STUDER
professional audio equipment

D21 MultiFeed
D21 MasterSync

Operating and Service Instructions

Prepared and edited by
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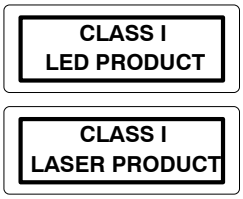
A Safety Information

	To reduce the risk of electric shock, do not remove covers (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.
	This symbol is intended to alert the user to presence of un-insulated *dangerous voltage* within the equipment that may be of sufficient magnitude to constitute a risk of electric shock to a person.
	This symbol is intended to alert the user to the presence of *important instructions* for operating and maintenance in the enclosed documentation.
	Assemblies or sub-assemblies of this product can contain opto-electronic devices. As long as these devices comply with Class I of laser or LED products according to EN 60825-1:1994, they will not be expressly marked on the product. If a special design should be covered by a higher class of this standard, the device concerned will be marked directly on the assembly or sub-assembly in accordance with the above standard.

A1 First Aid

In Case of Electric Shock:

Separate the person as quickly as possible from the electric power source:
- By switching off the equipment,
- By unplugging or disconnecting the mains cable, or
- By pushing the person away from the power source, using dry insulating material (such as wood or plastic).
- After having sustained an electric shock, *always* consult a doctor.

Warning! ***Do not touch the person or his clothing before the power is turned off, otherwise you stand the risk of sustaining an electric shock as well!***

If the Person is Unconscious:

- Check the pulse,
- Reanimate the person if respiration is poor,
- Lay the body down, turn it to one side, call for a doctor immediately.

B General Installation Hints

Please consider besides these general hints also any product-specific hints in the "Installation" chapter of this manual.

B1 Unpacking

Check the equipment for any transport damage. A unit that is mechanically damaged or that has been penetrated by liquids or foreign objects must not be connected to the AC power outlet or must be immediately disconnected by unplugging the power cable. Repairs must only be performed by trained personnel in accordance with the applicable regulations.

B2 Installation Site

Install the unit in a place where the following conditions are met:

- The temperature and the relative humidity of the environment must be within the specified limits during operation of the unit. Relevant air values are the ones at the air inlets of the unit.
- Condensation must be avoided. If the unit is installed in a location with large variation of ambient temperature (e.g. in an OB-van), feasible measures must be taken before and after operation (for details on this subject, refer to Appendix 1).
- Unobstructed air flow is essential for proper operation. Air vents of the unit are a functional part of the design and must not be blocked in any way during operation (e.g. by objects placed upon them or placement of the unit on a soft support).
- The unit must not be heated up by external sources of heat radiation (sunlight, spot lights).

B3 Earthing and Power Supply

Earthing of units with mains supply (class I equipment) is performed via the protective earth (PE) conductor integrated in the mains cable. Units with battery operation (< 60 V, class III equipment) must be earthed separately.

Earthing the unit is one of the measures for protection against electrical shock hazard (dangerous body currents). Hazardous voltage may not only be caused by a defective power supply insulation, but may also be introduced by the connected audio or control cables.

If the unit is installed with one or several external connections, its earthing must be provided during operation as well as while the unit is inoperative. If the earthing could be interrupted via the power supply (e.g. by pulling the mains plug), an additional, permanent earthing must be installed using the provided earth terminal.

Avoid ground loops (hum loops) by keeping the loop surface as small as possible (by consequently guiding the earth conductors in a narrow, parallel way), and reduce the noise current flowing through the loop by inserting an additional impedance (common-mode choke).

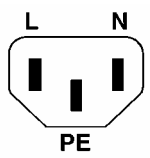
Class I Equipment (Mains Operation)

Should the equipment be delivered without a matching mains cable, the latter has to be prepared by a trained person using the attached female plug (IEC320/C13 or IEC320/C19) with respect to the applicable regulations in your country.

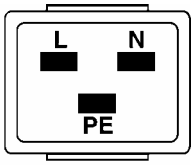
Before connecting the equipment to the AC power outlet, check that the local line voltage matches the equipment rating (voltage, frequency) within the admissible tolerance. The equipment fuses must be rated in accordance with the specifications on the equipment.

Equipment supplied with a 3-pole appliance inlet (protection conforming to class I equipment) *must* be connected to a 3-pole AC power outlet so that the equipment cabinet is connected to the protective earth.

For information on mains cable strain relief please refer to Appendix 2.



IEC 320 / C13



IEC 320 / C19

Female plug (IEC320), front-side view:		*National American Standard:*
L (Live)	Brown	*Black*
N (Neutral)	Blue	*White*
PE (Protective Earth	Green/Yellow	*Green*

Class III Equipment (Battery Operation up to 60 V_{DC})

Equipment of this protection class must be earthed using the provided earth terminal, if one or more external signals are connected to the unit (see explanation at the beginning of this paragraph).

B4 Electromagnetic Compatibility (EMC)

The unit conforms to the protection requirements relevant to electromagnetic phenomena that are listed in the guidelines 89/336/EC and FCC, part 15.

- The electromagnetic interference generated by the unit is limited in such a way that other equipment and systems can be operated normally.
- The unit is adequately protected against electromagnetic interference so that it can operate properly.

The unit has been tested and conforms to the EMC standards of the specified electromagnetic environment, as listed in the following declaration. The limits of these standards ensure protection of the environment and corresponding noise immunity of the equipment with appropriate probability. However, a professional installation and integration within the system are imperative prerequisites for operation without EMC problems.

For this purpose, the following measures must be followed:

- Install the equipment in accordance with the operating instructions. Use the supplied accessories.
- In the system and in the vicinity where the equipment is installed, use only components (systems, equipment) that also fulfill the EMC standards for the given environment.
- Use a system grounding concept that satisfies the safety requirements (class I equipment must be connected with a protective ground conduc-

tor) and that also takes into consideration the EMC requirements. When deciding between radial, surface, or combined grounding, the advantages and disadvantages should be carefully evaluated in each case.
- Use shielded cables where shielding is specified. The connection of the shield to the corresponding connector terminal or housing should have a large surface and be corrosion-proof. Please note that a cable shield connected only single-ended can act as a transmitting or receiving antenna within the corresponding frequency range.
- Avoid ground loops or reduce their adverse effects by keeping the loop surface as small as possible, and reduce the noise current flowing through the loop by inserting an additional impedance (e.g. common-mode choke).
- Reduce electrostatic discharge (ESD) of persons by installing an appropriate floor covering (e.g. a carpet with permanent electrostatic filaments) and by keeping the relative humidity above 30%. Further measures (e.g. conducting floor) are usually unnecessary and only suitable if used together with corresponding personal equipment.
- When using equipment with touch-sensitive operator controls, please take care that the surrounding building structure allows for sufficient capacitive coupling of the operator. This coupling can be improved by an additional, conducting surface in the operator's area, connected to the equipment housing (e.g. metal foil underneath the floor covering, carpet with conductive backing).

C Maintenance

All air vents and openings for operating elements (faders, rotary knobs) must be checked on a regular basis, and cleaned in case of dust accumulation. For cleaning, a soft paint-brush or a vacuum cleaner is recommended.
Cleaning the surfaces of the unit is performed with a soft, dry cloth or a soft brush.
Persistent contamination can be treated with a cloth that is slightly humidified with a mild cleaning solution (soap-suds).
For cleaning display windows, commercially available computer/TV screen cleaners are suited. Use only a slightly damp (never wet) cloth.
Never use any solvents for cleaning the exterior of the unit! Liquids must never be sprayed or poured on directly!
For equipment-specific maintenance information please refer to the corresponding chapter in the Operating and Service Instructions manuals.

D Electrostatic Discharge during Maintenance and Repair

Caution:

Observe the precautions for handling devices sensitive to electrostatic discharge!
Many semiconductor components are sensitive to electrostatic discharge (ESD). The life-span of assemblies containing such components can be drastically reduced by improper handling during maintenance and repair work. Please observe the following rules when handling ESD sensitive components:
- ESD sensitive components should only be stored and transported in the packing material specifically provided for this purpose.
- *When performing a repair by replacing complete assemblies, the removed assembly must be sent back to the supplier in the same packing*

material in which the replacement assembly was shipped. If this should not be the case, any claim for a possible refund will be null and void.

- Unpacked ESD sensitive components should only be handled in ESD protected areas (EPA, e.g. area for field service, repair or service bench) and only be touched by persons who wear a wristlet that is connected to the ground potential of the repair or service bench by a series resistor. The equipment to be repaired or serviced as well as all tools and electrically semi-conducting work, storage, and floor mats should also be connected to this ground potential.
- The terminals of ESD sensitive components must not come in uncontrolled contact with electrostatically chargeable (voltage puncture) or metallic surfaces (discharge shock hazard).
- To prevent undefined transient stress of the components and possible damage due to inadmissible voltages or compensation currents, electrical connections should only be established or separated when the equipment is switched off and after any capacitor charges have decayed.

E Repair

Removal of housing parts, shields, etc. exposes energized parts. For this reason the following precautions must be observed:

- Maintenance may only be performed by trained personnel in accordance with the applicable regulations.
- The equipment must be switched off and disconnected from the AC power outlet before any housing parts are removed.
- Even if the equipment is disconnected from the power outlet, parts with hazardous charges (e.g. capacitors, picture tubes) must not be touched until they have been properly discharged. Do not touch hot components (power semiconductors, heat sinks, etc.) before they have cooled off.
- If maintenance is performed on a unit that is opened and switched on, no un-insulated circuit components and metallic semiconductor housings must be touched, neither with your bare hands nor with un-insulated tools.

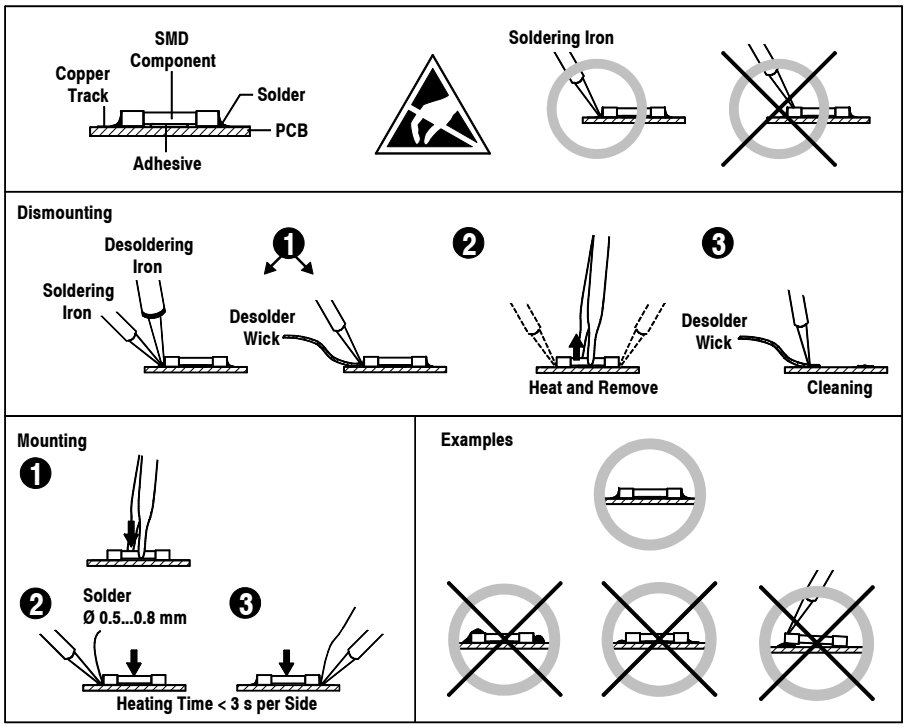
Certain components pose additional hazards:

- *Explosion hazard* from lithium batteries, electrolytic capacitors and power semiconductors (watch the component's polarity. Do not short battery terminals. Replace batteries only by the same type).
- *Implosion hazard* from evacuated display units.
- *Radiation hazard* from laser units (non-ionizing), picture tubes (ionizing).
- *Caustic effect* of display units (LCD) and components containing liquid electrolyte.

Such components should only be handled by trained personnel who are properly protected (e.g. safety goggles, gloves).

E1 SMD Components

Studer does not keep any commercially available SMD components in stock. For repair the corresponding devices should be purchased locally. The specifications of special components can be found in the service manual.
SMD components should only be replaced by skilled specialists using appropriate tools. No warranty claims will be accepted for circuit boards that have been damaged. Proper and improper SMD soldering joints are illustrated below.



F Disposal

Disposal of Packing Materials

The packing materials have been selected with environmental and disposal issues in mind. All packing material can be recycled. Recycling packing saves raw materials and reduces the volume of waste.
If you need to dispose of the transport packing materials, please try to use recyclable means.

Disposal of Used Equipment

Used equipment contains valuable raw materials as well as materials that must be disposed of professionally. Please return your used equipment via an authorized specialist dealer or via the public waste disposal system, ensuring any material that can be recycled is.
Please take care that your used equipment cannot be abused. To avoid abuse, delete sensitive data from any data storage media. After having disconnected your used equipment from the mains supply, make sure that the mains connector and the mains cable are made useless.

G Declarations of Conformity

G1 Class A Equipment - FCC Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide a reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Caution: *Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment. Also refer to relevant information in this manual.*

G2 CE Declaration of Conformity

We,
Studer Professional Audio GmbH,
CH-8105 Regensdorf,
declare under our sole responsibility that the products
Studer D21 MultiFeed
(starting with serial no. 1001)
Studer D21 MasterSync
(starting with serial no. 1001)
to which this declaration relates, according to following regulations of EU directives and amendments

- Low Voltage (LVD):
  73/23/EEC + 93/68/EEC
- Electromagnetic Compatibility (EMC):
  89/336/EEC + 92/31/EEC + 93/68/EEC

are in conformity with the following standards or other normative documents:

- Safety:
  EN 60950:2001 (Class I equipment)
- Safety of laser products:
  EN 60825-1:1994 + A11 + A2, EN60825-2:2000
- EMC:
  EN 55103-1/-2:1996, electromagnetic environments E2 and E4.

