	s LCD MODULE	212	4-459-300-01	s CUSHION (2), LIGHT INTERCEPTION
202	1-969-506-11	s HARNESS (LCD)	213	4-459-608-01	s CUSHION (RIGHT), LIGHT INTERCEP
203	3-079-115-01	s TAPE AS	214	4-459-837-01	s CUSHION, BUTTON
204	4-137-926-01	s SADDLE (LES-0505), EDGE	215	4-673-655-01	s SCREW +B
206	4-283-446-01	s RADIATION SHEET J	216	4-129-038-01	s FOAM (MOF), SHIELD
208	4-459-143-01	s LENS, LED (TALLY)	217	4-462-407-01	s CUSHION (R), LCD
209	4-459-144-01	s FRONT PANEL	218	4-462-408-01	s CUSHION (T), LCD
210	4-459-168-01	s CUSHION, LENS	219	4-469-466-01	s CUSHION, SUPPORT
211	4-459-299-01	s CUSHION (1), LIGHT INTERCEPTION			

Flexible Arm-1



No.	Part No.	SP Description
301	A-1929-876-A	s ARM ASSY, FLEXIBLE
302	4-459-152-01	s BOX (LCD), FITTING
303	4-469-106-01	s SCREW, FITTING (2)
304	4-459-155-01	s CUSHION, LCD
305	4-459-161-01	s BOX (LID), FITTING
306	2-580-602-01	s SCREW, +PSW M4X12
	7-621-773-95	s SCREW +B 2.6X6
	7-623-928-11	s WASHER 8.0, NYLON

Flexible Arm-2



No.	Part No.	SP Description
401	X-2586-818-1 s	KNOB ASSY, LOCK
402	4-456-181-01 s	SCREW STOPPER
403	4-459-153-01 s	BOX (CAMERA), FITTING
404	4-459-154-01 s	SCREW, FITTING
405	4-459-155-01 s	CUSHION, LCD
406	4-459-156-01 s	SPACER, FRICTION
407	4-459-160-01 s	LID, BLIND
408	4-459-161-01 s	BOX (LID), FITTING
409	2-580-602-01 s	SCREW, +PSW M4X12
	7-621-773-95 s	SCREW +B 2.6X6
	7-623-928-11 s	WASHER 8.0, NYLON
	7-682-962-01 s	SCREW +PSW 4X10
	7-688-006-11 s	W 6, MIDDLE

6-3. Electrical Parts List

CN-3600 BOARD

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-1929-932-A	s MOUNTED CIRCUIT BOARD, CN-3600
2pcs	1-784-240-11	s CONVERTER, COAXIAL CONNECTOR
2pcs	4-136-517-01	s WASHER, BNC COAXIAL FIXED
1pc	4-459-395-02	s PLATE,BNC
CN001	1-818-828-11	s CONNECTOR, ROUND TYPE (RF) 4P
CN002	1-770-160-21	s PIN, CONNECTOR (PC BOARD) 2P
CN003	1-770-619-21	s PIN, CONNECTOR 2P
FB003	1-400-921-21	s FERRITE, EMI (SMD)

CN-3600S BOARD

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-1962-686-A	s MOUNTED CIRCUIT BOARD, CN-3600S
2pcs	1-784-240-11	s CONVERTER, COAXIAL CONNECTOR
2pcs	4-136-517-01	s WASHER, BNC COAXIAL FIXED
1pc	4-459-395-02	s PLATE,BNC
CN001	1-818-828-11	s CONNECTOR, ROUND TYPE (RF) 4P
CN002	1-770-160-21	s PIN, CONNECTOR (PC BOARD) 2P
CN003	1-770-619-21	s PIN, CONNECTOR 2P
FB003	1-400-921-21	s FERRITE, EMI (SMD)

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-1929-933-A	s MOUNTED CIRCUIT BOARD, PR-331
C202	1-116-737-11	s CAP, CERAMIC 1MF X5R 1005
C203	1-116-737-11	s CAP, CERAMIC 1MF X5R 1005
C205	1-116-741-11	s CAP, CERAMIC 0.47MF X5R 1005
C206	1-116-741-11	s CAP, CERAMIC 0.47MF X5R 1005
C207	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C208	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C209	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C210	1-118-041-11	s CAP, CERAMIC 4.7MF X5R (1608)
C211	1-118-041-11	s CAP, CERAMIC 4.7MF X5R (1608)
C212	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C213	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C214	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C215	1-164-850-81	s CAP, CHIP CERAMIC 10PF CH 1005
C216	1-164-850-81	s CAP, CHIP CERAMIC 10PF CH 1005
C217	1-116-737-11	s CAP, CERAMIC 1MF X5R 1005
C218	1-114-565-81	s CAP, CERAMIC 0.047MF B
C219	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C220	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C221	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C222	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C223	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C224	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C225	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C226	1-116-737-11	s CAP, CERAMIC 1MF X5R 1005
C227	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C228	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C229	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C230	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C231	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
C232	1-116-737-11	s CAP, CERAMIC 1MF X5R 1005
C233	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C234	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C235	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C236	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C237	1-116-737-11	s CAP, CERAMIC 1MF X5R 1005
C238	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C239	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C240	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C241	1-116-350-21	s CAP, CHIP CERAMIC 47UF B 2012
C242	1-118-041-11	s CAP, CERAMIC 4.7MF X5R (1608)
C243	1-118-041-11	s CAP, CERAMIC 4.7MF X5R (1608)
C244	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C245	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C246	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C247	1-118-041-11	s CAP, CERAMIC 4.7MF X5R (1608)
C248	1-112-777-11	s CAP, CERAMIC 0.01MF X7R 1005
C250	1-118-041-11	s CAP, CERAMIC 4.7MF X5R (1608)
C252	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C301	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C302	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C303	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C304	1-116-707-11	s CAP, CERAMIC 47MF X5R 3216
C305	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C306	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C307	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C308	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C309	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C310	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C311	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C312	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C313	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C314	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C315	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C316	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C317	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C318	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C319	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C320	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C321	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C322	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C323	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C324	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C325	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C326	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C327	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C328	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C329	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C330	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C331	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C332	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C333	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C334	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C335	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C336	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C337	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C338	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C339	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C340	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C341	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C342	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C343	1-116-720-11	s CAP, CERAMIC 10MF X5R 1608
C344	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C345	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005
C346	1-100-916-11	s CAP, CERAMIC 0.1MF X7R 1005

[illegible]

Ref. No. or Q'ty	Part No.	SP	Description					
C730	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C731	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C732	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C733	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C734	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C735	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C736	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C737	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C738	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C739	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C740	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C741	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C742	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C804	1-116-720-11	s	CAP, CERAMIC	10MF	X5R	1608		
C805	1-116-720-11	s	CAP, CERAMIC	10MF	X5R	1608		
C806	1-116-720-11	s	CAP, CERAMIC	10MF	X5R	1608		
C807	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C808	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C809	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C810	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C811	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C812	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C813	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C814	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C815	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C816	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C817	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C818	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C819	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C820	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C821	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C822	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C823	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C824	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C825	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C826	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C827	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C828	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C829	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C830	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C831	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C832	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C833	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C834	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C836	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C837	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C839	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C840	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C843	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C845	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C847	1-100-916-11	s	CAP, CERAMIC	0.1MF	X7R	1005		
C848	1-100-916-11	s	CAP, CERAMIC	0.				

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
C877	1-116-720-11 s	CAP, CERAMIC 10MF X5R 1608
C879	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C881	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C901	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1001	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1002	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1003	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1004	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1005	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1006	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1007	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1008	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1009	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1010	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1011	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1012	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1013	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1014	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1015	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1016	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1017	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1018	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1019	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1020	1-116-720-11 s	CAP, CERAMIC 10MF X5R 1608
C1021	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1022	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1023	1-116-720-11 s	CAP, CERAMIC 10MF X5R 1608
C1024	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1025	1-116-720-11 s	CAP, CERAMIC 10MF X5R 1608
C1026	1-116-720-11 s	CAP, CERAMIC 10MF X5R 1608
C1027	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1028	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1029	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1030	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1031	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1032	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1033	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1034	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1035	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1036	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1037	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1038	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1039	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1040	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1041	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1042	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1101	1-116-720-11 s	CAP, CERAMIC 10MF X5R 1608
C1102	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1103	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1104	1-116-720-11 s	CAP, CERAMIC 10MF X5R 1608
C1105	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1106	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1201	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1202	1-114-335-11 s	CAP, CERAMIC 22MF X7R 3225
C1203	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1204	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1205	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1206	1-114-130-11 s	CAP, CERAMIC 1MF X6S 1005
C1207	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1208	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1209	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1210	1-116-737-11 s	CAP, CERAMIC 1MF X5R 1005
C1211	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1212	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1213	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
C1214	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1215	1-114-130-11 s	CAP, CERAMIC 1MF X6S 1005
C1216	1-100-909-11 s	CAP, CERAMIC 10MF X6S 2012
C1217	1-100-909-11 s	CAP, CERAMIC 10MF X6S 2012
C1218	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1219	1-164-850-81 s	CAP, CHIP CERAMIC 10PF CH 1005
C1220	1-164-850-81 s	CAP, CHIP CERAMIC 10PF CH 1005
C1221	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1222	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1223	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1224	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1225	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1226	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1227	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1301	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1302	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1303	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1304	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1305	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1306	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1307	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1308	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1402	1-116-709-11 s	CAP, CERAMIC 22MF X5R 3225
C1404	1-114-868-11 s	CAP, CERAMIC 0.1MF X7R 1608
C1405	1-114-868-11 s	CAP, CERAMIC 0.1MF X7R 1608
C1406	1-116-709-11 s	CAP, CERAMIC 22MF X5R 3225
C1408	1-118-046-11 s	CAP, CERAMIC 4.7MF X5R (2012)
C1409	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1410	1-116-741-11 s	CAP, CERAMIC 0.47MF X5R 1005
C1411	1-164-874-81 s	CAP,CHIP CERAMIC 100PF CH 1005
C1412	1-116-737-11 s	CAP, CERAMIC 1MF X5R 1005
C1413	1-114-868-11 s	CAP, CERAMIC 0.1MF X7R 1608
C1414	1-116-709-11 s	CAP, CERAMIC 22MF X5R 3225
C1415	1-112-692-81 s	CAP,CHIP CERAMIC1000PF CH 1005
C1416	1-116-709-11 s	CAP, CERAMIC 22MF X5R 3225
C1417	1-164-939-81 s	CAP, CHIP CERAMIC 2200PF B 1005
C1418	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1419	1-112-776-11 s	CAP, CERAMIC 4700PF X7R 1005
C1421	1-116-709-11 s	CAP, CERAMIC 22MF X5R 3225
C1422	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1423	1-164-858-81 s	CAP, CHIP CERAMIC 22PF CH 1005
C1424	1-164-858-81 s	CAP, CHIP CERAMIC 22PF CH 1005
C1425	1-100-597-91 s	CAP, CHIP CERAMIC 0.1MF B 1608
C1426	1-100-597-91 s	CAP, CHIP CERAMIC 0.1MF B 1608
C1427	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1428	1-112-778-11 s	CAP, CERAMIC 0.022MF X7R 1005
C1429	1-112-778-11 s	CAP, CERAMIC 0.022MF X7R 1005
C1430	1-162-969-91 s	CAP, CERAMIC 6800PF B 1608
C1431	1-162-969-91 s	CAP, CERAMIC 6800PF B 1608
C1432	1-100-909-11 s	CAP, CERAMIC 10MF X6S 2012
C1433	1-100-909-11 s	CAP, CERAMIC 10MF X6S 2012
C1434	1-100-909-11 s	CAP, CERAMIC 10MF X6S 2012
C1435	1-135-960-91 s	CAP, CHIP CERAMIC 10MF B (3225)
C1436	1-135-960-91 s	CAP, CHIP CERAMIC 10MF B (3225)
C1437	1-100-597-91 s	CAP, CHIP CERAMIC 0.1MF B 1608
C1438	1-100-597-91 s	CAP, CHIP CERAMIC 0.1MF B 1608
C1439	1-116-705-11 s	CAP, CERAMIC 47MF X5R 3225
C1440	1-116-709-11 s	CAP, CERAMIC 22MF X5R 3225
C1442	1-116-705-11 s	CAP, CERAMIC 47MF X5R 3225
C1443	1-116-709-11 s	CAP, CERAMIC 22MF X5R 3225
C1445	1-118-046-11 s	CAP, CERAMIC 4.7MF X5R (2012)
C1446	1-116-713-11 s	CAP, CERAMIC 22MF X5R 2012
C1447	1-116-707-11 s	CAP, CERAMIC 47MF X5R 3216
C1448	1-112-776-11 s	CAP, CERAMIC 4700PF X7R 1005
C1449	1-112-775-11 s	CAP, CERAMIC 2200PF X7R 1005

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
C1450	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1451	1-112-776-11 s	CAP, CERAMIC 4700PF X7R 1005
C1452	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1454	1-116-707-11 s	CAP, CERAMIC 47MF X5R 3216
C1455	1-112-778-11 s	CAP, CERAMIC 0.022MF X7R 1005
C1456	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1457	1-112-776-11 s	CAP, CERAMIC 4700PF X7R 1005
C1458	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1460	1-116-707-11 s	CAP, CERAMIC 47MF X5R 3216
C1461	1-112-776-11 s	CAP, CERAMIC 4700PF X7R 1005
C1462	1-112-778-11 s	CAP, CERAMIC 0.022MF X7R 1005
C1463	1-112-777-11 s	CAP, CERAMIC 0.01MF X7R 1005
C1464	1-112-776-11 s	CAP, CERAMIC 4700PF X7R 1005
C1465	1-100-916-11 s	CAP, CERAMIC 0.1MF X7R 1005
C1469	1-116-707-11 s	CAP, CERAMIC 47MF X5R 3216
C1470	1-116-707-11 s	CAP, CERAMIC 47MF X5R 3216
C1474	1-116-707-11 s	CAP, CERAMIC 47MF X5R 3216
C1475	1-116-707-11 s	CAP, CERAMIC 47MF X5R 3216
C1477	1-116-737-11 s	CAP, CERAMIC 1MF X5R 1005
C1478	1-116-709-11 s	CAP, CERAMIC 22MF X5R 3225
CN101	1-818-958-31 s	CONNECTOR, SDR (26 PIN)
CN201	1-764-243-31 o	CONNECTOR (COAXIAL)
CN202	1-764-243-31 o	CONNECTOR (COAXIAL)
CN301	1-784-254-21 s	CONNECTOR 10P
CN302	1-784-254-21 s	CONNECTOR 10P
CN1101	1-843-688-11 s	CONNECTOR, COAXIAL 30P
CN1201	1-778-648-31 s	CONNECTOR, FFC/FPC(ZIF) ST 20P
CN1202	1-573-290-21 s	PIN, CONNECTOR (1.5MM) (SMD) 4P
CN1401	1-770-160-21 s	PIN, CONNECTOR (PC BOARD) 2P
CN1402	1-770-619-21 s	PIN, CONNECTOR 2P
CN1403	1-580-056-21 s	PIN, CONNECTOR (SMD) 3P
D501	8-719-074-31 s	DIODE CL-196YG-CD-T
D502	8-719-074-31 s	DIODE CL-196YG-CD-T
D1201	6-502-197-01 s	DI SML-D12M8WT86SM
D1202	8-719-989-01 s	DIODE DA221-TL
D1203	6-502-197-01 s	DI SML-D12M8WT86SM
D1204	6-502-197-01 s	DI SML-D12M8WT86SM
D1309	6-503-801-01 s	DI SML-T13UTT86S
D1310	6-503-801-01 s	DI SML-T13UTT86S
D1311	6-503-801-01 s	DI SML-T13UTT86S
D1312	6-503-801-01 s	DI SML-T13UTT86S
D1313	6-503-946-01 s	DI SML-T13DTT86
D1314	6-503-946-01 s	DI SML-T13DTT86
D1315	6-503-946-01 s	DI SML-T13DTT86
D1316	6-503-790-01 s	DI SG1111C-0005-TR
D1317	6-503-946-01 s	DI SML-T13DTT86
D1318	6-503-790-01 s	DI SG1111C-0005-TR
D1319	6-503-946-01 s	DI SML-T13DTT86
D1320	6-503-800-01 s	DI SML-T13YTT86T
D1402	6-501-123-01 s	DIODE RB160M-60TR
D1403	8-719-069-28 s	DI 1SS400FJTE61
D1404	8-719-065-59 s	DIODE MBR0530T1
D1405	8-719-065-59 s	DIODE MBR0530T1
D1406	6-500-697-01 s	DI UDZSUSTE-173.3B
E101	1-535-877-22 s	CHIP, CHECKER
E102	1-535-877-22 s	CHIP, CHECKER
E103	1-535-877-22 s	CHIP, CHECKER
E104	1-535-877-22 s	CHIP, CHECKER
E105	1-780-050-21 s	CONTACT, ON BOARD
E106	1-780-050-21 s	CONTACT, ON BOARD
E107	1-780-050-21 s	CONTACT, ON BOARD
E108	1-780-050-21 s	CONTACT, ON BOARD
E109	1-780-050-21 s	CONTACT, ON BOARD

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
E110	1-780-050-21 s	CONTACT, ON BOARD
E111	1-780-050-21 s	CONTACT, ON BOARD
E112	1-780-050-21 s	CONTACT, ON BOARD
E113	1-780-050-21 s	CONTACT, ON BOARD
E114	1-694-974-21 s	CONTACT TERMINAL
E115	1-780-050-21 s	CONTACT, ON BOARD
E1401	1-535-877-22 s	CHIP, CHECKER
E1402	1-535-877-22 s	CHIP, CHECKER
ET101	1-780-627-11 s	TERMINAL, LUG
ET102	1-780-627-11 s	TERMINAL, LUG
ET103	1-780-627-11 s	TERMINAL, LUG
ET104	1-780-627-11 s	TERMINAL, LUG
F1401	△ 1-576-798-11 s	FUSE (SMD/ MEDIUM ACTING) (5A/ 125V)
FB201	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB202	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB203	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB204	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB205	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB206	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB301	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB302	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB303	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB304	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB305	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB306	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB503	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB504	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB701	1-400-824-21 s	EMI FERRITE (SMD) (1005)
FB702	1-400-382-21 s	EMI FERRITE (SMD) (1608)
FB801	1-400-382-21 s	EMI FERRITE (SMD) (1608)
FB802	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB803	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB804	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FB1001	1-400-824-21 s	EMI FERRITE (SMD) (1005)
FB1002	1-400-382-21 s	EMI FERRITE (SMD) (1608)
FB1101	1-400-462-21 s	FERRITE, EMI (SMD) (1005)
FL301	1-234-939-21 s	FILTER, EMI REMOVAL (SMD)
FL801	1-234-939-21 s	FILTER, EMI REMOVAL (SMD)
IC202	6-710-243-01 s	IC SN74AVC1T45DCKR
IC204	6-711-485-01 s	IC TC74VCX125FK(EL)
IC205	6-713-192-11 s	IC GS2978-CNTE3Z
IC206	6-715-041-01 s	IC TC7SZ125FU,RSOYJ
IC301	6-713-878-01 s	IC EPCS64S116N
IC503	6-700-831-01 s	IC TC7WZ74FK
IC504	6-706-484-01 s	IC TC7SH04FU
IC702	6-707-373-01 s	IC TPS51100DGQR
IC1002	6-707-373-01 s	IC TPS51100DGQR
IC1101	6-713-856-02 s	IC THC63LVD83D-T
IC1202	6-715-036-01 s	IC TC7SZ04FU,RSOYJ
IC1203	6-706-478-01 s	IC TC7SET08FU
IC1204	6-715-039-01 s	IC TC7SZ08FU,RSOYJ
IC1205	6-703-109-01 o	IC NJM2730F(Te1)
IC1206	6-715-039-01 s	IC TC7SZ08FU,RSOYJ
IC1207	6-702-879-01 s	IC R3112N281A-TR-FE
IC1208	6-706-815-01 s	IC TMP75AIDR
IC1209	6-706-815-01 s	IC TMP75AIDR
IC1401	8-759-183-53 s	IC TL431CPK-E2
IC1402	8-759-338-95 s	IC NJM2903V(Te2)
IC1403	8-759-183-53 s	IC TL431CPK-E2
IC1404	8-759-338-95 s	IC NJM2903V(Te2)
IC1406	6-702-510-01 s	IC TPS5120DBTRG4
IC1410	6-708-889-01 s	IC MP2105DJ-LF-Z

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
IC1411	6-712-324-01 s	IC NJM2878F4-15 (TE2)
IC1412	6-703-109-01 o	IC NJM2730F (TE1)
L101	1-457-539-11 s	COMMON MODE CHOKE COIL
L102	1-457-539-11 s	COMMON MODE CHOKE COIL
L103	1-457-539-11 s	COMMON MODE CHOKE COIL
L201	1-414-834-21 s	INDUCTOR, CHIP 3.3NH (1005)
L202	1-414-834-21 s	INDUCTOR, CHIP 3.3NH (1005)
L1101	1-469-555-21 s	INDUCTOR, CHIP 10UH (LB2016)
L1102	1-457-539-11 s	COMMON MODE CHOKE COIL
L1103	1-457-539-11 s	COMMON MODE CHOKE COIL
L1104	1-457-539-11 s	COMMON MODE CHOKE COIL
L1201	1-469-555-21 s	INDUCTOR, CHIP 10UH (LB2016)
L1202	1-469-555-21 s	INDUCTOR, CHIP 10UH (LB2016)
L1203	1-469-555-21 s	INDUCTOR, CHIP 10UH (LB2016)
L1204	1-469-555-21 s	INDUCTOR, CHIP 10UH (LB2016)
L1205	1-469-555-21 s	INDUCTOR, CHIP 10UH (LB2016)
L1206	1-469-555-21 s	INDUCTOR, CHIP 10UH (LB2016)
L1402	1-457-439-11 s	CHOKE COIL (SMD) 4.7UH
L1403	1-457-497-11 s	COIL, CHOKE (SMD)
L1404	1-457-509-11 s	CHOKE COIL 10UH
L1405	1-457-850-11 s	CHOKE COIL 22UH
L1406	1-457-439-11 s	CHOKE COIL (SMD) 4.7UH
L1407	1-469-757-21 s	INDUCTOR 10UH (2012)
L1408	1-457-852-11 s	COIL, CHOKE 1.2UH
L1410	1-457-497-11 s	COIL, CHOKE (SMD)
L1412	1-457-396-11 s	CHOKE COIL 6.8UH
L1414	1-457-396-11 s	CHOKE COIL 6.8UH
L1420	1-457-836-11 s	CHOKE COIL 10UH
L1421	1-481-781-21 s	INDUCTOR 47UH
Q501	8-729-928-25 s	TRANSISTOR 2SA1774TL-QR
Q502	8-729-928-25 s	TRANSISTOR 2SA1774TL-QR
Q1201	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1202	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1203	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1301	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1302	8-729-928-28 s	TRANSISTOR DTA144EE-TL
Q1303	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1304	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1305	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1306	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1307	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1308	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1309	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1310	8-729-928-82 s	TRANSISTOR DTC144EE-TL
Q1401	8-729-928-05 s	TRANSISTOR 2SC4617TL-QR
Q1402	6-552-545-01 s	TR SI4425DDY-T1-GE3
Q1403	8-729-928-05 s	TRANSISTOR 2SC4617TL-QR
Q1404	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1405	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1406	8-729-928-05 s	TRANSISTOR 2SC4617TL-QR
Q1407	6-552-545-01 s	TR SI4425DDY-T1-GE3
Q1408	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1409	8-729-928-05 s	TRANSISTOR 2SC4617TL-QR
Q1410	6-552-494-01 s	TR SI2307CDS-T1-GE3
Q1411	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1412	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1413	8-729-928-05 s	TRANSISTOR 2SC4617TL-QR
Q1414	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1415	6-552-494-01 s	TR SI2307CDS-T1-GE3
Q1416	8-729-054-35 s	TRANSISTOR HAT2070R-EL
Q1417	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1419	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1420	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
Q1421	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1422	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1423	6-551-190-01 s	TRANSISTOR HAT2218R-EL-E
Q1424	6-551-190-01 s	TRANSISTOR HAT2218R-EL-E
Q1425	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1426	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1427	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1428	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1429	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1430	6-552-494-01 s	TR SI2307CDS-T1-GE3
Q1431	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1432	6-552-494-01 s	TR SI2307CDS-T1-GE3
Q1433	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1437	6-550-750-01 s	TRANSISTOR SSM3K15FS-TE85L
Q1438	6-552-545-01 s	TR SI4425DDY-T1-GE3
R201	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R202	1-250-468-11 s	RES, METAL FILM CHIP 75 (1005)
R207	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R209	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R210	1-250-455-11 s	RES, METAL FILM CHIP 22 (1005)
R211	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)
R212	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)
R215	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R216	1-250-467-11 s	RES, METAL FILM CHIP 68 (1005)
R217	1-208-856-81 s	RES, CHIP 51 (1005)
R218	1-208-856-81 s	RES, CHIP 51 (1005)
R219	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)
R220	1-208-884-81 s	RES, CHIP 750 (1005)
R221	1-250-468-11 s	RES, METAL FILM CHIP 75 (1005)
R222	1-250-468-11 s	RES, METAL FILM CHIP 75 (1005)
R223	1-250-468-11 s	RES, METAL FILM CHIP 75 (1005)
R224	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R226	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R229	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R301	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)
R302	1-250-495-11 s	RES, METAL FILM CHIP 1.0K (1005)
R303	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)
R406	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R409	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R410	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R411	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R412	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R413	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R508	1-250-495-11 s	RES, METAL FILM CHIP 1.0K (1005)
R509	1-250-495-11 s	RES, METAL FILM CHIP 1.0K (1005)
R514	1-250-543-11 o	RES, METAL FILM CHIP 100K (1005)
R515	1-250-467-11 s	RES, METAL FILM CHIP 68 (1005)
R516	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)
R517	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)
R518	1-250-511-11 o	RES, METAL FILM CHIP 4.7K (1005)
R519	1-250-511-11 o	RES, METAL FILM CHIP 4.7K (1005)
R521	1-250-455-11 s	RES, METAL FILM CHIP 22 (1005)
R522	1-250-463-11 s	RES, METAL FILM CHIP 47 (1005)
R523	1-250-543-11 o	RES, METAL FILM CHIP 100K (1005)
R601	1-250-495-11 s	RES, METAL FILM CHIP 1.0K (1005)
R602	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R603	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R604	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R605	1-250-471-11 s	RES, METAL FILM CHIP 100 (1005)
R701	1-208-870-81 s	RES, CHIP 200 (1005)
R702	1-208-870-81 s	RES, CHIP 200 (1005)
R901	1-250-463-11 s	RES, METAL FILM CHIP 47 (1005)
R903	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)
R904	1-250-519-11 s	RES, METAL FILM CHIP 10K (1005)

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
R1427	1-250-511-11 o	RES,METAL FILM CHIP 4.7K(1005)
R1428	1-250-477-11 o	RES, METAL FILM CHIP 180(1005)
R1429	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1430	1-250-539-11 o	RES, METAL FILM CHIP 68K(1005)
R1431	1-250-539-11 o	RES, METAL FILM CHIP 68K(1005)
R1432	1-250-539-11 o	RES, METAL FILM CHIP 68K(1005)
R1433	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1434	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1435	1-250-535-11 s	RES, METAL FILM CHIP 47K(1005)
R1436	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1437	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1438	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1439	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1440	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1441	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1442	1-250-515-11 s	RES,METAL FILM CHIP 6.8K(1005)
R1443	1-250-515-11 s	RES,METAL FILM CHIP 6.8K(1005)
R1444	1-250-515-11 s	RES,METAL FILM CHIP 6.8K(1005)
R1445	1-250-527-11 o	RES, METAL FILM CHIP 22K(1005)
R1446	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1447	1-250-535-11 s	RES, METAL FILM CHIP 47K(1005)
R1448	1-250-535-11 s	RES, METAL FILM CHIP 47K(1005)
R1449	1-250-535-11 s	RES, METAL FILM CHIP 47K(1005)
R1451	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1452	1-250-523-11 o	RES, METAL FILM CHIP 15K(1005)
R1453	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1454	1-250-503-11 o	RES,METAL FILM CHIP 2.2K(1005)
R1455	1-250-527-11 o	RES, METAL FILM CHIP 22K(1005)
R1456	1-250-535-11 s	RES, METAL FILM CHIP 47K(1005)
R1457	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1458	1-250-487-11 s	RES, METAL FILM CHIP 470(1005)
R1459	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1460	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1461	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1462	1-250-447-11 s	RES, METAL FILM CHIP 10 (1005)
R1463	1-250-447-11 s	RES, METAL FILM CHIP 10 (1005)
R1464	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1465	1-250-503-11 o	RES,METAL FILM CHIP 2.2K(1005)
R1466	1-250-487-11 s	RES, METAL FILM CHIP 470(1005)
R1467	1-250-447-11 s	RES, METAL FILM CHIP 10 (1005)
R1468	1-250-515-11 s	RES,METAL FILM CHIP 6.8K(1005)
R1469	1-250-507-11 o	RES,METAL FILM CHIP 3.3K(1005)
R1470	1-250-483-11 s	RES, METAL FILM CHIP 330(1005)
R1471	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1472	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1473	1-250-531-11 s	RES, METAL FILM CHIP 33K(1005)
R1474	1-250-527-11 o	RES, METAL FILM CHIP 22K(1005)
R1475	1-211-899-91 s	RES,SQUARE TYPE CHIP 0.22 3225
R1476	1-211-899-91 s	RES,SQUARE TYPE CHIP 0.22 3225
R1477	1-250-521-11 s	RES, METAL FILM CHIP 12K(1005)
R1478	1-250-527-11 o	RES, METAL FILM CHIP 22K(1005)
R1479	1-250-551-11 s	RES,METAL FILM CHIP 220K(1005)
R1480	1-250-523-11 o	RES, METAL FILM CHIP 15K(1005)
R1481	1-250-511-11 o	RES,METAL FILM CHIP 4.7K(1005)
R1482	1-250-523-11 o	RES, METAL FILM CHIP 15K(1005)
R1483	1-250-511-11 o	RES,METAL FILM CHIP 4.7K(1005)
R1484	1-250-471-11 s	RES, METAL FILM CHIP 100(1005)
R1486	1-250-527-11 o	RES, METAL FILM CHIP 22K(1005)
R1487	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1488	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1489	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1490	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1491	1-250-471-11 s	RES, METAL FILM CHIP 100(1005)
R1492	1-250-471-11 s	RES, METAL FILM CHIP 100(1005)
R1493	1-250-471-11 s	RES, METAL FILM CHIP 100(1005)