Regensdorf, June 17, 2005

B. Hochstrasser, President

M. Lienert, Manager R&D

Appendix 1: Air Temperature and Humidity

General

Normal operation of the unit or system is warranted under the following ambient conditions defined by *EN 60721-3-3, set IE32, value 3K3.*
This standard consists of an extensive catalogue of parameters, the most important of which are: ambient temperature +5...+40 °C, relative humidity 5...85% (i.e., no formation of condensation or ice); absolute humidity 1...25 g/m³; rate of temperature change < 0.5 °C/min. These parameters are dealt with in the following paragraphs.
Under these conditions the unit or system starts and works without any problem. Beyond these specifications, possible problems are described in the following paragraphs.

Ambient Temperature

Units and systems by Studer are generally designed for an ambient temperature range (i.e. temperature of the incoming air) of +5...+40 °C. When rack mounting the units, the intended air flow and herewith adequate cooling must be provided. The following facts must be considered:

- The admissible ambient temperature range for operation of the semiconductor components is 0 °C to +70 °C (commercial temperature range for operation).
- The air flow through the installation must provide that the outgoing air is always cooler than 70 °C.
- Average heat increase of the cooling air shall be 20 K, allowing for an additional maximum 10 K increase at the hot components.
- In order to dissipate 1 kW with this admissible average heat increase, an air flow of 2.65 m³/min is required.

Example: A rack dissipating *P = 800 W* requires an air flow of *0.8 * 2.65 m³/min* which corresponds to *2.12 m³/min.*

- If the cooling function of the installation must be monitored (e.g. for fan failure or illumination with spot lamps), the outgoing air temperature must be measured directly above the modules at several places within the rack. The trigger temperature of the sensors should be 65 to 70 °C.

Frost and Dew

The unsealed system parts (connector areas and semiconductor pins) allow for a minute formation of ice or frost. However, formation of dew visible with the naked eye will already lead to malfunctions. In practice, reliable operation can be expected in a temperature range above –15 °C, if the following general rule is considered for putting the cold system into operation:
If the air within the system is cooled down, the relative humidity rises. If it reaches 100%, condensation will arise, usually in the boundary layer between the air and a cooler surface, together with formation of ice or dew at sensitive areas of the system (contacts, IC pins, etc.). Once internal condensation occurs, trouble-free operation cannot be guaranteed, independent of temperature.

Before putting into operation, the system must be checked for internal formation of condensation or ice. Only with a minute formation of ice, direct evaporation (sublimation) may be expected; otherwise the system must be heated and dried while switched off.

A system without visible internal formation of ice or condensation should be heated up with its own heat dissipation, as homogeneously (and subsequently as slow) as possible; the ambient temperature should then always be lower than the one of the outgoing air.

If it is absolutely necessary to operate the cold system immediately within warm ambient air, this air must be dehydrated. In such a case, the absolute humidity must be so low that the relative humidity, related to the coldest system surface, always remains below 100%.

Ensure that the enclosed air is as dry as possible when powering off (i.e. before switching off in winter, aerate the room with cold, dry air, and remove humid objects as clothes from the room).

These relationships are visible from the following climatogram. For a controlled procedure, thermometer and hygrometer as well as a thermometer within the system will be required.

Example 1: An OB-van having an internal temperature of 20 °C and relative humidity of 40% is switched off in the evening. If temperature falls below +5 °C, dew or ice will be forming.

Example 2: An OB-van is heated up in the morning with air of 20 °C and a relative humidity of 40%. On all parts being cooler than +5 °C, dew or ice will be forming.

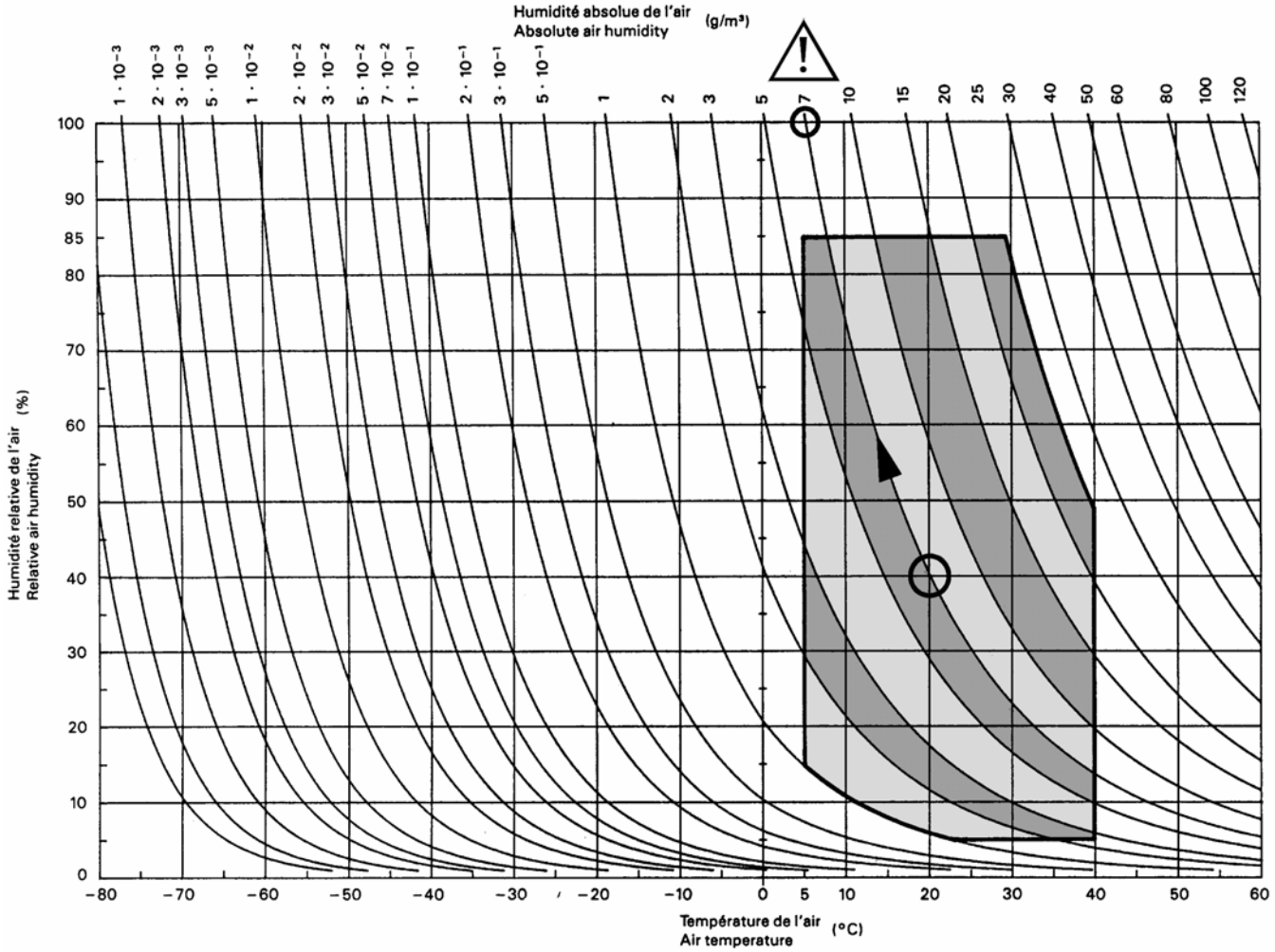


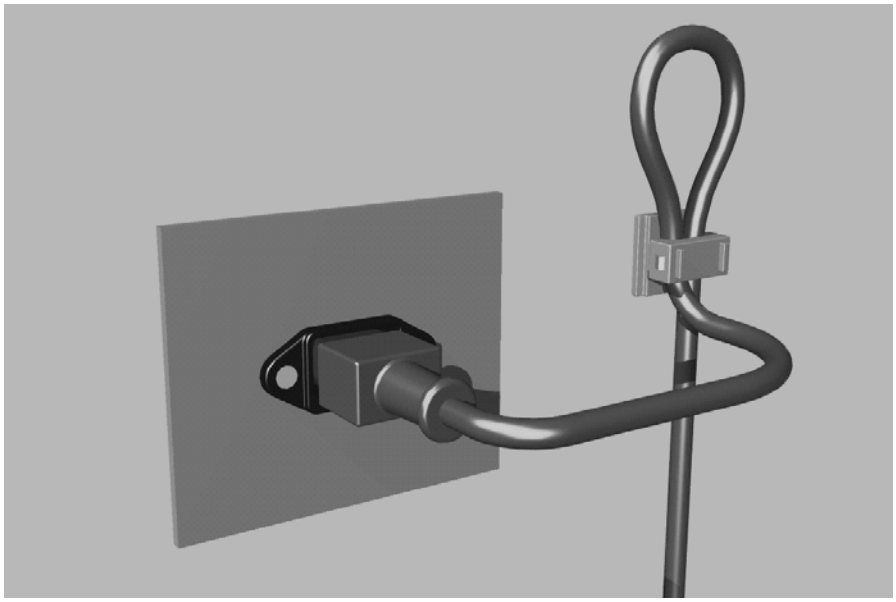
Figure B.3 – Climatogramme pour catégorie 3K3

Climatogram for class 3K3

721-3-3 © CEI:1994

Appendix 2: Mains Connector Strain Relief

For anchoring connectors without a mechanical lock (e.g. IEC mains connectors), we recommend the following arrangement:



Procedure: The cable clamp shipped with your unit is auto-adhesive. For mounting please follow the rules below:

- The surface to be adhered to must be clean, dry, and free from grease, oil, or other contaminants. Recommended application temperature range is 20...40 °C.
- Remove the plastic protective backing from the rear side of the clamp and apply it firmly to the surface at the desired position. Allow as much time as possible for curing. The bond continues to develop for as long as 24 hours.
- For improved stability, the clamp should be fixed with a screw. For this purpose, a self-tapping screw and an M4 bolt and nut are included.
- Place the cable into the clamp as shown in the illustration above and firmly press down the internal top cover until the cable is fixed.

Appendix 3: Software License

Use of the software is subject to the Studer Professional Audio Software License Agreement set forth below. Using the software indicates your acceptance of this license agreement. If you do not accept these license terms, you are not authorized to use this software.
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Warranty, Disclaimer, and Liability

For all issues not covered herewithin, please refer to the "General Terms and Conditions of Sale and Delivery" that are part of the sales contract.

CONTENTS

1 BASIC INFORMATION

The Studer MultiFeed and MasterSync units are housed in 19", 1U enclosures.
The distributor section is common for both MultiFeed and MasterSync. It distributes one word clock signal to six outputs, and up to four different AES/EBU signals to 16 outputs.
The MasterSync's generator section can be synchronized to a video, word clock, or AES/EBU signal with automatic switchover. Should the external clock fail, an internal high-precision reference clock with automatic and manual switchover is available.

AES/EBU Distributor

The inputs and outputs are available on 15-pin D-type connectors. The distributor can also be used for distributing an AES/EBU frame clock.

Word Clock Distributor

The input and the outputs are equipped with BNC sockets. Input sensitivity is 1 V_{pp}, regardless of any DC level. The word clock outputs may not only be connected to the word clock input but also to the internal generator's clock (setting with DIP switches). The polarity of three of the WCLK outputs can be inverted with an internal jumper.

Generator *(MasterSync Only)*

The MasterSync's internal generator has a low-tolerance reference clock (1 ppm); selectable frequencies are 44.056, 44.1, 47.952, and 48 kHz, as well as twice and four times each. For each group of four AES/EBU outputs individual multiplication factors may be set.
For external synchronization, a video signal (25 or 29.97 fps), an AES/EBU signal, or a word clock signal can be used. Signal selection is performed automatically, with priority in the same order. Termination for the video input is selected with an internal jumper from hi-Z or 75 Ω. The word clock input is the same as the word clock distributor's input signal.
For word clock and AES/EBU sync signals the input frequency is displayed, however without drop/non-drop recognition. When operating with the internal generator or with external video sync the sampling rate is generated according to the front panel selector's position. It is, for instance, possible to convert a 29.97 fps video signal to a 44.056 or 44.1 kHz sampling rate signal, as set with the **PULL DOWN** switch.

Redundancy

Two MasterSync units can be linked for redundancy. Both units must be fed with the same sync signal and must have identical front panel and DIP switch settings. In case of a malfunction, the supply as well as the AES/EBU and word clock signals are taken from the second unit. In order to avoid phase jumps during switchover, both units are continuously synchronized.
It is also possible to install a second, redundant power supply into a single generator/distributor unit. Then the **WARN** LED indicates a generator or supply failure; in the latter case, normal operation is still maintained. The **WARN** signal is also available at the **ALARM** socket (see chapters 2.3.5 and 3.2).
The MasterSync units automatically communicate by sending a signal indicating that they can be used as master (i.e., they have a valid input signal and the PLL's output signal is valid, too). After power-on, the unit reaching this condition first is then considered as master. Should the master fail, the second unit automatically becomes master; the **WARN** LED of the defective unit is on. Should both be defective, the **FAIL** LEDs of both units are on. The **FAIL** signal is also available at the **ALARM** socket (see chapters 2.3.5 and 3.2).

Redundancy Input Option

When using this option (see chapter 1.2 below), all main inputs are equipped with an additional redundancy input. Automatical switchover to the corresponding redundancy input takes place if one or more of the main inputs do not receive a valid AES/EBU signal. Thus, important outputs (such as program feeds) can be made very reliable. For each of the main inputs a sampling frequency converter (SFC) can be inserted into the signal path (with internal jumpers); the redundancy inputs always have SFCs in their signal path.