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
R1494	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1495	1-250-523-11 o	RES, METAL FILM CHIP 15K(1005)
R1496	1-250-523-11 o	RES, METAL FILM CHIP 15K(1005)
R1497	1-250-503-11 o	RES,METAL FILM CHIP 2.2K(1005)
R1498	1-250-499-11 o	RES,METAL FILM CHIP 1.5K(1005)
R1499	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1500	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1501	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1502	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1503	1-250-503-11 o	RES,METAL FILM CHIP 2.2K(1005)
R1504	1-250-541-11 s	RES, METAL FILM CHIP 82K(1005)
R1505	1-250-503-11 o	RES,METAL FILM CHIP 2.2K(1005)
R1506	1-250-535-11 s	RES, METAL FILM CHIP 47K(1005)
R1507	1-250-491-11 o	RES, METAL FILM CHIP 680(1005)
R1508	1-250-491-11 o	RES, METAL FILM CHIP 680(1005)
R1509	1-250-503-11 o	RES,METAL FILM CHIP 2.2K(1005)
R1510	1-250-491-11 o	RES, METAL FILM CHIP 680(1005)
R1511	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1512	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1514	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1515	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1516	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1517	1-250-511-11 o	RES,METAL FILM CHIP 4.7K(1005)
R1518	1-250-511-11 o	RES, METAL FILM CHIP 4.7K(1005)
R1519	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1520	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1521	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1522	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1523	1-250-545-11 o	RES,METAL FILM CHIP 120K(1005)
R1524	1-250-541-11 s	RES, METAL FILM CHIP 82K(1005)
R1525	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1526	1-250-511-11 o	RES,METAL FILM CHIP 4.7K(1005)
R1527	1-250-555-11 s	RES,METAL FILM CHIP 330K(1005)
R1528	1-250-541-11 s	RES, METAL FILM CHIP 82K(1005)
R1529	1-250-521-11 s	RES, METAL FILM CHIP 12K(1005)
R1530	1-250-487-11 s	RES, METAL FILM CHIP 470(1005)
R1531	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1532	1-250-545-11 o	RES,METAL FILM CHIP 120K(1005)
R1533	1-250-541-11 s	RES, METAL FILM CHIP 82K(1005)
R1534	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1535	1-250-503-11 o	RES,METAL FILM CHIP 2.2K(1005)
R1536	1-250-471-11 s	RES, METAL FILM CHIP 100(1005)
R1537	1-250-555-11 s	RES,METAL FILM CHIP 330K(1005)
R1538	1-250-553-11 s	RES,METAL FILM CHIP 270K(1005)
R1539	1-250-511-11 o	RES,METAL FILM CHIP 4.7K(1005)
R1540	1-250-483-11 s	RES, METAL FILM CHIP 330(1005)
R1541	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1542	1-250-545-11 o	RES,METAL FILM CHIP 120K(1005)
R1543	1-250-541-11 s	RES, METAL FILM CHIP 82K(1005)
R1544	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1545	1-250-499-11 o	RES,METAL FILM CHIP 1.5K(1005)
R1546	1-250-481-11 s	RES, METAL FILM CHIP 270(1005)
R1547	1-250-555-11 s	RES,METAL FILM CHIP 330K(1005)
R1548	1-250-553-11 s	RES,METAL FILM CHIP 270K(1005)
R1550	1-250-471-11 s	RES, METAL FILM CHIP 100(1005)
R1551	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1552	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1554	1-250-547-11 s	RES,METAL FILM CHIP 150K(1005)
R1555	1-250-559-11 o	RES,METAL FILM CHIP 470K(1005)
R1556	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1557	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1558	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1561	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1562	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1563	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)

PR-331 BOARD

Ref. No. or Q'ty	Part No.	SP Description
R1564	1-250-507-11 o	RES,METAL FILM CHIP 3.3K(1005)
R1565	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1566	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1567	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1568	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1569	1-250-479-11 o	RES, METAL FILM CHIP 220 (1005)
R1570	1-250-479-11 o	RES, METAL FILM CHIP 220 (1005)
R1571	1-250-479-11 o	RES, METAL FILM CHIP 220 (1005)
R1572	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1575	1-250-543-11 o	RES,METAL FILM CHIP 100K(1005)
R1576	1-250-495-11 s	RES,METAL FILM CHIP 1.0K(1005)
R1577	1-250-503-11 o	RES,METAL FILM CHIP 2.2K(1005)
R1579	1-250-551-11 s	RES,METAL FILM CHIP 220K(1005)
R1580	1-250-519-11 s	RES, METAL FILM CHIP 10K(1005)
R1582	1-218-990-81 s	CONDUCTOR, CHIP (1005)
R1583	1-218-990-81 s	CONDUCTOR, CHIP (1005)
RB201	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB202	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB203	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB204	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB205	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB206	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB207	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB301	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB302	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB501	1-234-375-21 s	RES, NETWORK 1K (1005X4)
RB502	1-234-375-21 s	RES, NETWORK 1K (1005X4)
RB503	1-234-375-21 s	RES, NETWORK 1K (1005X4)
RB504	1-234-375-21 s	RES, NETWORK 1K (1005X4)
RB505	1-234-375-21 s	RES, NETWORK 1K (1005X4)
RB506	1-234-375-21 s	RES, NETWORK 1K (1005X4)
RB507	1-234-375-21 s	RES, NETWORK 1K (1005X4)
RB508	1-234-375-21 s	RES, NETWORK 1K (1005X4)
RB701	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB702	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB703	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB704	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB705	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB706	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB901	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB902	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB903	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB904	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB905	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB906	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB907	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB908	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB909	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB910	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB911	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB912	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB913	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB914	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB915	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB916	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB917	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB918	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB919	1-234-370-21 s	RES, NETWORK 22 (1005X4)
RB920	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB921	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB922	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB923	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB924	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB925	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB926	1-234-378-21 s	RES, NETWORK 10K (1005X4)

PR-331 BOARD

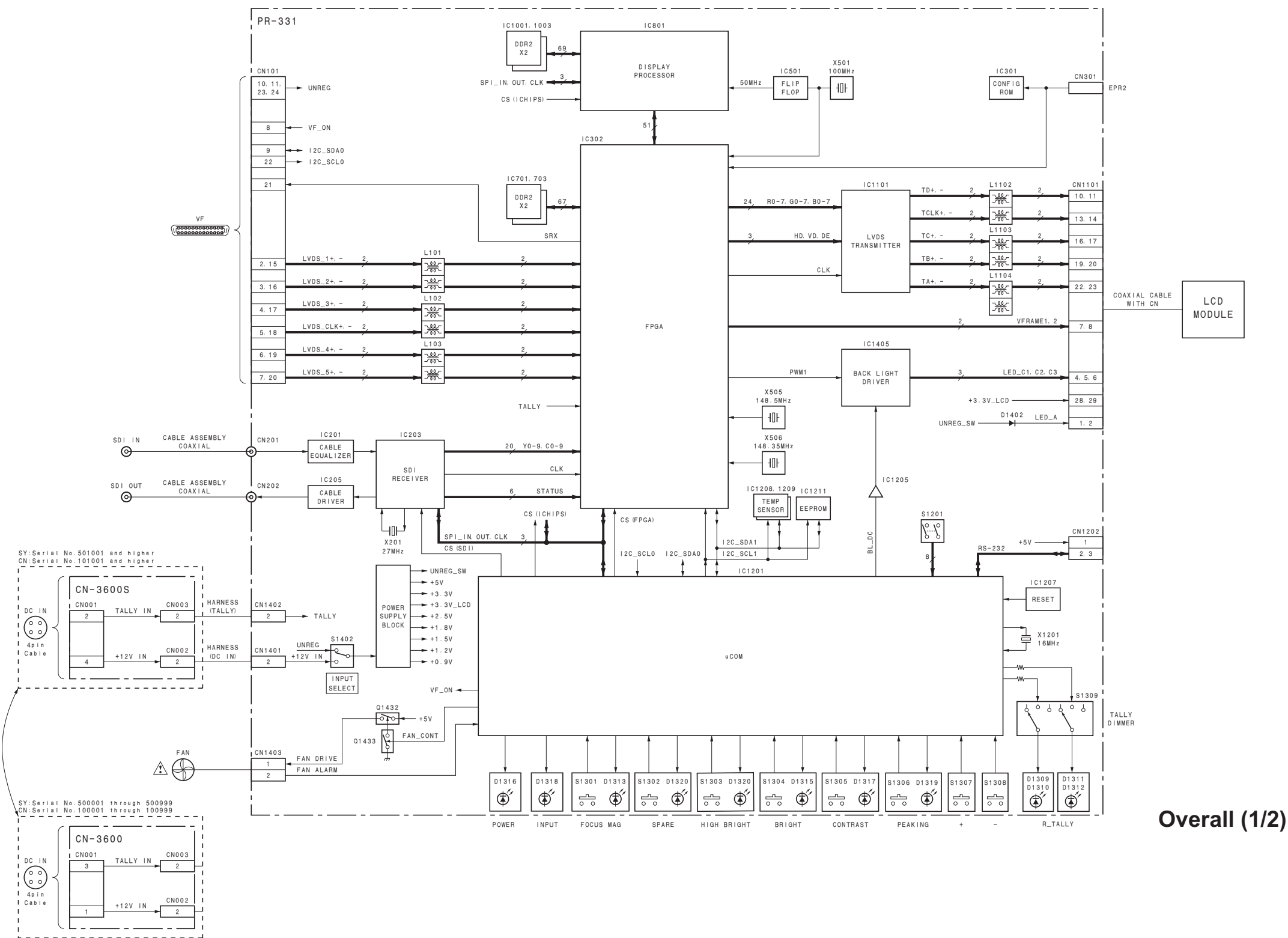
Ref. No. or Q'ty	Part No.	SP Description
RB927	1-234-378-21 s	RES, NETWORK 10K (1005X4)
RB1001	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB1002	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB1003	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB1004	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB1005	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB1006	1-234-371-21 s	RES, NETWORK 47 (1005X4)
RB1201	1-234-380-21 s	RES, NETWORK 47K (1005X4)
RB1202	1-234-380-21 s	RES, NETWORK 47K (1005X4)
RB1203	1-234-380-21 s	RES, NETWORK 47K (1005X4)
RB1204	1-234-380-21 s	RES, NETWORK 47K (1005X4)
RB1205	1-234-380-21 s	RES, NETWORK 47K (1005X4)
RB1206	1-234-380-21 s	RES, NETWORK 47K (1005X4)
RB1207	1-234-380-21 s	RES, NETWORK 47K (1005X4)
RB1208	1-234-380-21 s	RES, NETWORK 47K (1005X4)
S1201	1-692-271-41 s	SWITCH, SLIDE
S1301	1-786-157-51 s	TACTILE SWITCH
S1302	1-786-157-51 s	TACTILE SWITCH
S1303	1-786-157-51 s	TACTILE SWITCH
S1304	1-786-157-51 s	TACTILE SWITCH
S1305	1-786-157-51 s	TACTILE SWITCH
S1306	1-786-157-51 s	TACTILE SWITCH
S1307	1-786-157-51 s	TACTILE SWITCH
S1308	1-786-157-51 s	TACTILE SWITCH
S1309	1-771-141-21 s	SWITCH, SLIDE
S1401	1-798-117-21 s	SWITCH, TOGGLE
S1402	1-798-479-11 s	SWITCH, SLIDE
TP501	1-535-877-22 s	CHIP, CHECKER
TP1401	1-535-877-22 s	CHIP, CHECKER
TP1402	1-535-877-22 s	CHIP, CHECKER
TP1403	1-535-877-22 s	CHIP, CHECKER
TP1404	1-535-877-22 s	CHIP, CHECKER
TP1405	1-535-877-22 s	CHIP, CHECKER
TP1406	1-535-877-22 s	CHIP, CHECKER
TP1407	1-535-877-22 s	CHIP, CHECKER
TP1408	1-535-877-22 s	CHIP, CHECKER
TP1409	1-535-877-22 s	CHIP, CHECKER
TP1410	1-535-877-22 s	CHIP, CHECKER
VDR101	1-802-481-11 s	ESD SUPPRESSOR (4 ARRAY)
VDR102	1-802-481-11 s	ESD SUPPRESSOR (4 ARRAY)
VDR103	1-802-481-11 s	ESD SUPPRESSOR (4 ARRAY)
VDR104	1-802-481-11 s	ESD SUPPRESSOR (4 ARRAY)
X201	1-813-267-11 s	VIBRATOR, CRYSTAL (27 MHz)
X504	1-813-824-11 s	OSCILLATOR, CRYSTAL
X505	1-814-185-11 s	OSCILLATOR, CRYSTAL
X506	1-814-184-11 s	OSCILLATOR, CRYSTAL
X1201	1-813-177-21 s	VIBRATOR, CRYSTAL (16 MHz)

6-4. Supplied Accessories

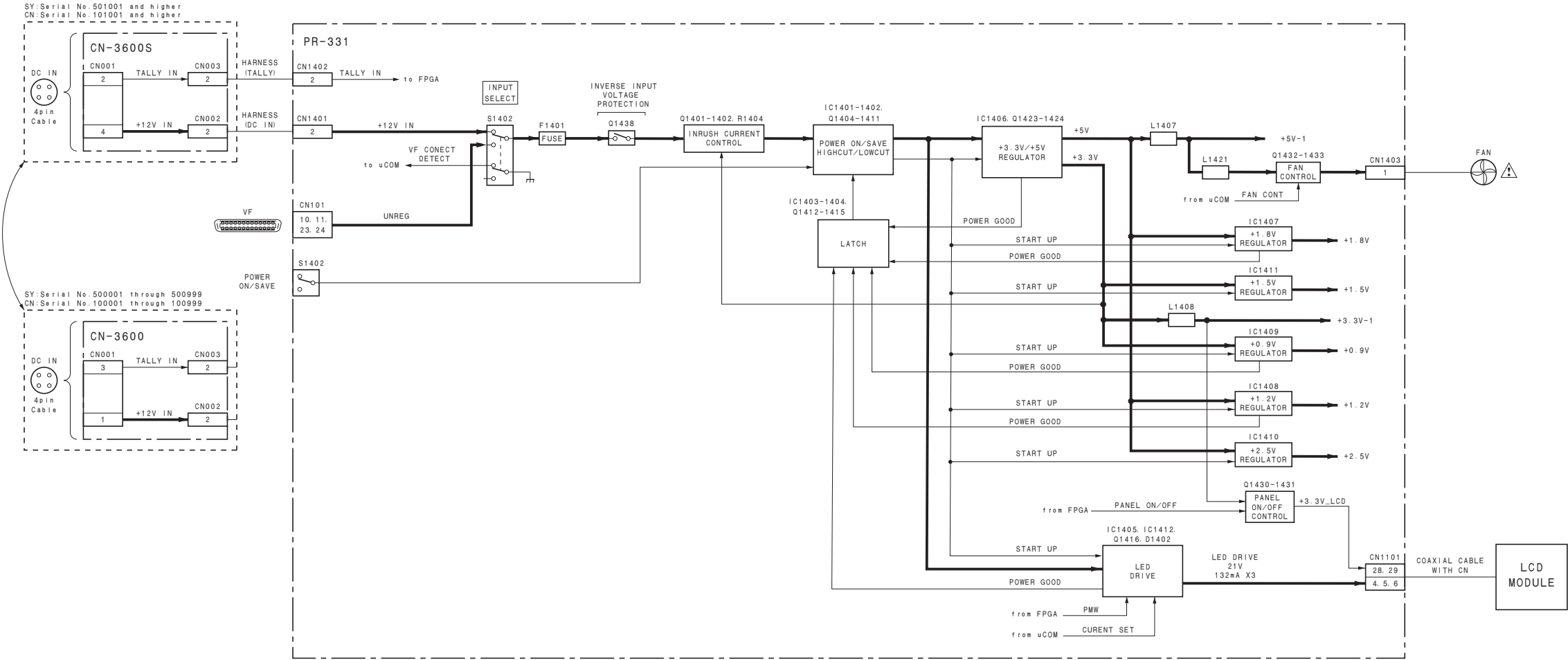
Q'ty	Part No.	SP Description
1pc	A-1929-876-C s	ARM ASSY, FLEXIBLE
1pc	A-1970-764-A s	CABLE (53) ASSY, SERVICE
1pc	A-1970-765-A s	CABLE (120) ASSY, SERVICE
1pc	1-481-528-21 s	FILTER, CLAMP (FERRITE CORE)
1pc	1-751-484-31 s	CORD, CONNECTION (SY:Serial No.500001 through 500999 CN:Serial No.100001 through 100999)
1pc	1-846-900-11 s	CORD, CONNECTION (STRAIGHT) (SY:Serial No.501001 and higher CN:Serial No.101001 and higher)
1pc	 4-460-311-02 s	PACK, CD-ROM

Section 7
Block Diagrams and Frame Wiring

Overall (1/2)



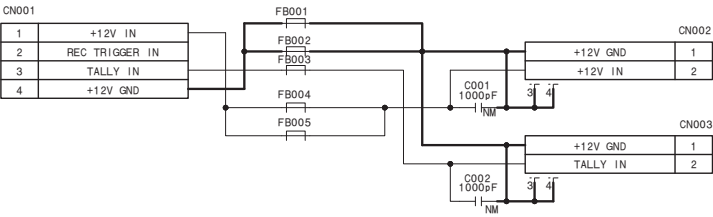
Overall (2/2)



Power supply
Overall (2/2)

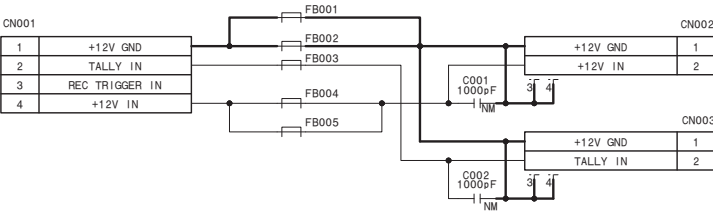
Section 8
Schematic Diagrams

CN-3600



CN-3600
BOARD NO. 1-888-379-12
CN-3600_1

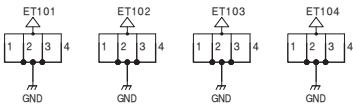
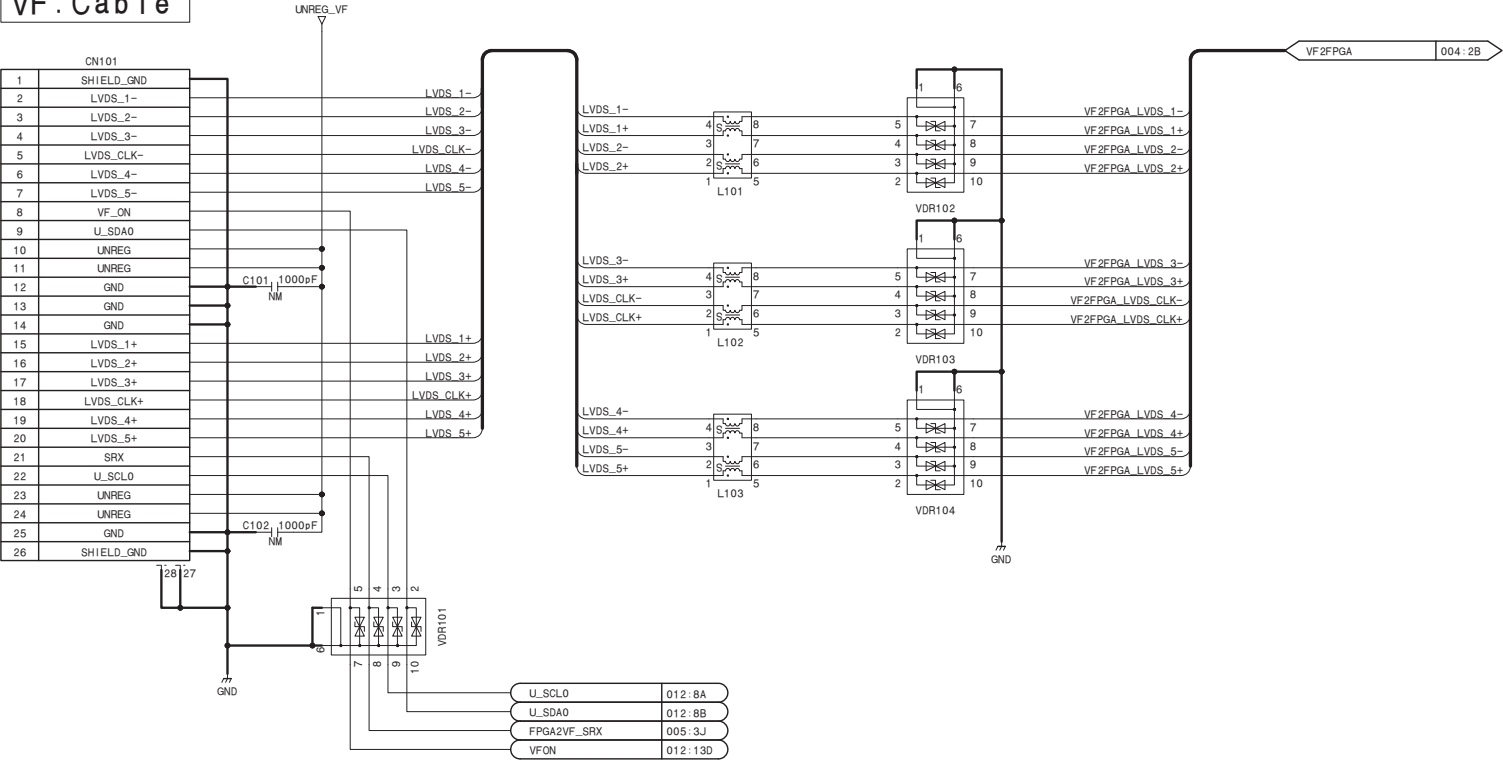
CN-3600S



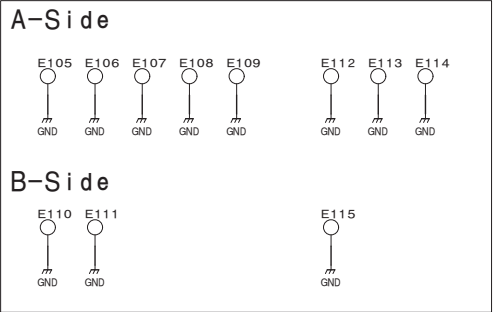
CN-3600S
BOARD NO. 1-888-379-21
CN-3600S_1

PR-331
PR-331 (1/15)