Note: *With the redundancy input option, the input signal range is limited to 96 kHz, and the output signal range to 48 kHz.*

1.1 Scope of Delivery

MultiFeed (order no. 60.682.01000) and MasterSync (60.683.01000) are shipped with an IEC 320/C13 socket, a hex-socket screwdriver (2.5 mm), and this operating manual.

1.2 Options

Redundancy Input Option

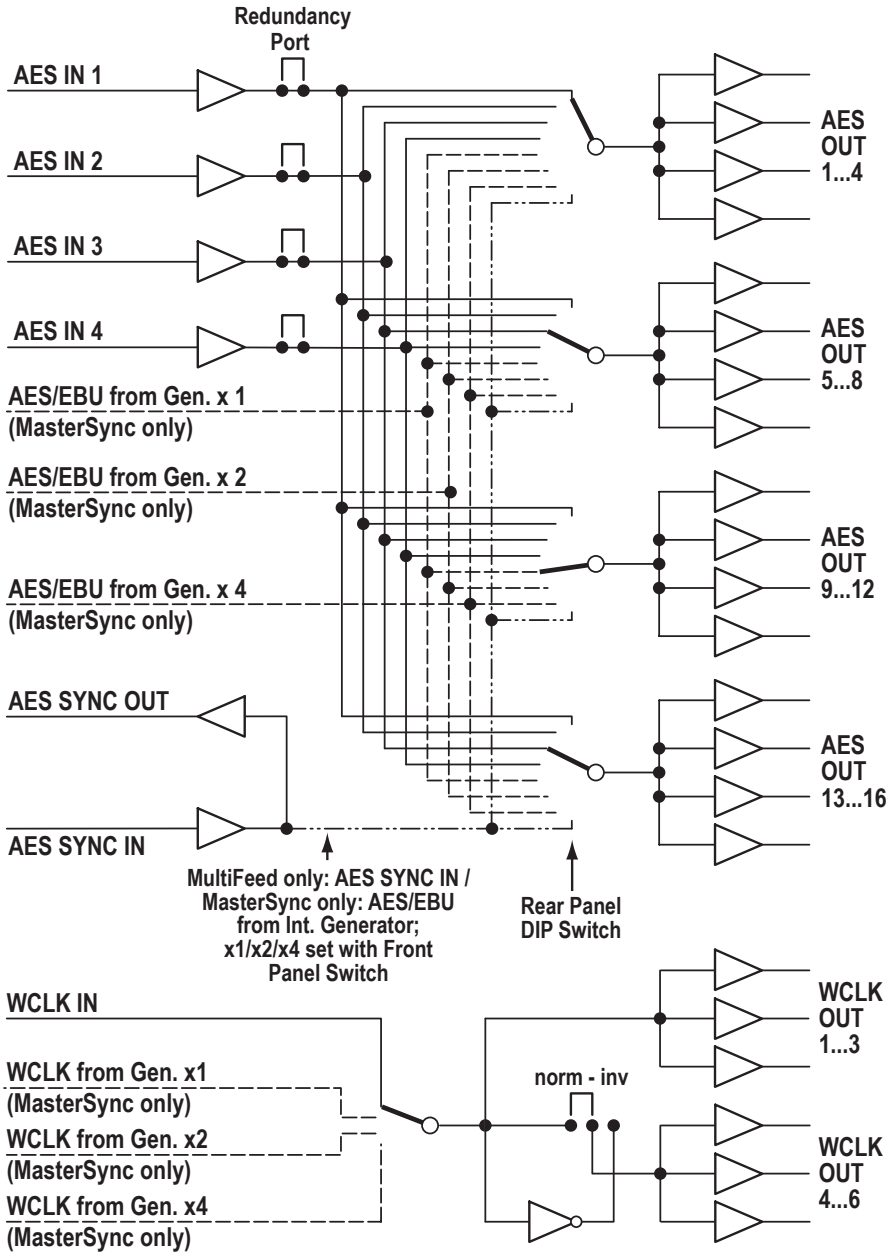
Upgrade to MultiFeed/MasterSync Plus (order no. 1.680.042.00)
If one of the AES/EBU 1-4 input signals fails, switchover to a redundant input (with SFC) can be done either automatically or controlled by an external signal. The output is synchronized to the generator's output signal.
An alarm output provides the individual error signals.
With the redundancy input option, the input signal range is limited to 96 kHz, and the output signal range to 48 kHz.

Redundant PSU

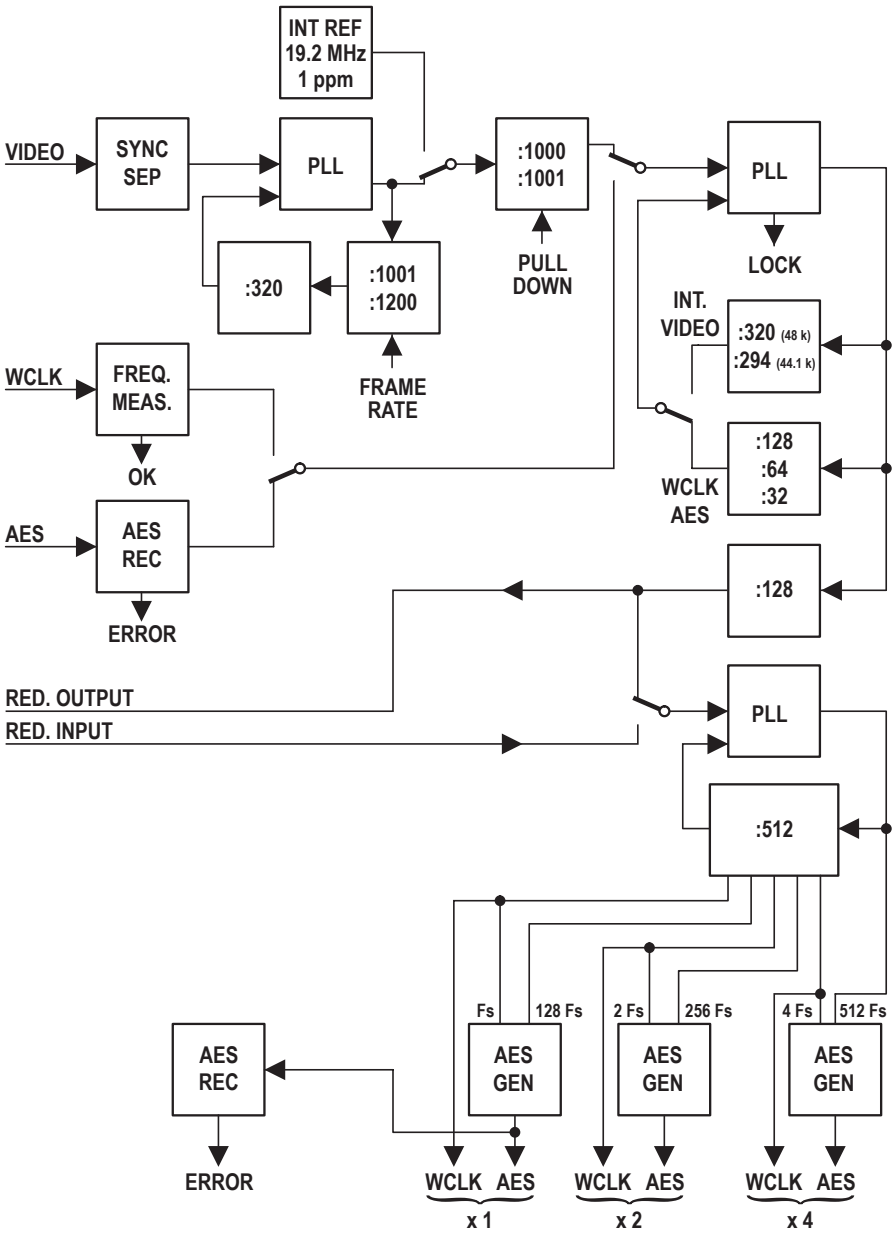
MultiFeed w. Redundant Power Supply (order no. 60.682.01001)
MasterSync w. Redundant Power Supply (order no. 60.683.01001)
MultiFeed or MasterSync units may be equipped with a second, redundant power supply unit (PSU).
In such a case, an internal jumper must be changed (refer to chapter 3.2).

1.3 Block Diagrams

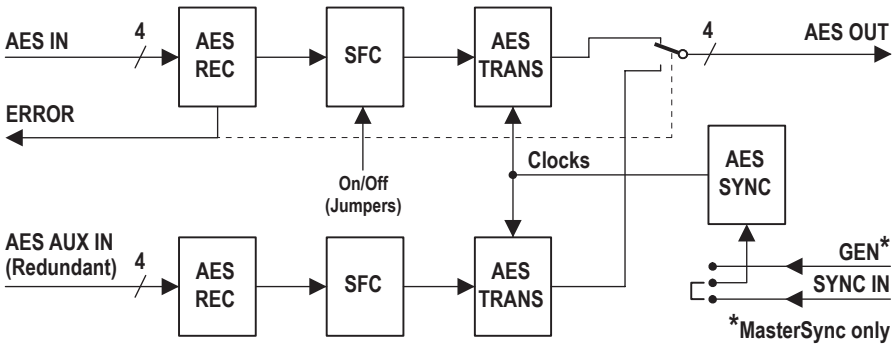
1.3.1 Distributor



1.3.2 Sync Generator *(MasterSync only)*



1.3.3 Redundancy Input Option



1.4 Safety and Connections

1.4.1 Utilization for the Purpose Intended

The MasterSync and MultiFeed units are designed for professional use. It is presumed that the units are operated only by trained personnel; servicing must be performed by qualified experts.

The electrical connections may be connected only to the appropriate voltages and signals specified in this manual. Please consult the Safety and EMC sections at the very beginning of this manual.

1.4.2 Mains Connection

There is no need to select a specific mains voltage setting because the unit has an auto-ranging supply unit; it can be operated on mains voltages from 100 through 240 V_{AC}, 50 to 60 Hz.

Caution

Repair work may only be performed by a trained service technician. The primary fuse inside the unit must be replaced by a spare fuse of exactly the same type.

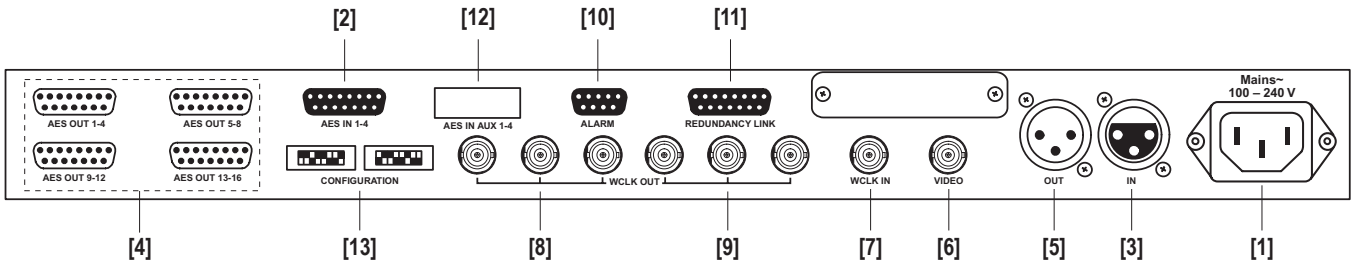
The unit must not be opened by the user – risk of a severe electric shock hazard!

Mains Cable

The supplied mains socket has to be fitted with a mating power cable incl. plug by an electrician, if your local Studer agency or your dealer should not have added a fitting power cable.

Please consult the "Safety" section at the very beginning of this manual.

1.4.3 Connector Field



[1] Mains ~ 100 – 240 V

Connector for socket IEC 320/C13.
Supply voltage range 100...240 V_{AC} (autoranging), 50...60 Hz.
Before connecting the unit to the mains, please consult the "Safety" section at the very beginning of this manual.

[2] AES IN 1-4

Inputs for four digital input signals according to AES/EBU, with a female 15-pin D-type connector.

[3] AES IN

Input for sync signal with female XLR socket.
For MasterSync only: This input signal may be routed to the outputs 1...16, depending on the **CONFIGURATION** DIP switch [13] setting (see chapter 3.1).

[4] AES OUT 1-4...13-16

Outputs for 16 digital output signals according to AES/EBU, with four male 15-pin D-type connectors.

[5] AES OUT

Sync output with male XLR socket, hard-wired to the AES IN sync signal input (XLR).

[6] VIDEO

Video input *for MasterSync only*; BNC socket, 75 Ω termination jumper-selectable. *(On MultiFeed units this socket is installed but not connected internally).*

[7] WCLK IN

Word clock input; BNC socket, 75 Ω termination jumper-selectable.

[8] WCLK OUT (1...3)

Word clock outputs 1...3; BNC sockets, distributing the **WCLK IN** signal.
For MasterSync only: In generator mode, these outputs supply a word-clock signal with the sampling rate selected with the **x1/x2/x4** front panel switch.

[9] WCLK OUT (4...6)

Word clock outputs 4...6; BNC sockets, distributing the **WCLK IN** signal. The polarity of these three outputs may be inverted with an internal jumper.
For MasterSync only: In generator mode, these outputs supply a wordclock signal with the sampling rate selected by the **CONFIGURATION** DIP switches [13].

[10] ALARM

Alarm outputs, watching the AES/EBU inputs 1...4 and the power supply; female 9-pin D-type connector (for details refer to chapters 2.3.5 and 3.2).

[11] REDUNDANCY LINK

Socket for redundancy connection to a second unit, with female 15-pin D-type connector. Matching cable: order no. 1.680.026.00

[12] AES IN AUX 1-4

(Option) Inputs for four redundant, digital input signals according to AES/EBU; female 15-pin D-type connector.

[13] CONFIGURATION

DIP switch bank with 16 switches for basic settings such as routing selection (refer to chapter 3.1).