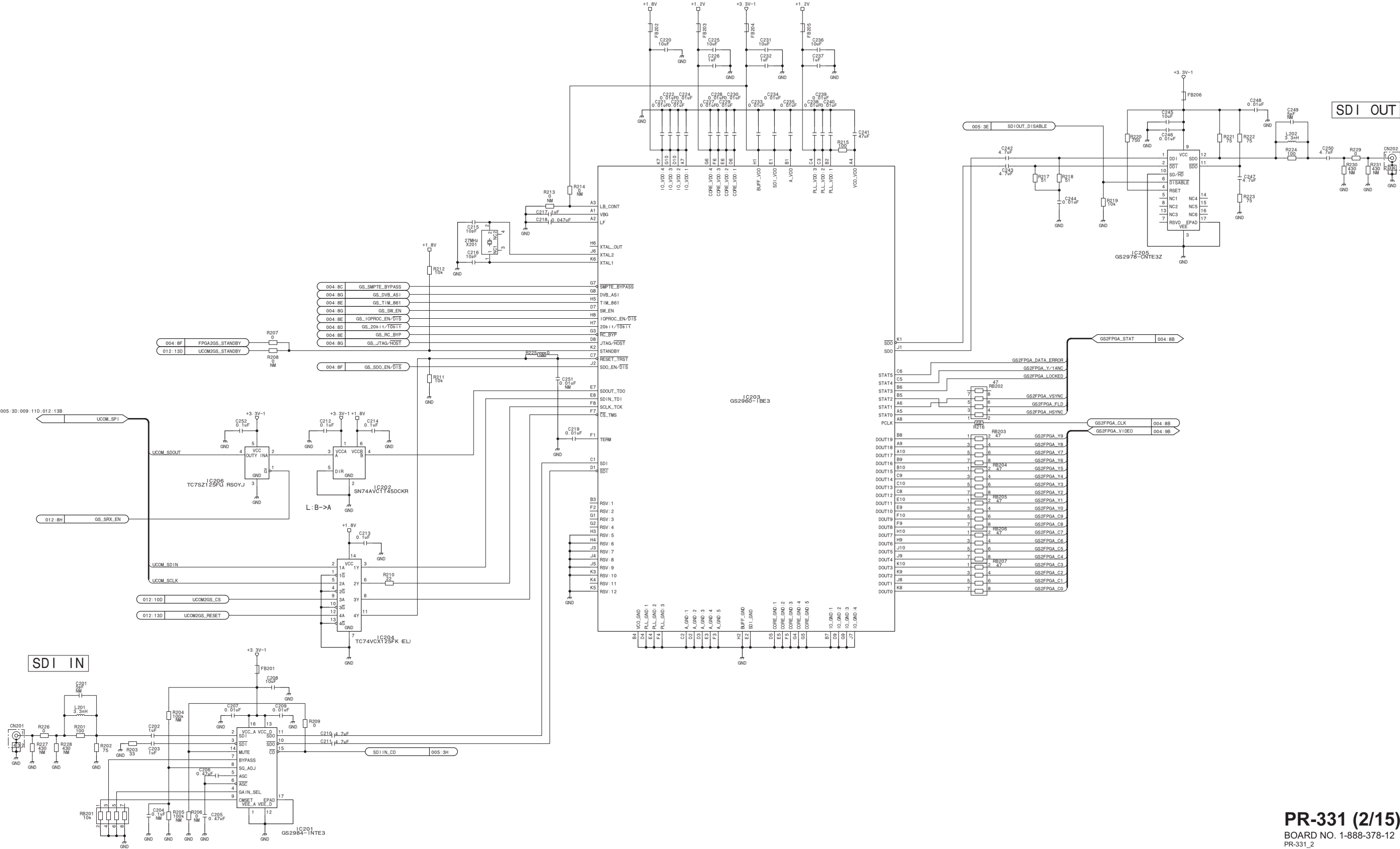
VF . Cab l e

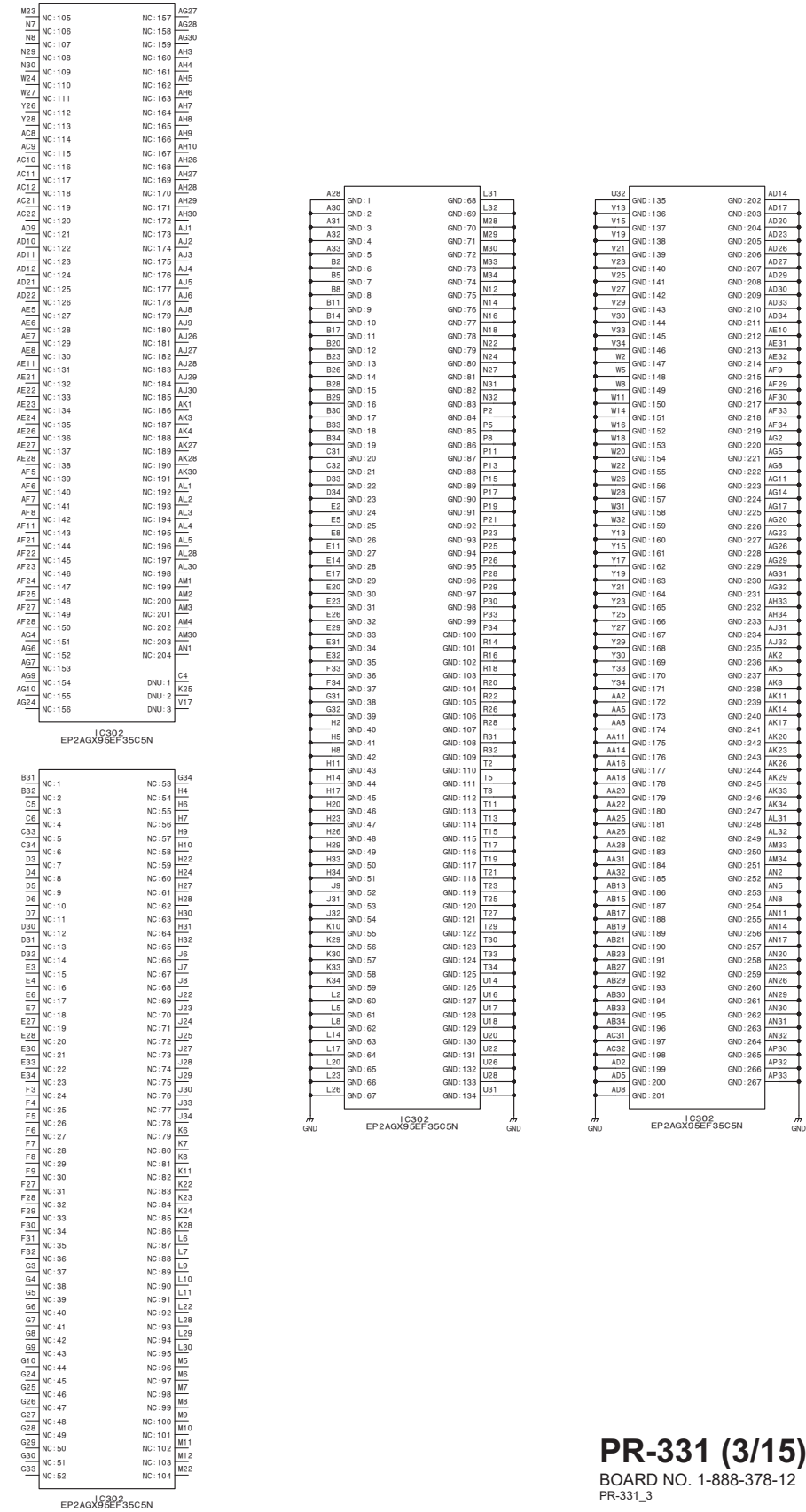
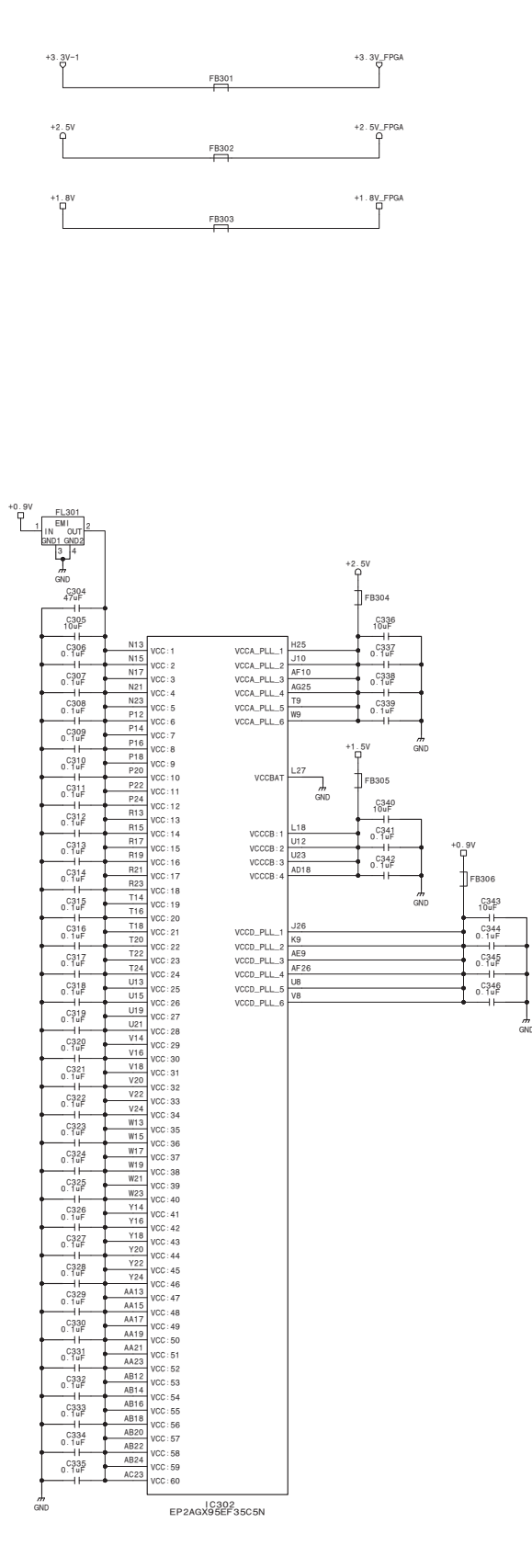
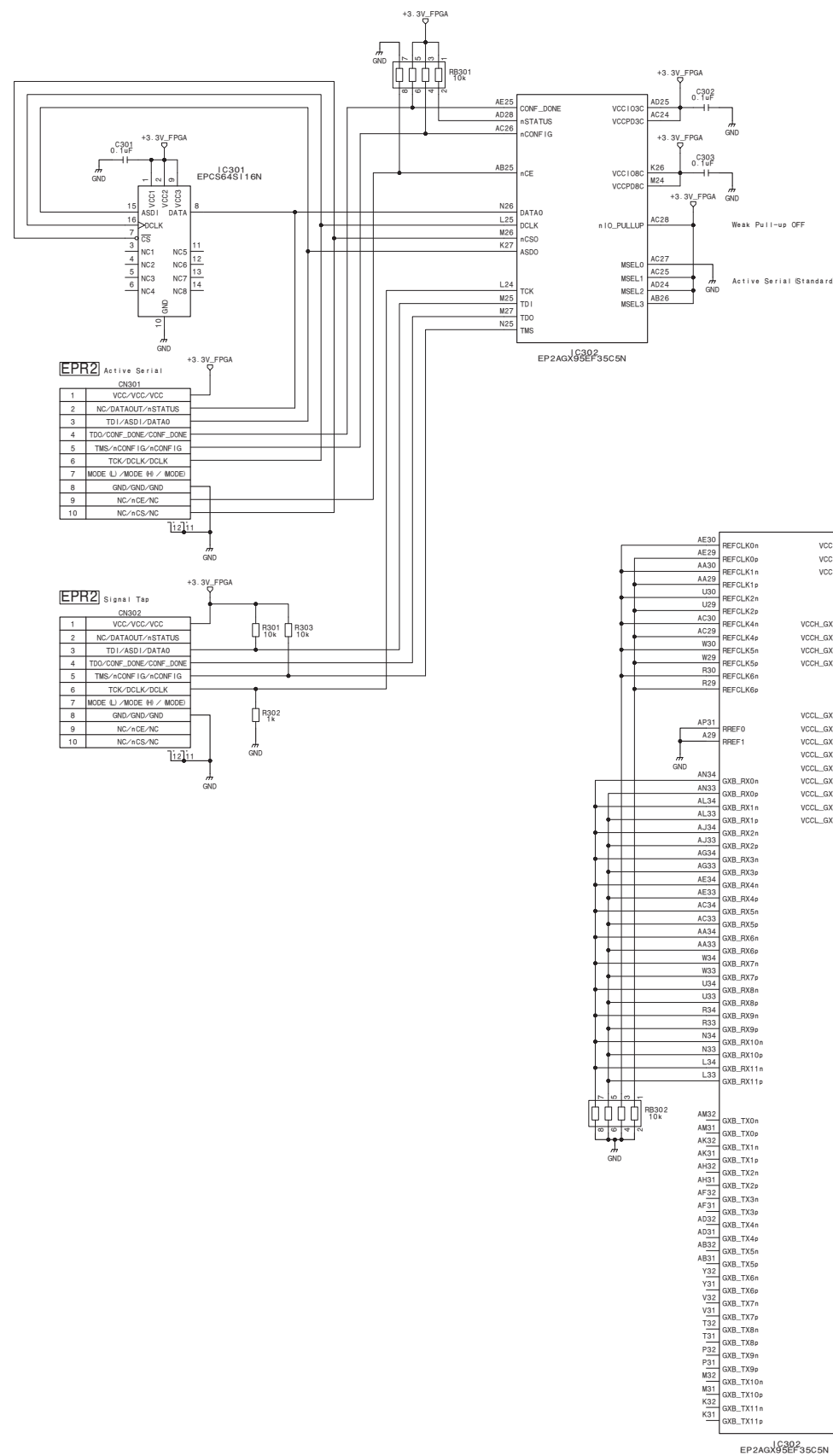


ON BOARD CONTACT

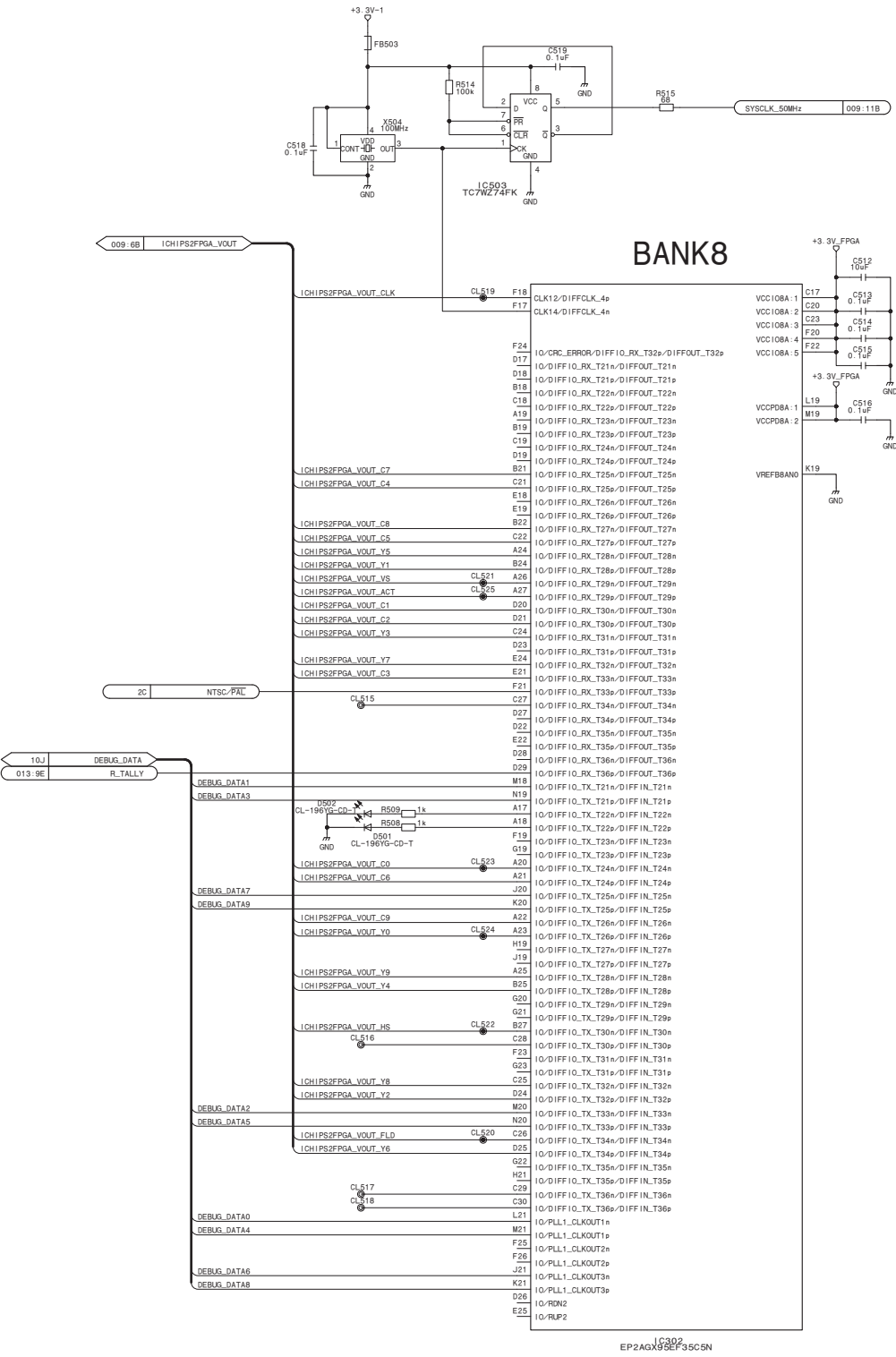
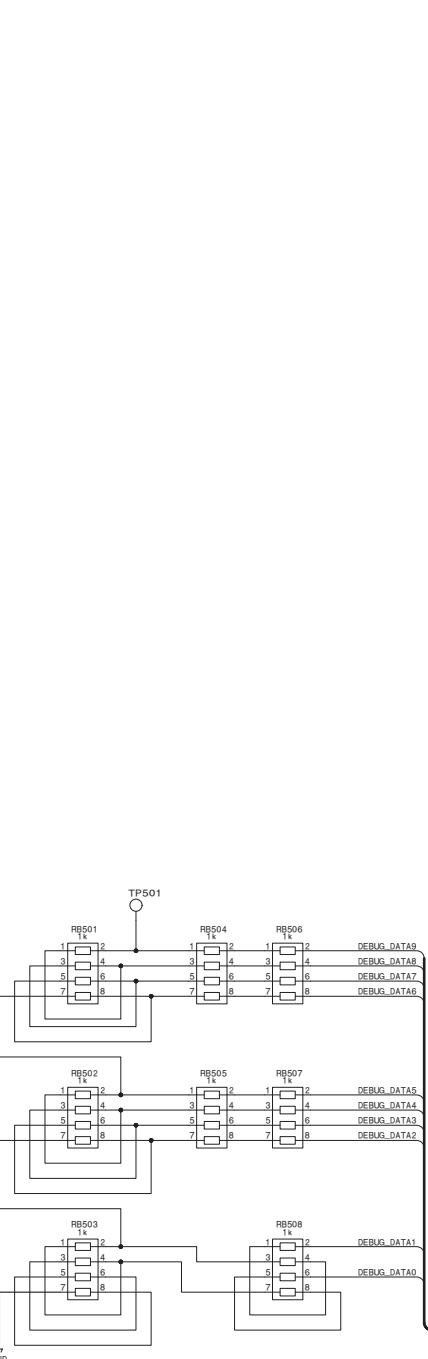
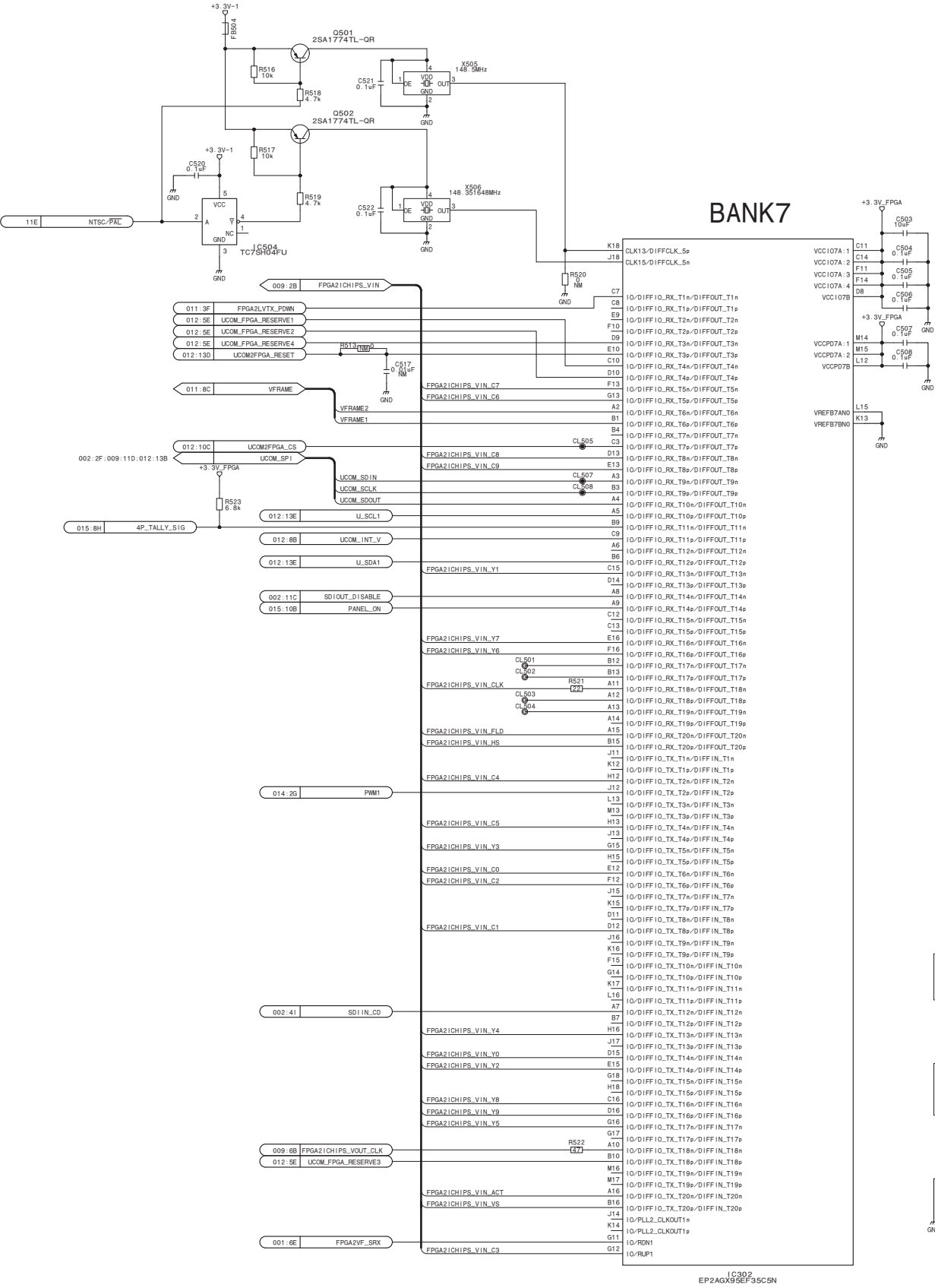