1.5 Technical Specifications (preliminary, subject to change without notice)

1.5.1 General

Inputs	**AES/EBU**	Impedance 110 Ω typ. Sensitivity min. 0.2 V_{pp} Sampling rate 30...200 kHz according to AES3 1992
	Word Clock	Impedance: hi-Z or 75 Ω, selectable with internal jumper; TTL level
Outputs	**AES/EBU**	Impedance 110 Ω typ. Output level with 110 Ω load: 5 V_{pp} Sampling rate 30...200 kHz according to AES3 1992
	Word Clock	Impedance: 75 Ω, TTL level Polarity: The polarity of three of the **WCLK OUT** outputs (the ones below the **REDUNDANCY LINK** connector) can be inverted with an internal jumper.
Generator	**Internal Clock**	44.1, 44.056, 48; 47.952 kHz; each × 1, × 2, × 4 Accuracy: ±1 ppm
	External Clock	If synchronized by an external video signal: 44.1, 44.056, 48, 47.952 kHz; each × 1, × 2, × 4 If synchronized by WCLK or AES/EBU, for input signals of 42...50 kHz, *or* 84...100 kHz, *or* 168...200 kHz: 42...50 kHz; × 1, × 2, × 4

1.5.2 Power Supply

Mains Voltage	100...240 V_{AC}, 50...60 Hz
Current Consumption	1...0.5 A
Power Inlet	IEC 320/C14

1.5.3 Primary Fuse

Danger *The primary fuse is located inside the unit. Repair work may only be performed by a trained service technician.*

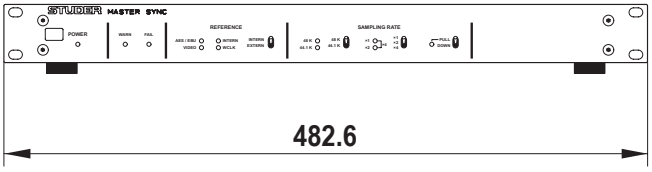
The primary fuse must be replaced by a spare fuse of exactly the same type and value. The unit must not be opened by the user – risk of a severe electric shock hazard.

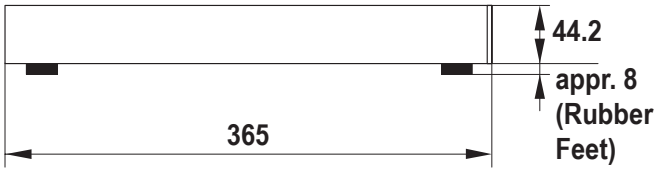
Spare Fuse **T 2.0 A H 250 V (5 × 20 mm)** Order No. 51.01.1022

1.5.4 Mechanical Data

Weight approx. 5 kg

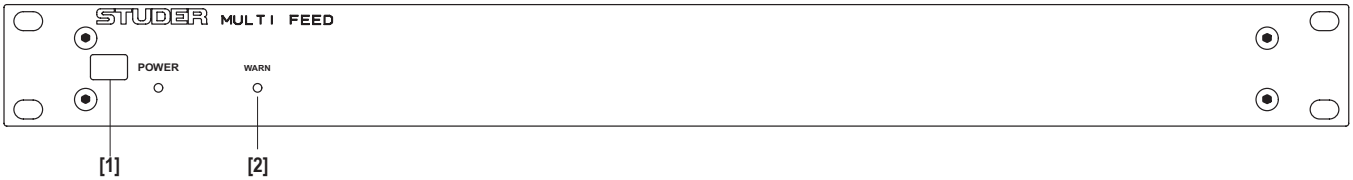
Dimensions [mm]

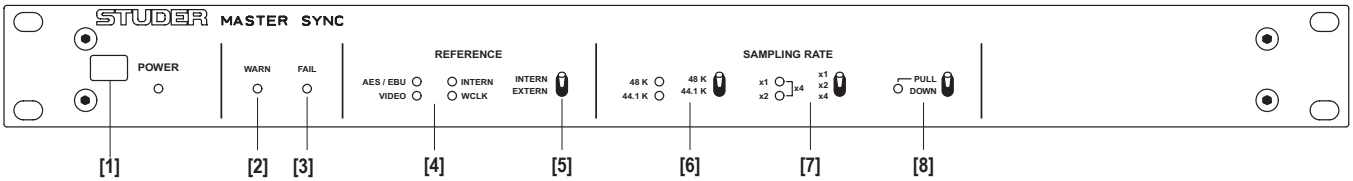




2 OPERATION

2.1 Operating Elements





[1] POWER Recessed pushbutton for switching the unit on or off; the associated LED is illuminated when the unit is switched on.

[2] WARN This LED is on if, while in redundancy mode, the unit accesses the power supply of the second unit.
The **WARN** signal is also available at the **ALARM** socket (see chapters 2.3.5 and 3.2).

MasterSync Only: The LED is on if the unit does not receive a valid signal at its input, but receives a valid signal via the redundancy link. (The input signal is considered as invalid either if **EXTERN** is selected but no valid signal – Video, AES/EBU, or Wordclock – is received, or if **INTERN** is selected but the internal PLL cannot generate a valid signal).

[3] FAIL *(MasterSync Only)* This LED is on if the generator cannot generate a valid output signal, or if the **INTERN/EXTERN** switch **[5]** is set to **EXTERN**, but no valid input signal is received; i.e., the internal generator has been selected automatically.
The **FAIL** signal is also available at the **ALARM** socket (see chapters 2.3.5 and 3.2).

[4] REFERENCE *(MasterSync Only)*

AES/EBU Is on if the unit has successfully synchronized to an AES/EBU signal.
VIDEO Is on if the unit has successfully synchronized to a video signal.
INTERN Is on if the unit uses its own, internal signal.
WCLK Is on if the unit has successfully synchronized to a wordclock signal.

[5] INTERN/EXTERN *(MasterSync Only)*
Manual selection from either the internal or one of the external clock references.
In the **EXTERN** setting, the video input signal has top priority; should the video signal be missing, AES/EBU is selected. Should this be missing as well, the wordclock is selected. If none of these signals should be available, the internal generator signal is selected and the **WARN** LED is on, and the corresponding output signal on the **ALARM** socket is active.
If a valid signal is available via the redundancy link, the signal from the redundancy link is selected (same priority sequence as mentioned above) and the **WARN** LED is on, and the corresponding output signal on the **ALARM** socket is active.

[6] 48 K/44.1 K *(MasterSync Only)* If the video input signal or the internal generator is selected as source, this switch selects the operating frequency of the MasterSync (48/44.1 kHz, or 47.852/44.054 kHz in **PULL DOWN** mode (see [8]).
The associated LEDs indicate the current setting.

[7] ×1 / ×2 / ×4 *(MasterSync Only)* If the unit is operating in generator mode, this switch selects whether the outputs deliver either the basic frequency (44.1/48 kHz), twice (88.2/96 kHz), or four times (176.4/192 kHz) the basic frequency.
The associated LEDs indicate the current setting.

[8] PULL DOWN *(MasterSync Only)*
If the video input signal or the internal generator is selected as source, this switch selects standard or **PULL DOWN** mode, as indicated in the table below.

Switches	[6] 48 K	[6] 44.1 K
[8] PULL DOWN, upper position (LED on)	47.952 kHz	44.056 kHz
[8] PULL DOWN, lower position (LED off)	48 kHz	44.1 kHz

The **PULL DOWN** LED is on if the **PULL DOWN** switch is activated (upper position) *and* the video input or the internal generator is active.

2.2 Sampling Rates Overview

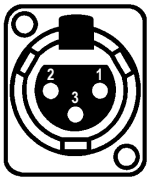
Distributor Input Sampling Rate	AES/EBU or WordClock	30…200 kHz

	Multiplier	Standard	Pull-Down	Standard	Pull-Down
Generator, Int. Clock or Ext. Clock, *Video Sync*	x 1	44.1 kHz	44.056 kHz	48 kHz	47.952 kHz
	x 2	88.2 kHz	88.112 kHz	96 kHz	95.904 kHz
	x 4	176.4 kHz	176.224 kHz	192 kHz	191.808 kHz

Generator, Ext. Clock *Word Clock or AES/EBU Sync*	Multiplier	Output
Input 42 kHz…50 kHz, *or* 84 kHz...100 kHz, *or* 168 kHz...200 kHz	x 1	42 kHz…50 kHz
	x 2	84 kHz...100 kHz
	x 4	168 kHz...200 kHz

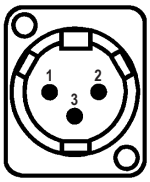
2.3 Connector Pin Assignments

2.3.1 AES IN (XLR-3f)



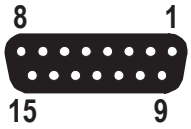
Pin	Signal
1	Screen
2	Input +
3	Input –
-	Chassis

2.3.2 AES OUT (XLR-3m)



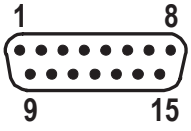
Pin	Signal
1	Screen
2	Input +
3	Input –
-	Chassis

2.3.3 AES IN 1-4 (15-pin D-type, f)



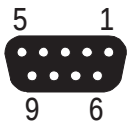
Pin	Signal
1	AES 1 +
9	AES 1 –
2	Screen
10	Screen
11	AES 2 +
3	AES 2 –
15	AES 3 +
7	AES 3 –
14	Screen
6	Screen
5	AES 4 +
13	AES 4 –
4	n.c.
12	n.c.
8	n.c.

2.3.4 AES OUT 1-16 (4 × 15-pin D-type, m)



Pin	Signal Out 1...4	Signal Out 5...8	Signal Out 9...12	Signal Out 13...16
1	AES 1 +	AES 5 +	AES 9 +	AES 13 +
9	AES 1 –	AES 5 –	AES 9 –	AES 13 –
2	Screen	Screen	Screen	Screen
10	Screen	Screen	Screen	Screen
11	AES 2 +	AES 6 +	AES 10 +	AES 14 +
3	AES 2 –	AES 6 –	AES 10 –	AES 14 –
15	AES 3 +	AES 7 +	AES 11 +	AES 15 +
7	AES 3 –	AES 7 –	AES 11 –	AES 15 –
14	Screen	Screen	Screen	Screen
6	Screen	Screen	Screen	Screen
5	AES 4 +	AES 8 +	AES 12 +	AES 16 +
13	AES 4 –	AES 8 –	AES 12 –	AES 16 –
4	n.c.	n.c.	n.c.	n.c.
12	n.c.	n.c.	n.c.	n.c.
8	n.c.	n.c.	n.c.	n.c.

2.3.5 ALARM (9-pin D-type, f)

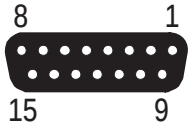


Pin	Signal
1	+24 V
2	GND
3	WARN relay contact output. Active if an internal supply has a malfunction, provided that either two units are linked or a second redundancy power supply is installed. If active, depending on the internal jumper setting, the relay either connects pins 3 and 6 (J3 position NO), or it interrupts this connection (position NC; default setting). See chapter 3.2 for details.
4	Error signal AES In 2 *
5	Error signal AES In 4 *
6	WARN / FAIL common relay contact
7	FAIL relay contact output. Active if the generator cannot generate a valid AES/EBU signal in spite of redundancy. If active, depending on the internal jumper setting, the relay either connects pins 7 and 6 (J4 position NO), or it interrupts this connection (position NC; default setting). See chapter 3.2 for details.
8	Error signal AES In 1 *
9	Error signal AES In 3 *

* These signals are used only if the redundancy option is installed. They are open-collector outputs pulling to GND in case of an error. Small loads, such as LEDs, opto-couplers or relays may be directly driven. *The external supply voltage must not exceed +24 V_{DC}, the current must not exceed 50 mA per output.*
The pins may also be pulled to GND by external signals or contacts for a forced switch-over to the redundancy inputs.

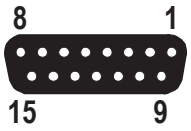
2.3.6 AES IN AUX 1-4 (15-pin D-type, f) *(optional)*

This connector is available only if the redundancy input option is installed. The pin assignment is identical with the one of the standard AES IN 1-4 connector.



Pin	Signal
1	AES 1 +
9	AES 1 –
2	Screen
10	Screen
11	AES 2 +
3	AES 2 –
15	AES 3 +
7	AES 3 –
14	Screen
6	Screen
5	AES 4 +
13	AES 4 –
4	n.c.
12	n.c.
8	n.c.

2.3.7 REDUNDANCY LINK (15-pin D-type, f)



Pin	Signal
1	GND
2	n.c.
3	n.c.
4	n.c.
5	n.c.
6	RED OUT
7	COM IN
8	GND
9	n.c.
10	n.c.
11	+24 V
12	n.c.
13	COM OUT
14	RED IN
15	n.c.

Matching Cable Order no. 1.680.026.00, suited for two units placed on top of each other.

3 DIP SWITCHES AND JUMPERS

3.1 DIP Switch Setting

The DIP switches are located at the rear of the unit and are numbered 1...16 from left to right.

Signal Selection for AES OUT 1…4

Selected Signal:	AES IN 1	AES IN 2	AES IN 3	AES IN 4	*MasterSync Only:*				*MultiFeed Only:*
					Int. Gen. ×1	Int. Gen. ×2	Int. Gen. ×4	Int. Gen. ×1 / ×2 / ×4	AES IN
DIP Sw. 1	up	up	up	up	down	down	down	down	down
DIP Sw. 2	up	up	down	down	up	up	down	down	down
DIP Sw. 3	up	down	up	down	up	down	up	down	down
Front Panel: ×1 / ×2 / ×4	don't care	don't care	don't care	don't care	don't care	don't care	don't care	×1 / ×2 / ×4	don't care

Signal Selection for AES OUT 5…8

Selected Signal:	AES IN 1	AES IN 2	AES IN 3	AES IN 4	*MasterSync Only:*				*MultiFeed Only:*
					Int. Gen. ×1	Int. Gen. ×2	Int. Gen. ×4	Int. Gen. ×1 / ×2 / ×4	AES IN
DIP Sw. 4	up	up	up	up	down	down	down	down	down
DIP Sw. 5	up	up	down	down	up	up	down	down	down
DIP Sw. 6	up	down	up	down	up	down	up	down	down
Front Panel: ×1 / ×2 / ×4	don't care	don't care	don't care	don't care	don't care	don't care	don't care	×1 / ×2 / ×4	don't care

Signal Selection for AES OUT 9…12

Selected Signal:	AES IN 1	AES IN 2	AES IN 3	AES IN 4	*MasterSync Only:*				*MultiFeed Only:*
					Int. Gen. ×1	Int. Gen. ×2	Int. Gen. ×4	Int. Gen. ×1 / ×2 / ×4	AES IN
DIP Sw. 7	up	up	up	up	down	down	down	down	down
DIP Sw. 8	up	up	down	down	up	up	down	down	down
DIP Sw. 9	up	down	up	down	up	down	up	down	down
Front Panel: ×1 / ×2 / ×4	don't care	don't care	don't care	don't care	don't care	don't care	don't care	×1 / ×2 / ×4	don't care

Signal Selection for AES OUT 13…16

Selected Signal:	AES IN 1	AES IN 2	AES IN 3	AES IN 4	*MasterSync Only:*				*MultiFeed Only:*
					Int. Gen. ×1	Int. Gen. ×2	Int. Gen. ×4	Int. Gen. ×1 / ×2 / ×4	AES IN
DIP Sw. 10	up	up	up	up	down	down	down	down	down
DIP Sw. 11	up	up	down	down	up	up	down	down	down
DIP Sw. 12	up	down	up	down	up	down	up	down	down
Front Panel: ×1 / ×2 / ×4	don't care	don't care	don't care	don't care	don't care	don't care	don't care	×1 / ×2 / ×4	don't care

Signal Selection for AES OUT

Selected Signal:	*MasterSync Only:*				*MultiFeed Only:*
	Int. Gen. ×1	Int. Gen. ×2	Int. Gen. ×4	Int. Gen. ×1 / ×2 / ×4	AES IN
DIP Switch 13	up	up	down	down	down
DIP Switch 14	up	down	up	down	down
Front Panel Switch: ×1 / ×2 / ×4	don't care	don't care	don't care	×1 / ×2 / ×4	don't care

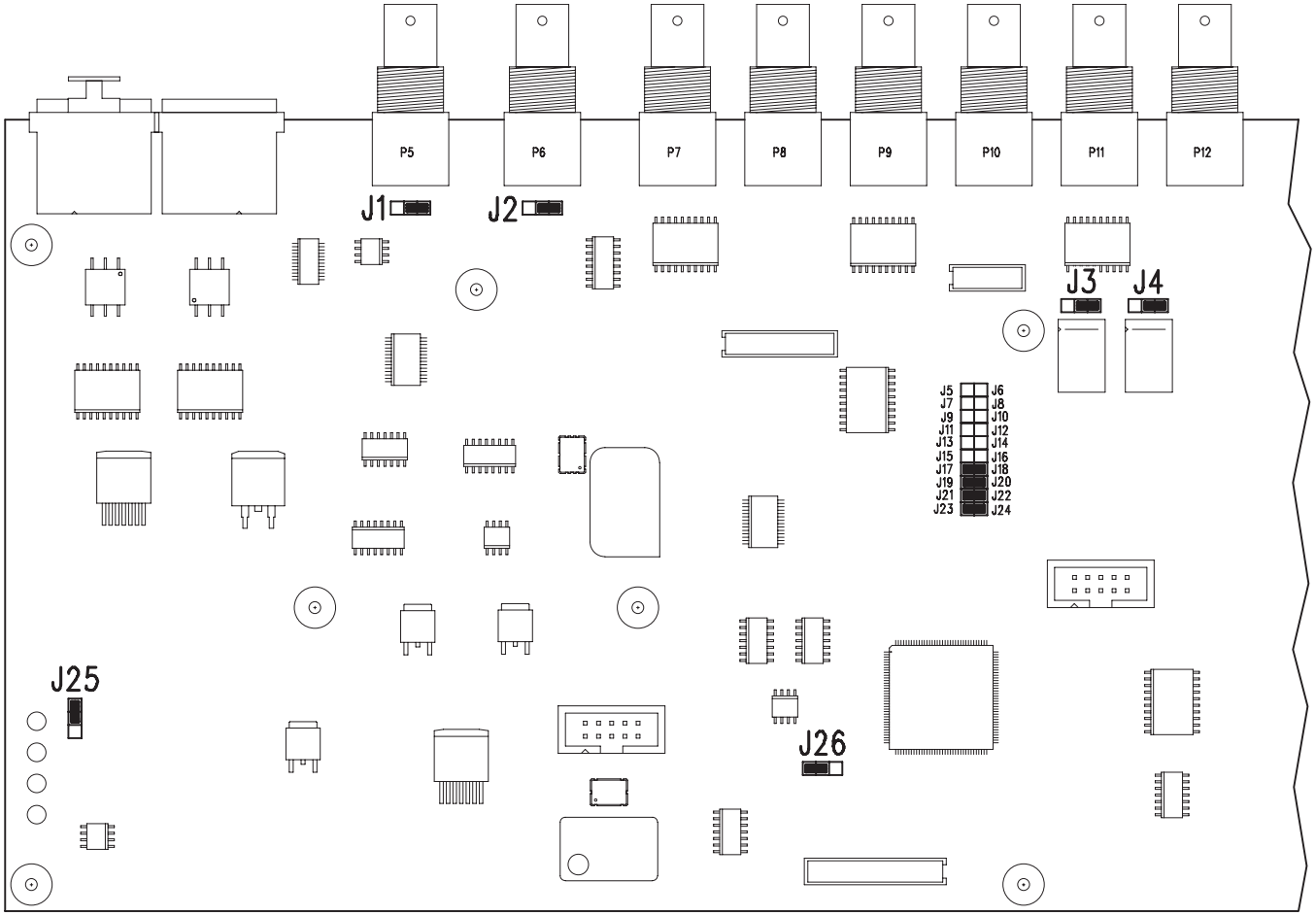
Signal Selection for WCLK Out 4...6 *(Selection for WCLK Out 1...3 is performed by the front panel switches)*

Selected Signal:	WCLK IN	*MasterSync Only:*		
		Int. Gen. ×1	Int. Gen. ×2	Int. Gen. ×4
DIP Switch 15	down	down	up	up
DIP Switch 16	down	up	down	up

3.2 Internal Jumpers

Caution ⚠ *All internal adjustments as well as repair work on this product must be performed by a trained technician – no user-serviceable parts inside!*

Factory Setting In all drawings below, the default jumper settings are marked in black.



J1: 75 Ω Hi-Z

(MasterSync only) Impedance setting for the **VIDEO** input (BNC socket P5). Default setting: hi-Z; when changing the jumper position, the input impedance is 75 Ω.

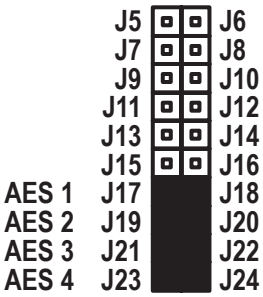
J2: 75 Ω Hi-Z

Impedance setting for the WCLK IN input (BNC socket P6). Default setting: hi-Z; when changing the jumper position, the input impedance is 75 Ω.

(WARN Relay) **J3:** NO NC

(FAIL Relay) **J4:** NO NC

Configuration for the FAIL and WARN relay contact outputs.
WARN is active if an internal supply has a malfunction, provided that either two units are linked or a second power supply unit is installed. J3 default setting: NC (normally closed), pins 3 and 6 of the **ALARM** socket are shorted as long as no error is detected (i.e. WARN inactive).
FAIL is active if the generator cannot generate a valid AES/EBU signal in spite of redundancy. J4 default setting: NC (normally closed), pins 6 and 7 of the **ALARM** socket are shorted as long as no error is detected (i.e. FAIL inactive).
For the pin assignment of the **ALARM** socket on the rear panel refer to chapter 2.3.5.

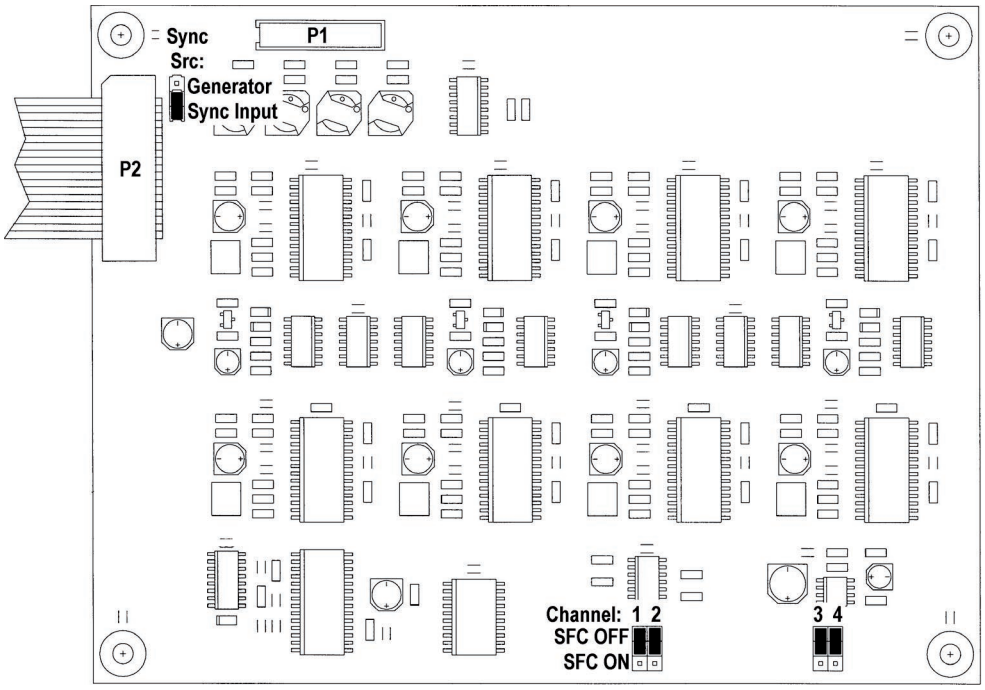


This pin array is used for installing the redundancy input option (refer to chapters 1.2 and 1.3.3).
If no redundancy input option is installed, the following pins *must* be connected with jumpers: J17-J18, J19-J20, J21-J22, and J23-J24 (default setting).

If a second, redundant power supply unit is installed, jumper J25 must be set to the "Redundant" position (refer to chapter 1.2).
If not, the jumper remains in the "Default" position.

Position INV: Polarity inversion of the word clock outputs **WCLK OUT** 4...6 (i.e., BNC sockets P10...P12). Default setting: NORM.

3.3 Jumpers on Redundancy Input Option



The redundancy input option is plugged to the pin array J5...J24 (see above) using the flat cable connected to P2. The flat cable from the rear-panel D-type connector is plugged to P1.

Sync Src Selects the sync source for the AES/EBU output. *The* **Generator** *position is allowed for MasterSync units only.* Default setting: **Sync Input**.

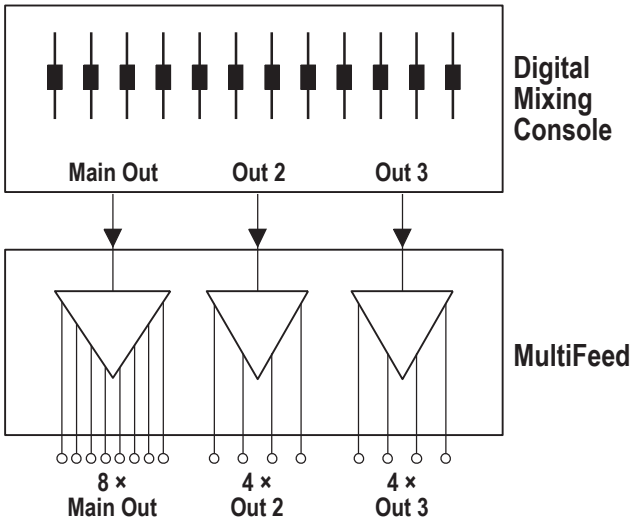
SFC ON / OFF Individually enables the sampling frequency converters (SFC) for each of the monitored **AES IN 1-4** inputs. Default setting: **SFC OFF**.
The SFCs in the four redundant signal paths **AES AUX IN 1-4** *are always enabled.*

4 APPLICATIONS

4.1 Digital Mixing Console

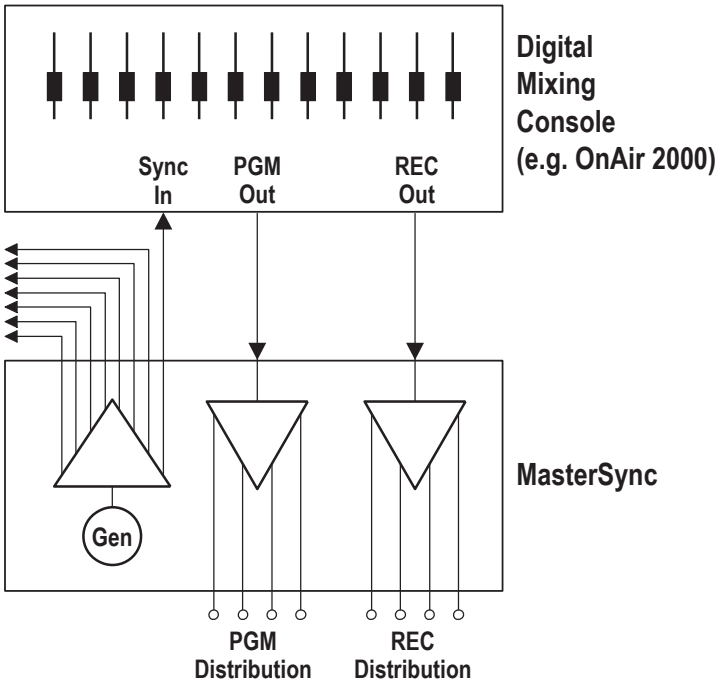
MultiFeed

In most applications, the different output signals of a digital console have to be distributed to different targets. For example, the main output has to be distributed to the master control room, to a digital harddisk workstation, and to several other recording devices.
As the outputs of a MultiFeed can be configured in such a way that they distribute different signals, it is possible to use eight of them for the distribution of the main output, and four of them each for two other signals, such as AUX outputs or a second master output.