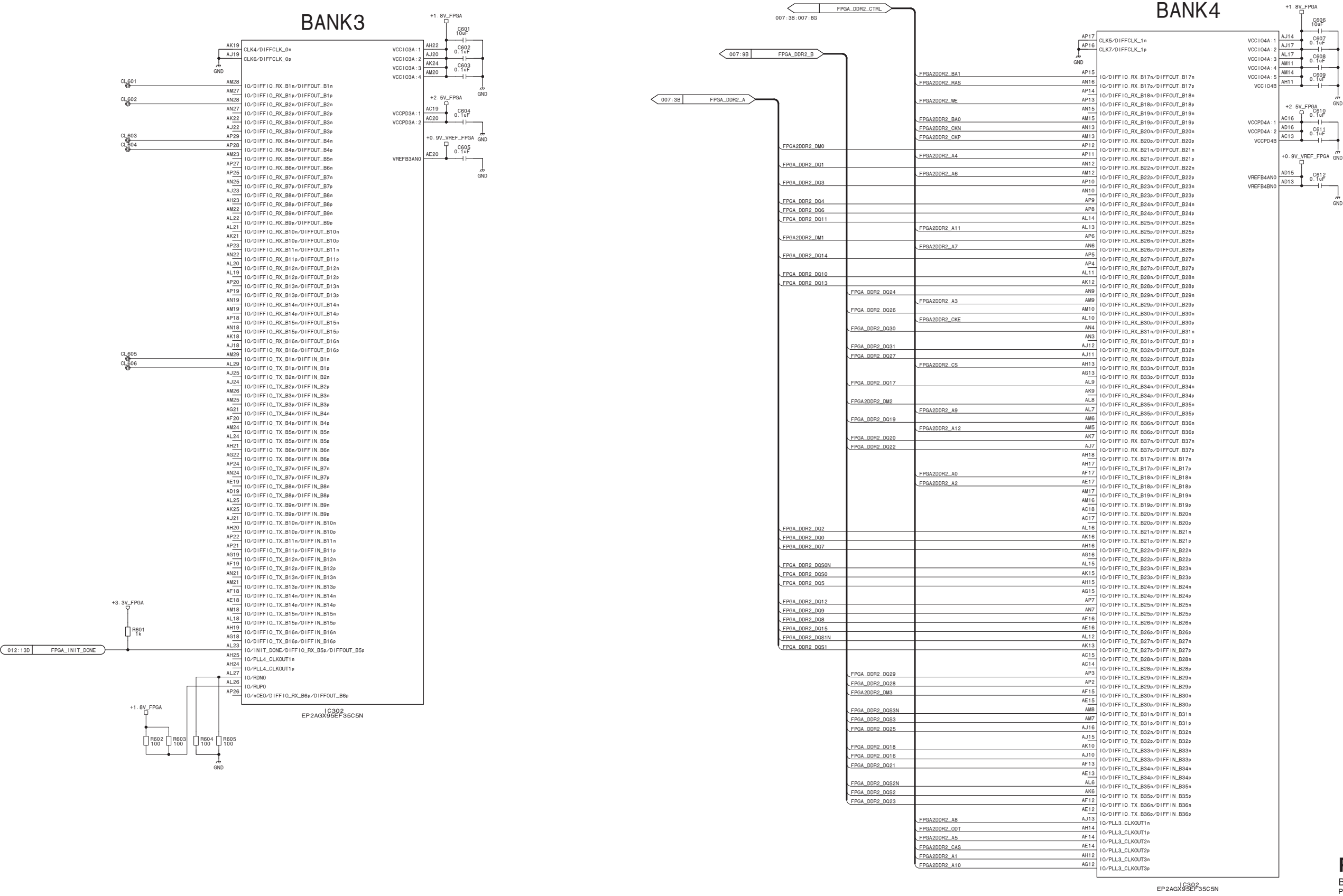
PR-331 (1/15)
BOARD NO. 1-888-378-12
PR-331_1



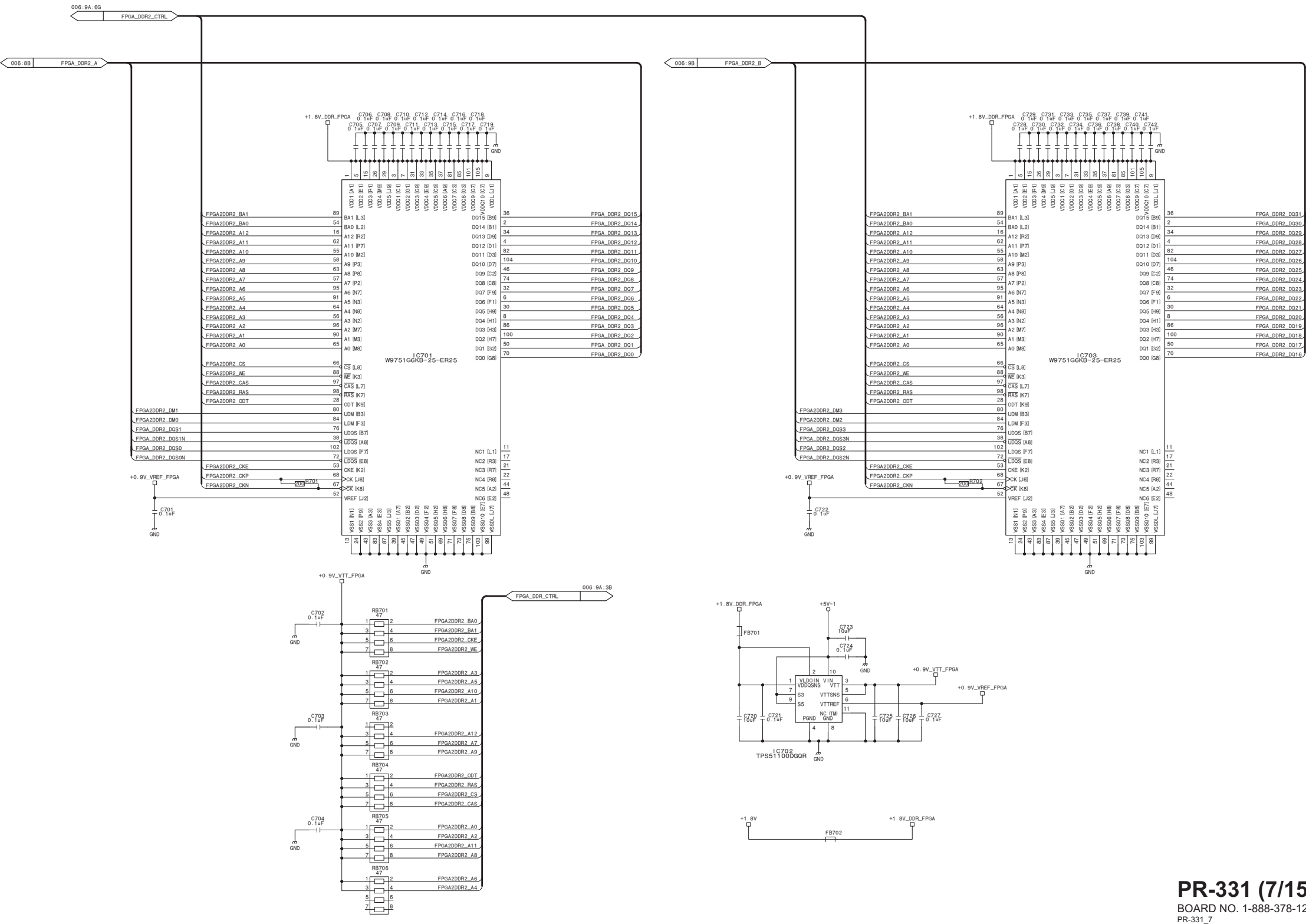




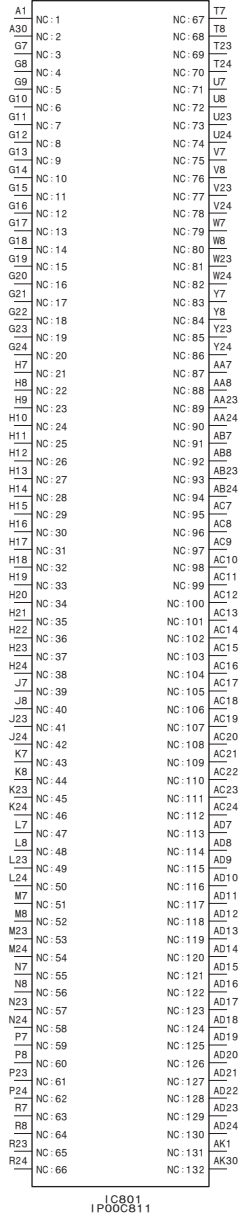
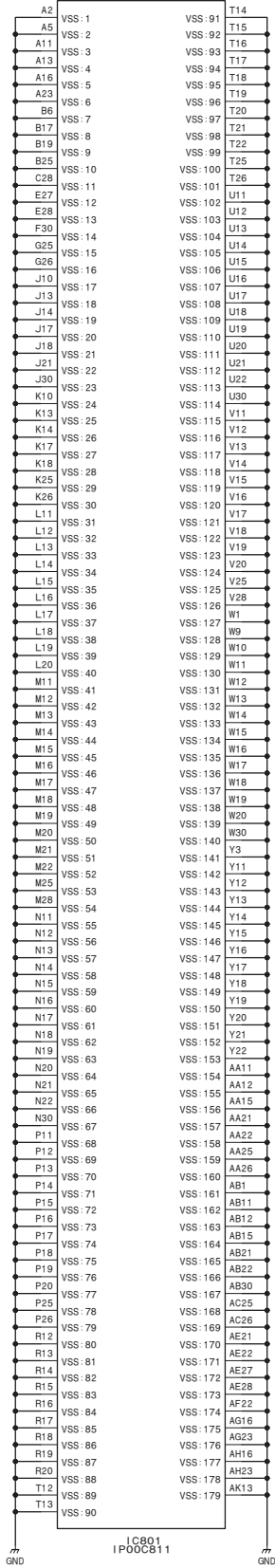
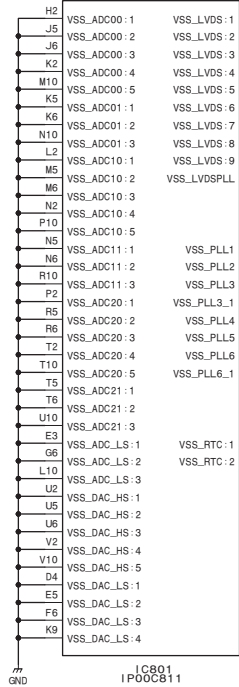
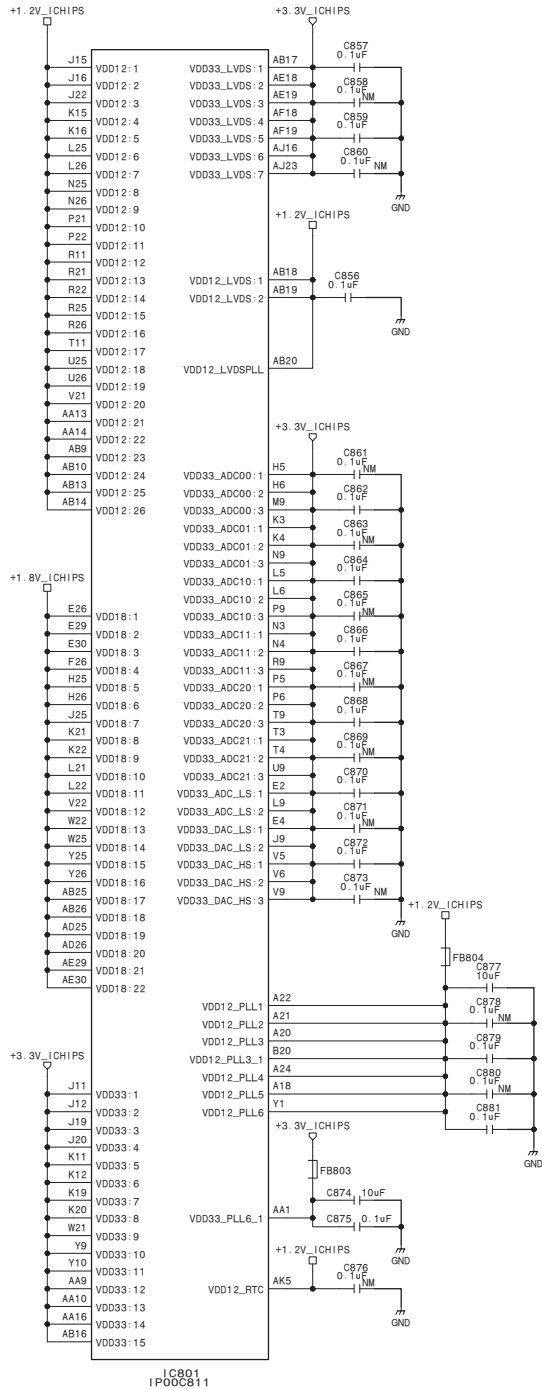
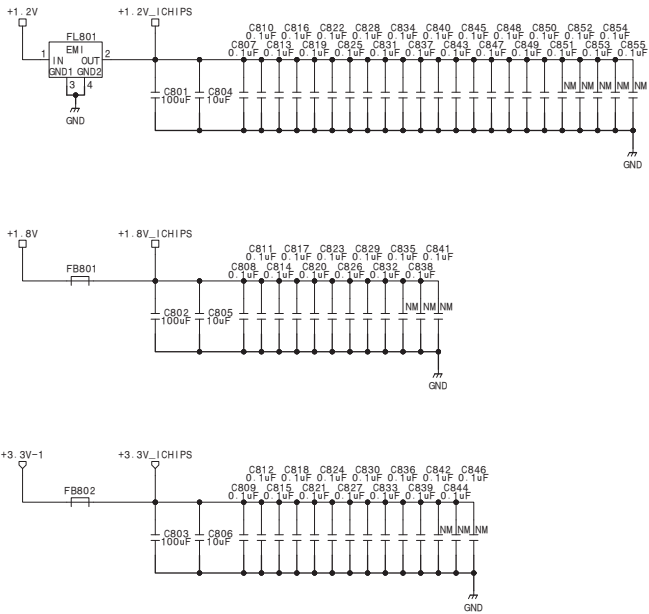




Impedance Control
Single-Ended: 50ohm
Differential: 100ohm



PR-331 (7/15)
BOARD NO. 1-888-378-12
PR-331_7

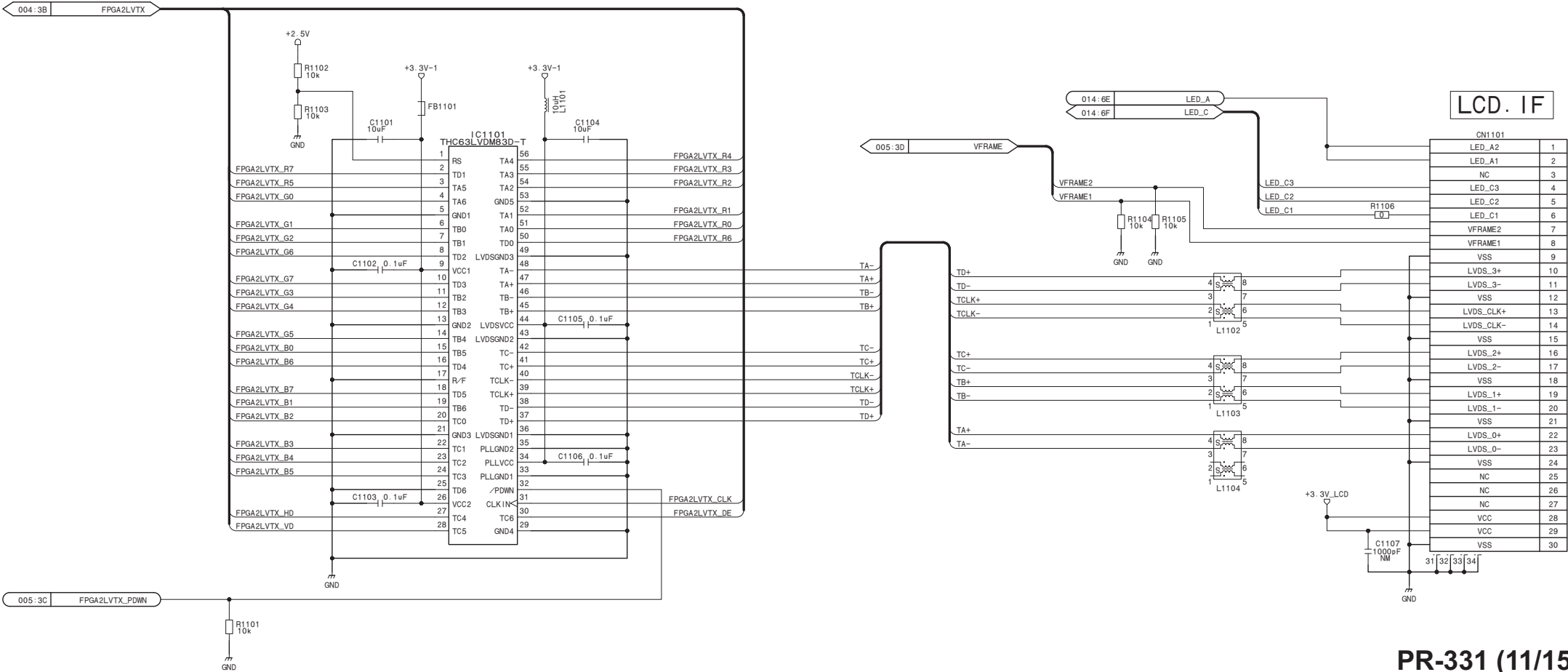


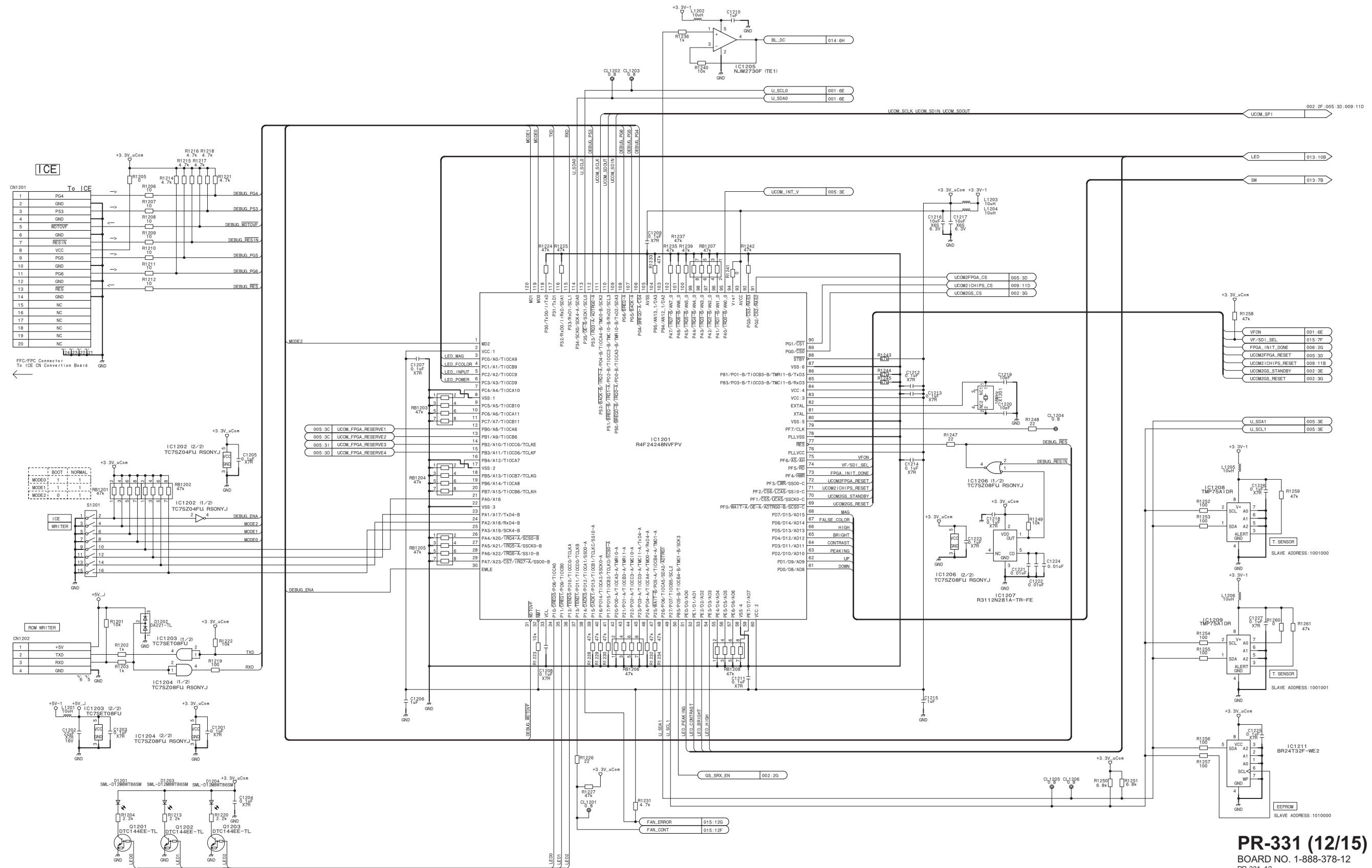


3-11

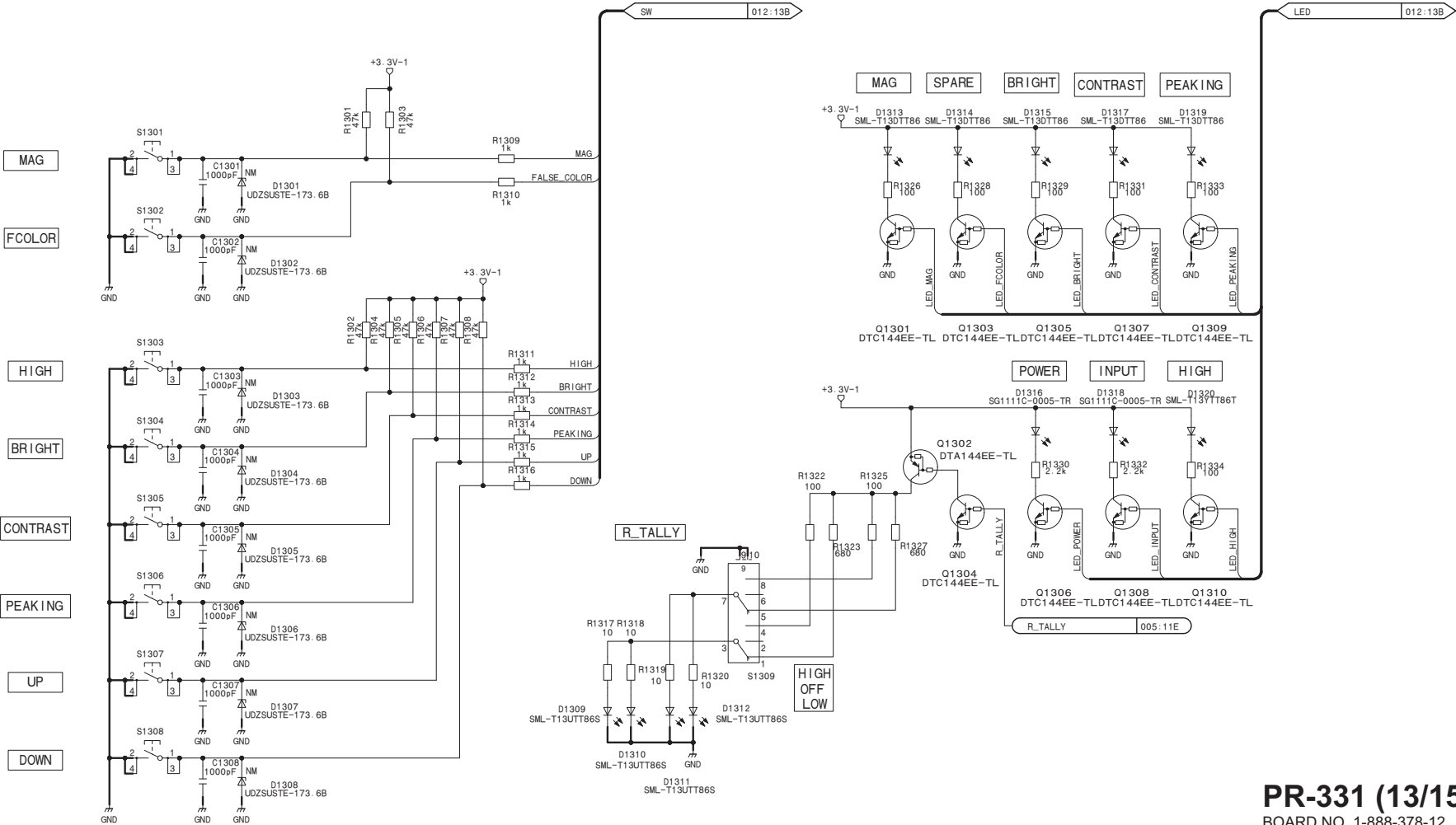


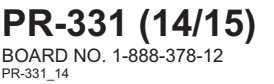
Impedance Control
Differential:100ohm

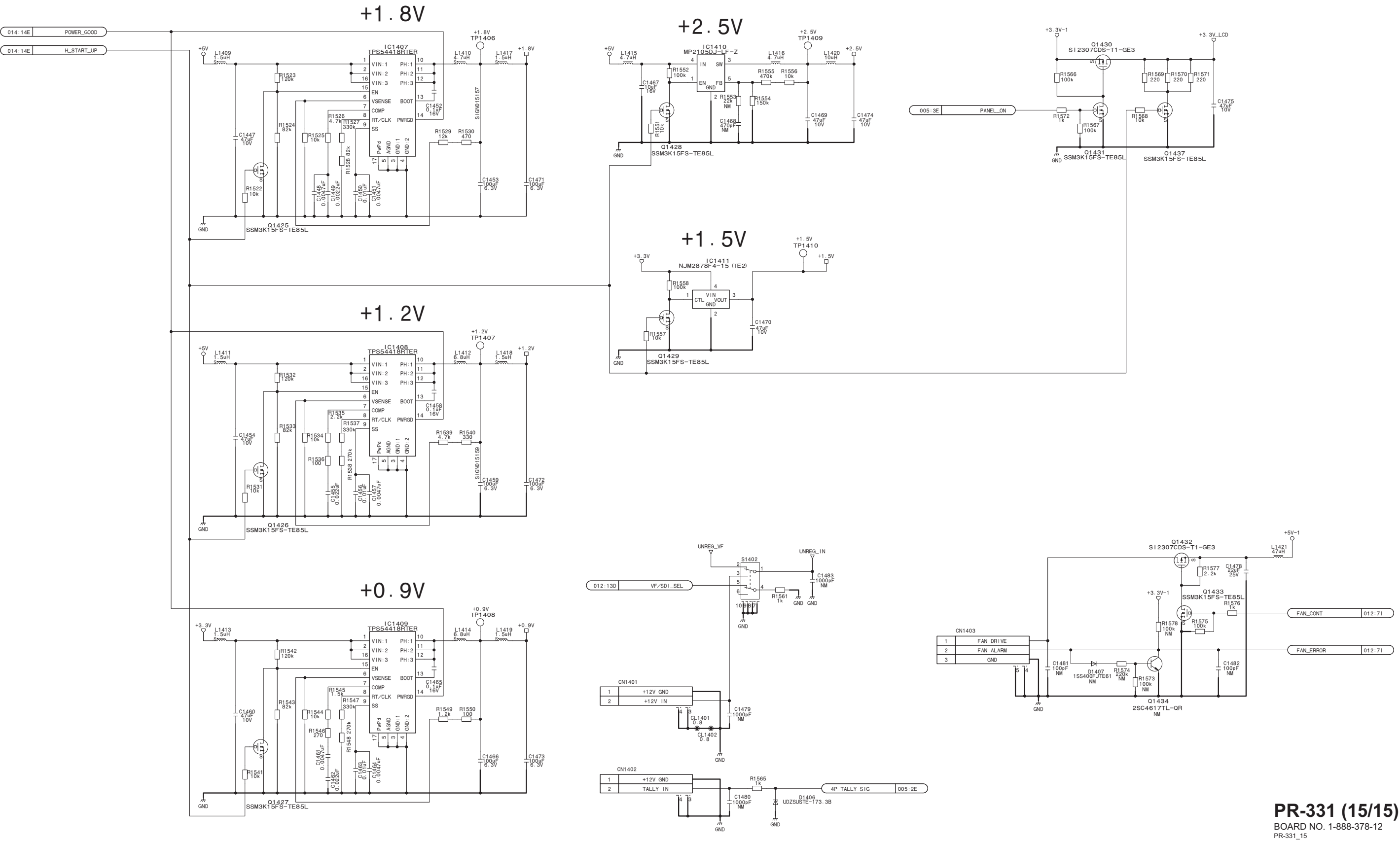




PR-331 (13/15)