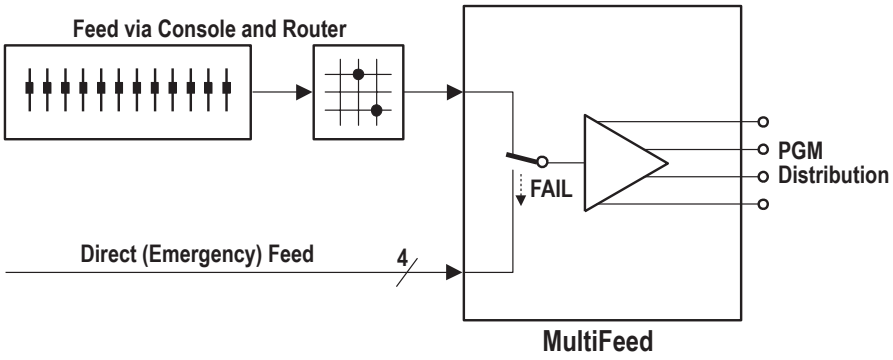
MasterSync

In some installations with digital mixing consoles, a sync signal must be generated and distributed to some peripheral devices, such as recording or playback units. Eight of the MasterSync's outputs may be configured in such a way that they are used for distributing the sync signal generated internally.



4.2 Emergency Feeds

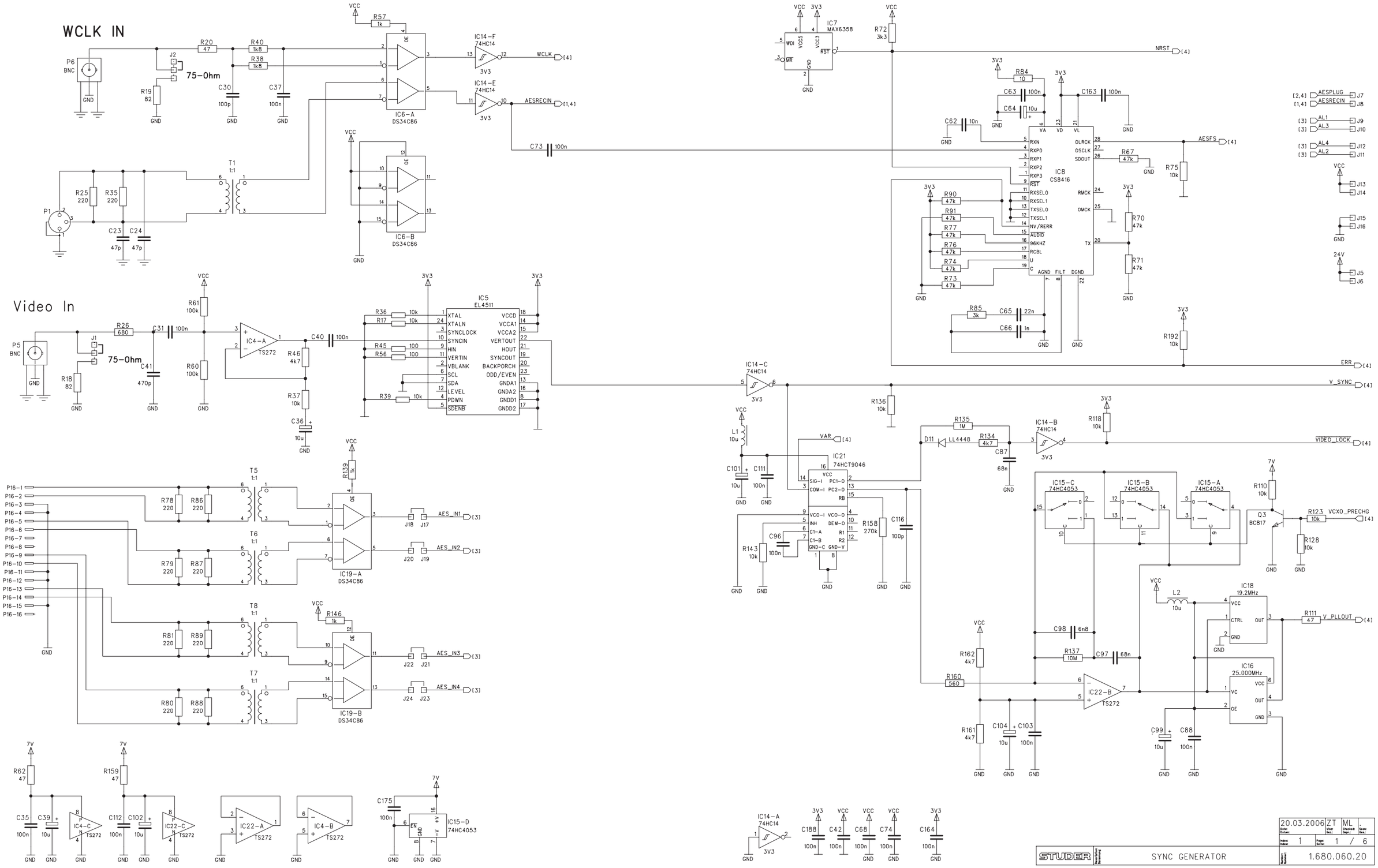
Each of the MultiFeed's inputs can be equipped with an additional input when using the redundancy input option. It automatically switches over to the corresponding redundancy input if one or more of the main inputs do not receive a valid AES/EBU signal. Thus, important outputs (such as program feeds) can be made very reliable.
In the given example, the MultiFeed will switch over to the emergency feeds in the same moment when the program feed via console and router is interrupted. This ensures that the important system outputs will never be without a signal.



5 DIAGRAMS

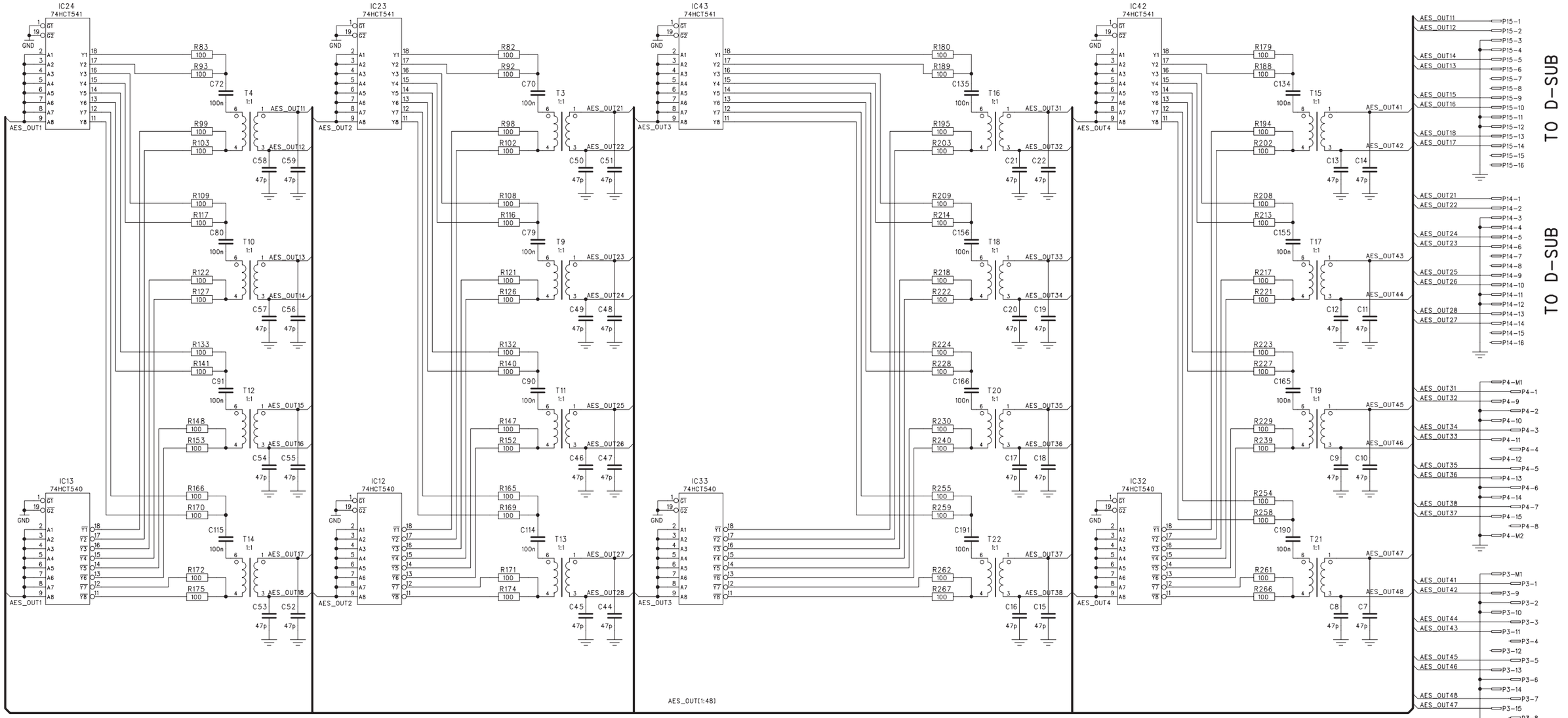
D21 MultiFeed / MasterSync Assemblies	Order No.
Sync Generator PCB	1.680.060
Distributor PCB	1.680.065
Redundancy Input PCB (Option)	1.680.040

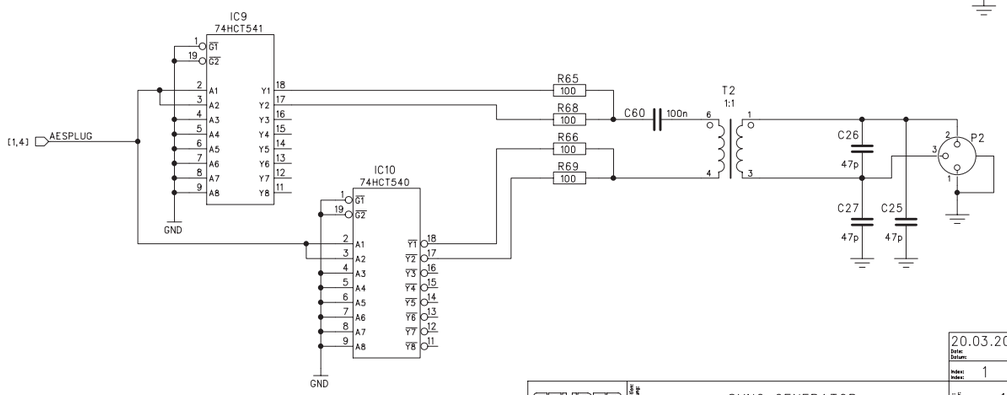
Sync Generator 1.680.060.20 (1) / Distributor 1.680.065.20 (0) Page: 1 of 6

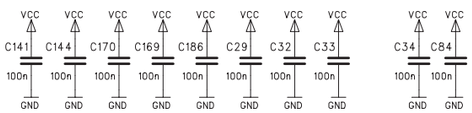


Date printed: 20.03.07

Sync Generator 1.680.060.20 (1) / Distributor 1.680.065.20 (0)