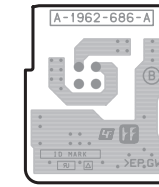


PR-331 (15/15)
BOARD NO. 1-888-378-12
PR-331_15

CN-3600



CN-3600 -B SIDE-
SUFFIX: -12



CN-3600S -B SIDE-
SUFFIX: -21

PR-331 -B SIDE-
SUFFIX: -12

Board Parts Location

CN-3600	CN-3600S	PR-331	C323	* C2	C720	D1	C858	* B1	C1205	* E3	C1450	* A3	CL911	C1	L1203	* D3	R204	C3	R1201	D3	R1323	E1	R1470	* D3	R1551	B3	RB925	* B1
1-888-379-12	1-888-379-21	1-888-378-12	C324	* C2	C721	D1	C859	* B1	C1206	* E3	C1451	* A3	CL913	B2	L1204	D3	R205	C3	R1202	D3	R1325	E1	R1471	* D3	R1552	B3	RB926	* B1
*: B SIDE	*: B SIDE	*: B SIDE	C325	* C2	C722	D2	C860	* B1	C1207	* E3	C1452	* A3	CL1201	D3	L1205	* C1	R206	C3	R1203	D3	R1326	* E1	R1472	* C3	R1553	B3	RB927	* B1
C001 A1	C001 A1	C101 D1	C326	* C2	C723	D1	C861	* B2	C1208	E3	C1453	* B2	CL1202	E2	L1206	* C3	R207	C3	R1204	E3	R1327	E1	R1473	* D3	R1554	B3	RB1001	A2
C002 A1	C002 A1	C102 D2	C327	* C2	C724	D1	C862	* B2	C1209	D3	C1454	* A3	CL1203	E2	L1401	A2	R208	C3	R1205	* E2	R1328	* E1	R1474	* D3	R1555	B3	RB1002	A2
CN001 A1	CN001 A1	C201 C3	C328	* C2	C725	* D1	C863	* B2	C1210	D3	C1455	* B3	CL1204	D3	L1402	C3	R209	C3	R1206	E2	R1329	* A2	R1475	* C3	R1556	B3	RB1003	A2
CN002 A1	CN002 A1	C202 C3	C329	* C2	C726	* D1	C864	* B2	C1211	* D3	C1456	* A3	CL1205	D3	L1403	D3	R210	* C3	R1207	E2	R1330	* E3	R1476	* C3	R1557	B3	RB1004	* A2
CN003 A1	CN003 A1	C203 C3	C330	* C2	C727	D1	C865	* B2	C1212	* D3	C1457	* A3	CL1206	D3	L1404	* B3	R211	* C3	R1208	E2	R1331	* A2	R1477	* C3	R1558	B3	RB1005	* A2
FB001 A1	FB001 A1	C204 C3	C331	* C2	C728	D2	C866	* B2	C1213	* D3	C1458	* A3	CL1401	* A1	L1405	* B3	R212	C3	R1209	E2	R1332	* E3	R1478	D3	R1561	D1	RB1006	* A2
FB002 A1	FB002 A1	C205 C3	C332	* C2	C729	D2	C867	* B2	C1214	* D3	C1459	* B3	CL1402	* A1	L1406	* A3	R213	C3	R1210	E2	R1333	* A2	R1479	D3	R1562	D3	RB1201	* E3
FB003 A1	FB003 A1	C206 C3	C333	* C2	C730	D2	C868	* B2	C1215	* D3	C1460	* B3	FB301	* C2	L1407	* B3	R214	C3	R1211	E2	R1334	* A1	R1480	D3	R1563	D3	RB1202	* E3
FB004 A1	FB004 A1	C207 C3	C334	* C2	C731	D2	C869	* B2	C1216	D3	C1461	* C3	FB302	* C2	L1408	* B3	R215	* C3	R1212	E2	R1401	* A3	R1481	D3	R1564	D3	RB1203	* E3
FB005 A1	FB005 A1	C208 C3	C335	* C2	C732	D2	C870	* B2	C1217	* D3	C1462	* C3	FB303	* D1	L1409	A2	R216	C3	R1213	E3	R1402	* A3	R1482	D3	R1565	D3	RB1204	* E3
		C209 C3	C336	* C2	C733	D2	C871	* B2	C1218	D3	C1463	* C3	FB304	* C2	L1410	B2	R217	C3	R1214	E2	R1403	* A3	R1483	D3	R1566	D3	RB1205	* E3
		C210 C3	C337	* C2	C734	D2	C872	* B2	C1219	* D3	C1464	* C3	FB305	* C2	L1411	A3	R218	C3	R1215	E2	R1404	A3	R1484	D3	R1567	D3	RB1206	* D3
		C211 C3	C338	* C2	C735	D1	C873	* B2	C1220	* D3	C1465	* C3	FB306	* C2	L1412	B3	R219	C3	R1216	E2	R1405	A3	R1486	B3	R1568	D3	RB1207	* D3
		C212 * C3	C339	* C2	C736	D2	C874	* B2	C1221	D3	C1466	* C3	FB701	D1	L1413	B3	R220	C3	R1217	E2	R1406	* A3	R1487	A3	R1569	D3	RB1208	* D3
		C213 * C3	C340	* C2	C737	D2	C875	* B2	C1222	D3	C1467	B3	FB702	D1	L1414	C3	R221	C3	R1218	E2	R1407	E3	R1488	A3	R1570	D3		
		C214 * C3	C341	* C2	C738	D2	C876	* B1	C1223	D3	C1468	B3	FB801	* B2	L1415	B3	R222	C3	R1219	* E2	R1408	E3	R1489	B3	R1571	D3	S1201	E3
		C215 C3	C342	* C2	C739	D2	C877	* B2	C1224	D3	C1469	B3	FB802	* C2	L1416	B3	R223	C3	R1220	E3	R1409	E3	R1490	A3	R1572	D3	S1301	E1
		C216 C3	C343	* C2	C740	* D1	C878	* B2	C1225	D3	C1470	C3	FB803	* B2	L1417	B2	R224	C3	R1221	E2	R1410	E3	R1491	B3	R1573	* B3	S1302	E1
		C217 C3	C344	* C2	C741	* D2	C879	* B2	C1226	* C1	C1471	B3	FB804	* B2	L1418	B3	R225	* C3	R1222	* E2	R1411	E3	R1492	B3	R1574	* B3	S1303	A1
		C218 C3	C345	* C2	C742	* D2	C880	* B2	C1227	* C3	C1472	B3	FB1001	* A1	L1419	C3	R226	C3	R1223	* E3	R1412	* A3	R1493	B3	R1575	* B3	S1304	A2
		C219 C3	C346	* C2	C801	* B2	C881	* B2	C1301	E1	C1473	C3	FB1002	A2	L1420	B3	R227	C3	R1224	* E3	R1413	* A3	R1494	B3	R1576	* B3	S1305	A2
		C220 * C3	C401	* C2	C802	* B2	C901	* B2	C1302	E1	C1474	B3	FB1101	* D3	L1421	* B3	R228	C3	R1225	* E3	R1414	E3	R1495	B3	R1577	* B3	S1306	A2
		C221 * C3	C402	* C2	C803	* B2	C902	B2	C1303	A1	C1475	D3	FL301	* C2	Q501	C1	R229	C3	R1226	D3	R1415	* A3	R1496	B3	R1578	* B3	S1307	A3
		C222 * C3	C403	* C2	C804	* B2	C903	B2	C1304	A2	C1477	D3	FL801	* B2	Q502	C1	R230	C3	R1227	D3	R1416	* A3	R1497	B3	R1579	A3	S1308	A3
		C223 * C3	C404	* C2	C805	* B2	C1001	A1	C1305	A2	C1478	* B3	IC201	C3	Q1201	E3	R231	C3	R1228	* E3	R1417	* A3	R1498	B3	R1580	D3	S1309	E1
		C224 * C3	C405	* C2	C806	* B2	C1002	A2	C1306	A2	C1479	D3	IC202	* C3	Q1202	E3	R301	B1	R1229	* E3	R1418	* A3	R1499	B3	R1581	* A3	S1401	E3
		C225 * C3	C406	* C2	C807	* B2	C1003	* A2	C1307	A3	C1480	D3	IC203	C3	Q1203	E3	R302	B1	R1230	* D3	R1419	* A3	R1500	B3	R1582	* A3	S1402	D1
		C226 * C3	C407	* C2	C808	* B1	C1004	* A2	C1308	A3	C1481	* B3	IC204	* C3	Q1301	* E1	R303	B1	R1231	* E3	R1420	A3	R1501	B3	R1583	* A3		
		C227 * C3	C408	* C2	C809	* B2	C1005	A1	C1401	* A3	C1482	* B3	IC205	C3	Q1302	D1	R406	* C2	R1232	* D3	R1421	A3	R1502	B3	R1584	* A3	TP501	C1
		C228 * C3	C503	* C2	C810	* B2	C1006	A1	C1402	A3	C1483	* A1	IC206	* C3	Q1303	* E1	R408	C2	R1233	* D3	R1422	A3	R1503	B3			TP1401	A3
		C229 * C3	C504	* C2	C811	* B1	C1007	A1	C1403	* A3			IC301	C1	Q1304	D1	R409	* C2	R1234	* D3	R1423	A3	R1504	B3	RB201	* C3	TP1402	A3
		C230 * C3	C505	* C2	C812	* B2	C1008	A1	C1404	A3	CL401	C2	IC302	C2	Q1305	* A2	R410	* C2	R1235	* D2	R1424	A3	R1505	B3	RB202	C3	TP1403	D3
		C231 * C3	C506	* C2	C813	* B2	C1009	A1	C1405	* A3	CL402	C2	IC303	C2	Q1306	* E3	R411	* C2	R1236	D3	R1425	A3	R1506	B3	RB203	C3	TP1404	B3
		C232 * C3	C507	* C2	C814	* B2	C1010	A1	C1406	A3	CL403	C2	IC503	C1	Q1307	* A2	R412	* C2	R1237	* D3	R1426	A3	R1507	B3	RB204	C3	TP1405	B3
		C233 * C3	C508	* C2	C815	* B2	C1011	A2	C1407	* A3	CL404	C2	IC504	C1	Q1308	* E3	R413	* C2	R1239	* D2	R1427	A3	R1508	B3	RB205	C3	TP1406	B2
		C234 * C3	C512	* C2	C816	* B2	C1012	* A1	C1408	A3	CL405	C2	IC701	D2	Q1309	* A2	R508	C2	R1240	D2	R1428	A3	R1509	B3	RB206	C3	TP1407	B3
		C235 * C3	C513	* C2	C817	* B2	C1013	A2	C1409	A3	CL406	C2	IC702	D1	Q1310	* A1	R509	C2	R1241	D3	R1429	A3	R1510	B3	RB207	C3	TP1408	C3
		C236 * C3	C514	* C2	C818	* B2	C1014	A2	C1410	* A3	CL407	C2	IC703	D2	Q1311	* C1	R513	* C2	R1242	* D3	R1430	A3	R1511	A3	RB301	* C2	TP1409	B3
		C237 * C3	C515	* C2	C819	* B2	C1015	A2	C1411	* A3	CL408	C2	IC801	B2	Q1401	* A3	R514	C1	R1243	* D3	R1431	A3	R1512	B3	RB302	* C1	TP1410	C2
		C238 * C3	C516	* C2	C820	* B2	C1016	A2	C1412	* C3	CL409	C2	IC1001	A1	Q1402	* A3	R515	C1	R1244	D3	R1432	* A3	R1513	B3	RB501	C1		
		C239 * C3	C517	* C2	C821	* B2	C1017	* A1	C1413	* D3	CL410	C2	IC1002	* A1	Q1403	A3	R516	C1	R1245	D3	R1433	* A3	R1514	A3	RB502	C1	VDR101	* D2
		C240 * C3	C518	C1	C822	* B2	C1018	* A2	C1414	C3	CL411	C2	IC1003	A2	Q1404	* A3	R517	C1	R1247	D3	R1434	* A3	R1515	A3	RB503	C1	VDR102	* E2
		C241 * C3	C519	C1	C823	* B2	C1019	* A1	C1415	* C3	CL412	C2	IC1101	D3	Q1405	* A3	R518	C1	R1248	D3	R1435	A3	R1516	B3	RB504	C1	VDR103	* E2
		C242 C3	C520	C1	C824	* B2	C1020	* A1	C1416	C3	CL501	C2	IC1201	* D3	Q1406	* A3	R519	C1	R1249	D3	R1436	A3	R1517	B3	RB505	C1	VDR104	* E2
		C243 C3	C521	C1	C825	* B2	C1021	A2	C1417	* C3	CL502	C2	IC1202	* E3	Q1407	A3	R520	* C2	R1250	D3	R1437	* A3	R1518	B3	RB506	C1		
		C244 C3	C522	C1	C826	* B2	C1022	* A1	C1418	* C3	CL503	C2	IC1203	* E2	Q1408	A3	R521	C2	R1251	D3	R1438	* A3	R1519	B3	RB507	C1	X201	C3
		C245 C3	C601	* C2	C827	* B2	C1023	* A1	C1419	* C3	CL504	C2	IC1204	* E2	Q1409	A3	R522	C2	R1252	* C1	R1439	* A3	R1520	B3	RB508	C1	X504	C1
		C246 C3	C602	* C2	C828	* B2	C1024	* A1	C1420	* C3	CL505	C2	IC1205	D3	Q1410	* A3	R523	* C2	R1253	* C1	R1440	* A3	R1521	B3	RB701	D2	X505	C1
		C247 C3	C603	* D2	C829	* B2	C1025	A1	C1421	D3	CL507	C2	IC1206	D3	Q1411	* A3	R601	* C2	R1254	* C3	R1441	* A3	R1522	* A3	RB702	D2	X506	C1
		C248 C3	C604	* C2	C830	* B1	C1026	A1	C1422	B3	CL508	C2	IC1207	D3	Q1412	A3	R602	* C2	R1255	* C3	R1442	* A3	R1523	* A2	RB703	D2	X1201	* D3
		C249 C3	C605	* C2	C831	* B2	C1027	* A1	C1423	A3	CL515	C1	IC1208	* C1	Q1413	* A3	R603	* C2	R1256	D3	R1443	* A3	R1524	* A2	RB704	* D2		
		C250 C3	C606	* C2	C832	* B2	C1028	A2	C1424	A3	CL516	C1	IC1209	* C3	Q1414	* A3	R604	* C2	R1257	D3	R1444	* A3	R1525	* A2	RB705	* D2		