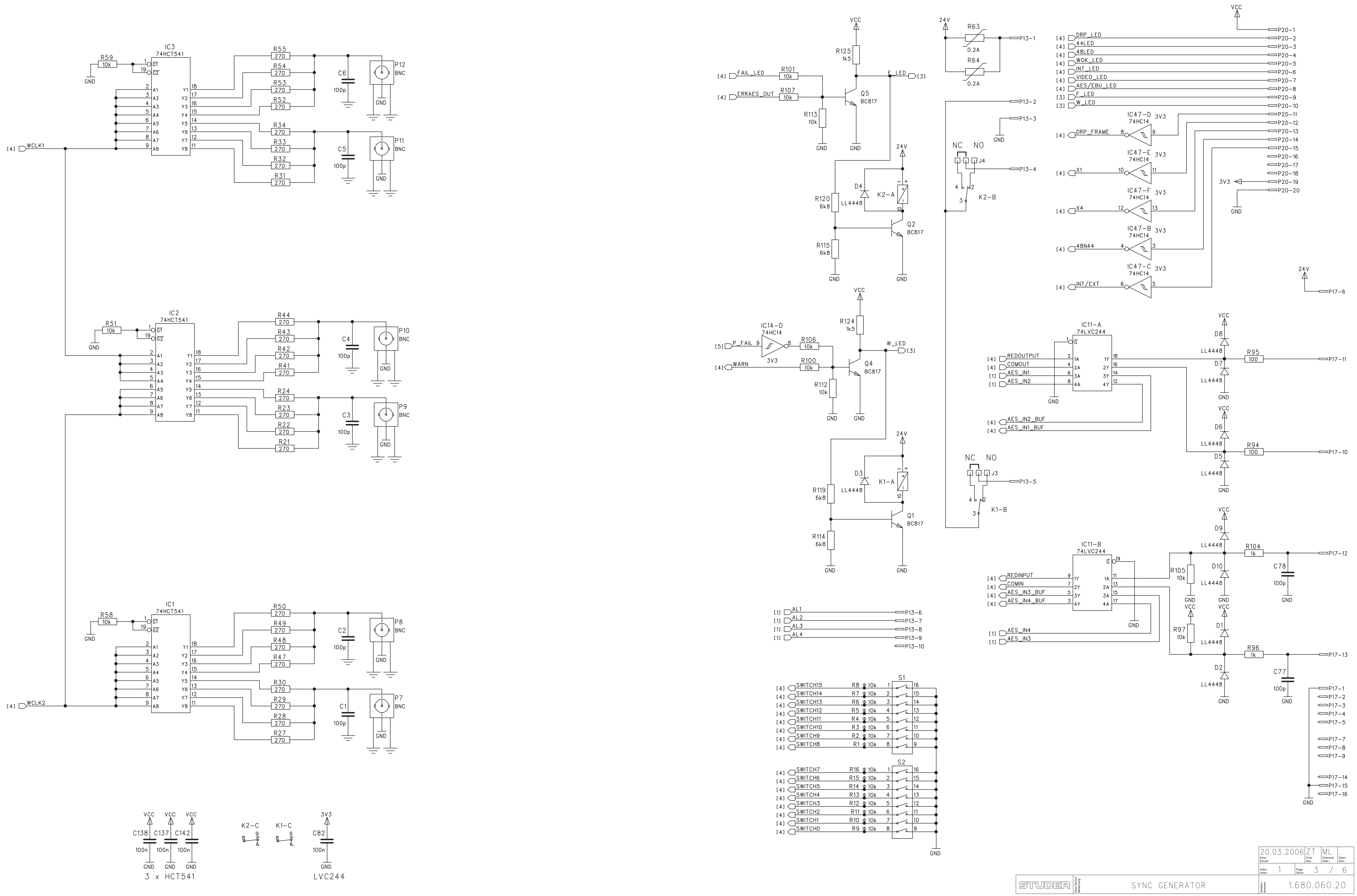




20.03.2006 Date: Datum:	ZT Visa: Sez:	ML Checked: Contr.:	. Sect: Sez.:	
Index: Index:	1	Page: Seite:	2 / 6	
STUDER	SYNC GENERATOR		Number: Numéro:	1.680.060.20

Date printed: 20.03.07

Sync Generator 1.680.060.20 (1) / Distributor 1.680.065.20 (0) Page: 3 of 6


IC3 74HCT541
IC2 74HCT541
IC1 74HCT541
WCLK1
WCLK2
P12 BNC
P11 BNC
P10 BNC
P9 BNC
P8 BNC
P7 BNC
3 x HCT541
LVC244
FAIL_LED
ERRAES_OUT
F_LED
W_LED
P_FAIL
WARN
K2-A
K1-A
K2-B
K1-B
IC11-A 74LVC244
IC11-B 74LVC244
DRP_LED
44LED
48LED
WOK_LED
INT_LED
VIDEO_LED
AES/EBU_LED
DRP_FRAME
X1
X4
48N44
INT/EXT
REDOUTPUT
COMOUT
AES_IN1
AES_IN2
AES_IN2_BUF
AES_IN1_BUF
REDINPUT
COMIN
AES_IN3_BUF
AES_IN4_BUF
AES_IN4
AES_IN3
AL1
AL2
AL3
AL4
S1
S2
20.03.2006 ZT ML
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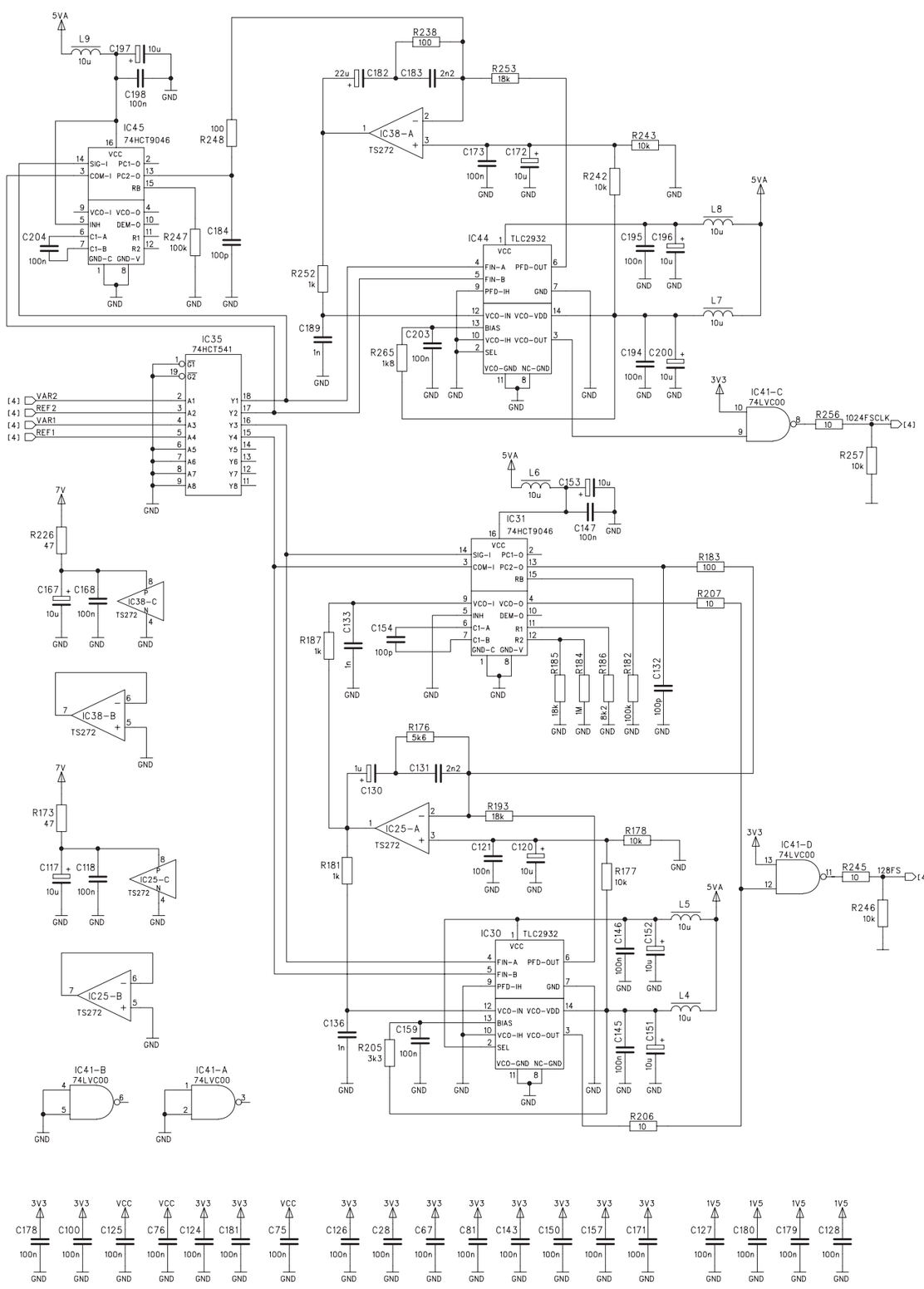
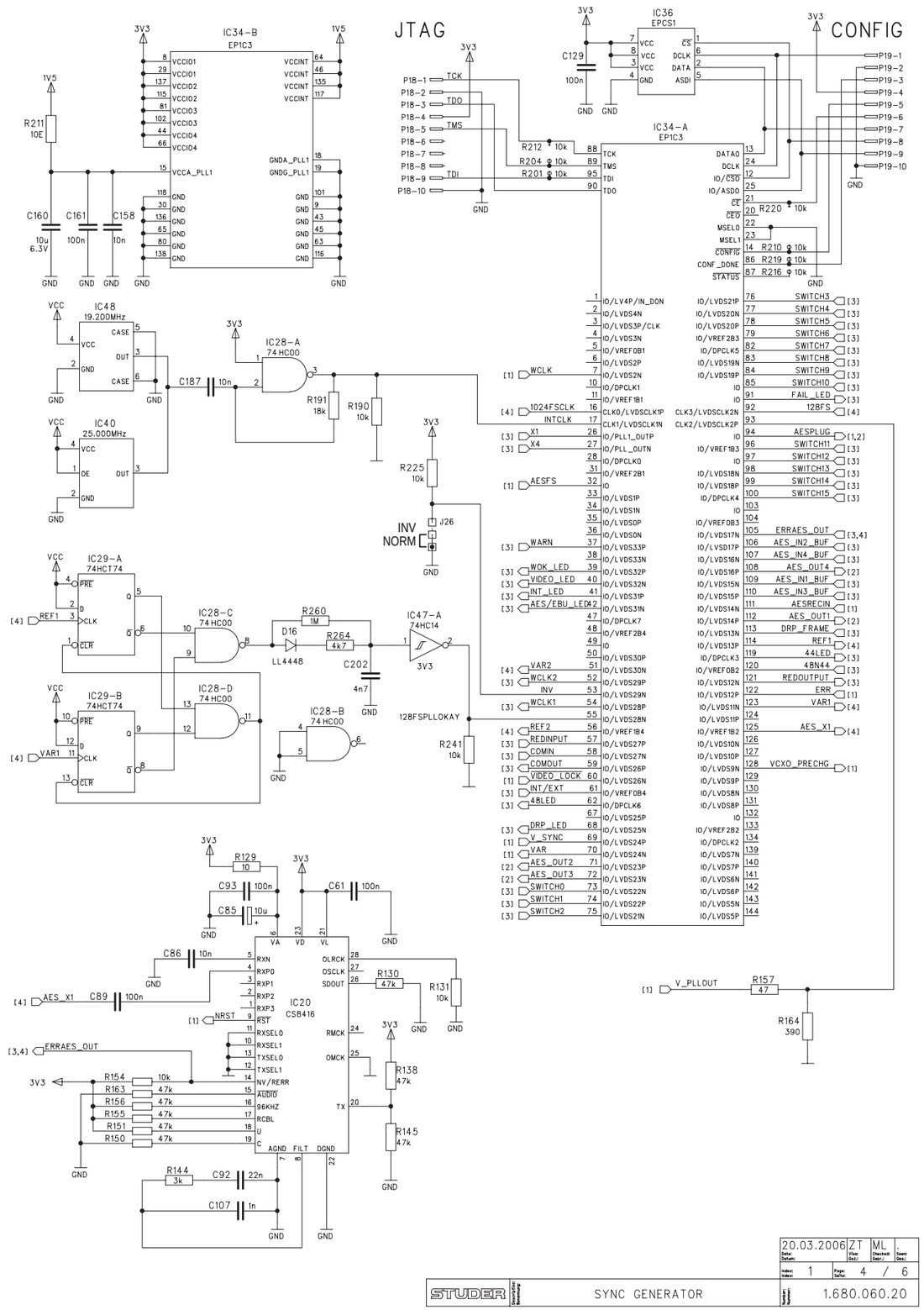
STUDER
SYNC GENERATOR
1.680.060.20

Date printed: 20.03.07

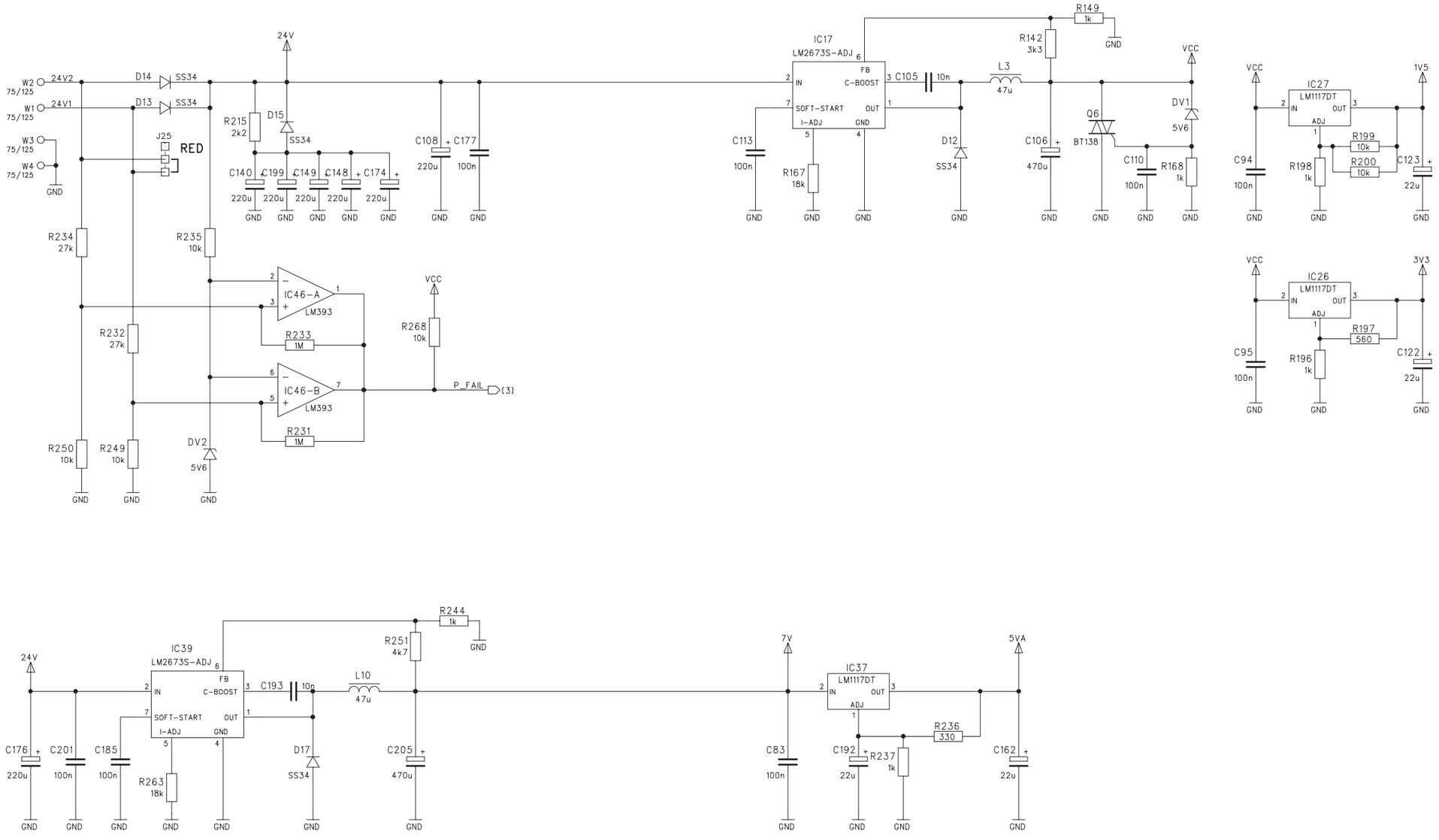
Sync Generator 1.680.060.20 (1) / Distributor 1.680.065.20 (0)





STUDER	SYNC GENERATOR	20.03.2006 ZT / ML	
		Index: 1	Page: 4 / 6
			1.680.060.20

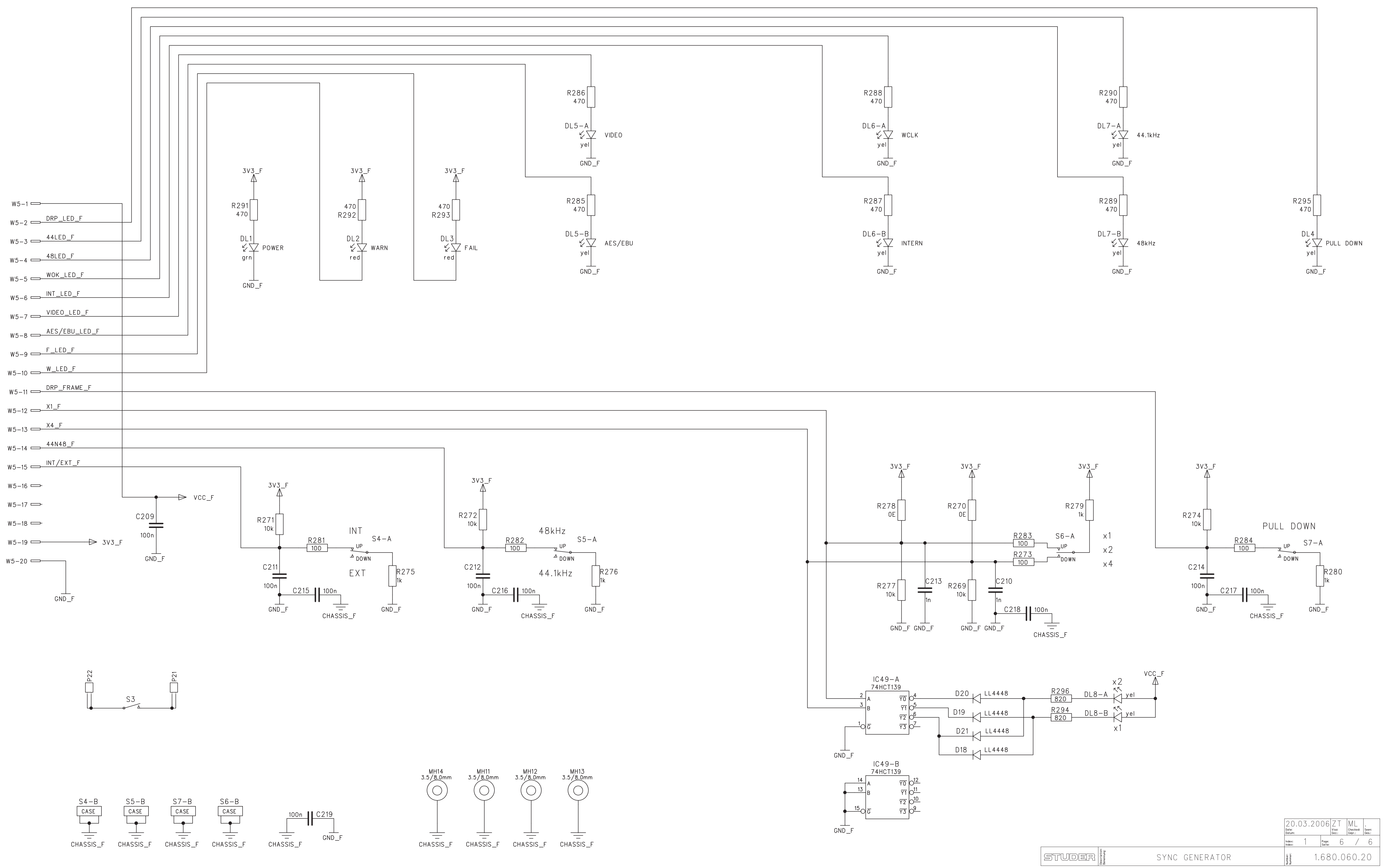
Sync Generator 1.680.060.20 (1) / Distributor 1.680.065.20 (0) Page: 5 of 6



Date printed: 20.03.07

STUDER	SYNC GENERATOR	20.03.2006	ZT	ML
		Index: 1	Page: 5 / 6	
		Number:	1.680.060.20	

Sync Generator 1.680.060.20 (1) / Distributor 1.680.065.20 (0) Page: 6 of 6


W5-1
W5-2 DRP_LED_F
W5-3 44LED_F
W5-4 48LED_F
W5-5 WOK_LED_F
W5-6 INT_LED_F
W5-7 VIDEO_LED_F
W5-8 AES/EBU_LED_F
W5-9 F_LED_F
W5-10 W_LED_F
W5-11 DRP_FRAME_F
W5-12 X1_F
W5-13 X4_F
W5-14 44N48_F
W5-15 INT/EXT_F
W5-16
W5-17
W5-18
W5-19
W5-20
VCC_F
3V3_F
GND_F
CHASSIS_F
R291 470
DL1 grn POWER
R292 470
DL2 red WARN
R293 470
DL3 red FAIL
R286 470
DL5-A yel VIDEO
R285 470
DL5-B yel AES/EBU
R288 470
DL6-A yel WCLK
R287 470
DL6-B yel INTERN
R290 470
DL7-A yel 44.1kHz
R289 470
DL7-B yel 48kHz
R295 470
DL4 yel PULL DOWN
C209 100n
R271 10k
R281 100
INT
EXT
S4-A
UP
DOWN
R275 1k
C211 100n
C215 100n
R272 10k
R282 100
48kHz
44.1kHz
S5-A
R276 1k
C212 100n
C216 100n
R278 0E
R277 10k
C213 1n
R270 0E
R269 10k
C210 1n
R279 1k
R283 100
R273 100
S6-A
x1
x2
x4
C218 100n
R274 10k
PULL DOWN
R284 100
S7-A
R280 1k
C214 100n
C217 100n
P22
P21
S3
IC49-A 74HCT139
D20 LL4448
D19 LL4448
D21 LL4448
D18 LL4448
R296 820
R294 820
DL8-A yel
DL8-B yel
IC49-B 74HCT139
S4-B CASE
S5-B CASE
S7-B CASE
S6-B CASE
C219 100n
MH14 3.5/8.0mm
MH11 3.5/8.0mm
MH12 3.5/8.0mm
MH13 3.5/8.0mm
20.03.2006 ZT ML
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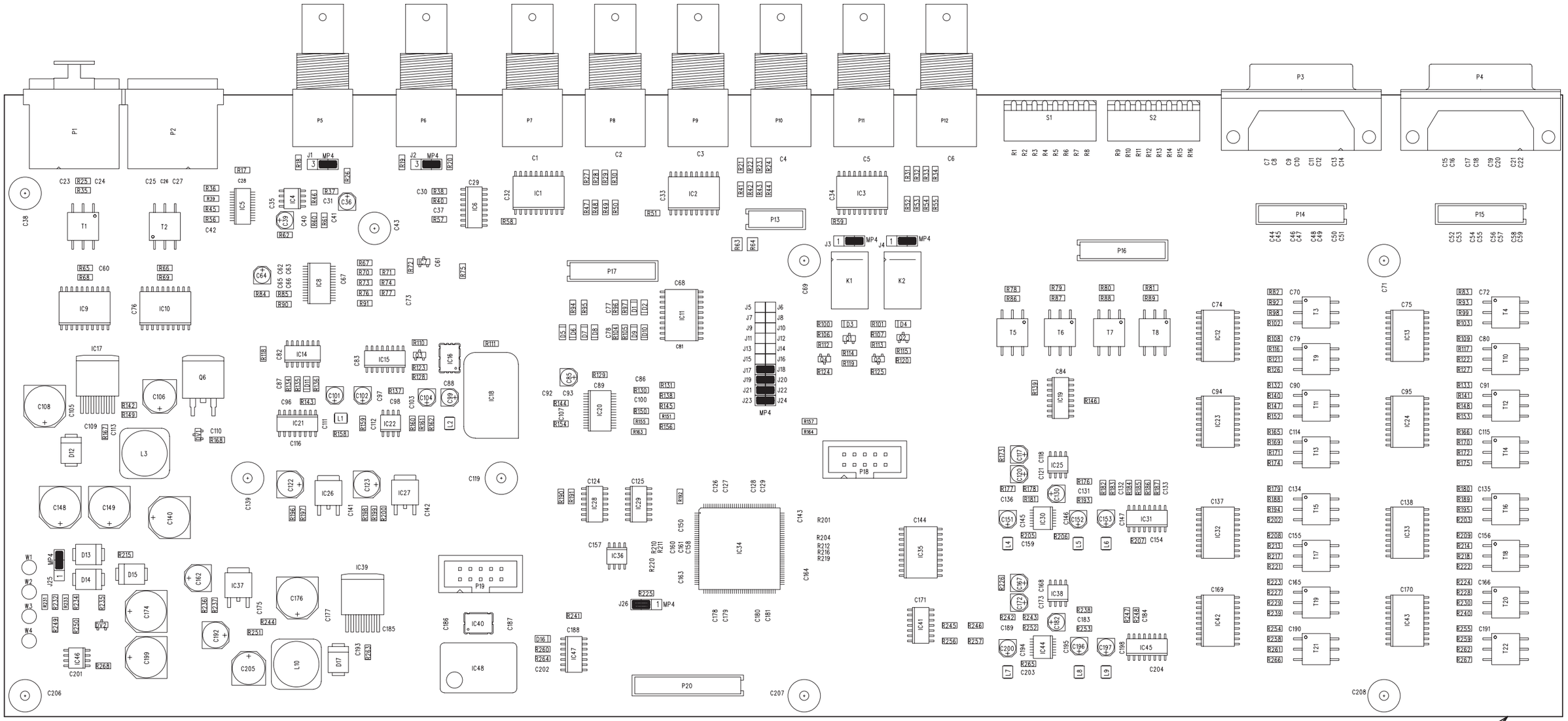
STUDER SYNC GENERATOR 1.680.060.20

Sync Generator 1.680.060.20 (1)



20.05.2005	PG	ML	HW
0		1 / 1	
STUDER	SYNC GENERATOR "ESE"		1.680.060.20

Date printed: 20.03.07

Distributor 1.680.065.20 (0)

Date printed: 20.03.07

20.05.2005	PG	ML	HW	
Index: 0	Pages: 1 / 1			
STUDER	DISTRIBUTOR "ESE"		1.680.065.20	

Sync Generator 1.680.060.20 (1)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 2	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 3	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 4	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 5	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 6	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 7	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 8	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 9	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 10	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 11	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 12	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 13	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 14	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 15	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 16	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 17	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 18	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 19	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 20	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 21	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 22	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 23	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 24	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 25	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 26	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 27	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 28	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 29	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 30	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 31	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 32	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 33	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 34	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 35	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 36	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 37	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 38	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 39	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 40	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 41	59.60.2365	1 pce	470p	CER 50V, 5%, C0G, 0805
0	C 42	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 43	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 44	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 45	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 46	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 47	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 48	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 49	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 50	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 51	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 52	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 53	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 54	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 55	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 56	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 57	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 58	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 59	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 60	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 61	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 62	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 63	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 64	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 65	59.60.3329	1 pce	22n	CER 50V, 10%, X7R, 0805
0	C 66	59.60.2373	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 67	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 68	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 69	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 70	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 71	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 72	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 73	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 74	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 75	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 76	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 77	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 78	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 79	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 80	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 81	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 82	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 83	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 84	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 85	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 86	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 87	59.60.3335	1 pce	68n	CER 50V, 10%, X7R, 0805
0	C 88	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 89	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 90	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 91	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 92	59.60.3329	1 pce	22n	CER 50V, 10%, X7R, 0805
0	C 93	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 94	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 95	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 96	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 97	59.60.3335	1 pce	68n	CER 50V, 10%, X7R, 0805
0	C 98	59.60.3323	1 pce	6n8	CER 50V, 10%, X7R, 0805
0	C 99	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 100	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 101	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 102	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 103	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 104	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 105	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 106	59.68.0033	1 pce	470u	EL 6V, 8.0*10.7
0	C 107	59.60.2373	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 108	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 109	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 110	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 111	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 112	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 113	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 114	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 115	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 116	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 117	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 118	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 119	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 120	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 121	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 122	59.68.0111	1 pce	22u	EL 35V, 6.3*5.7
0	C 123	59.68.0111	1 pce	22u	EL 35V, 6.3*5.7
0	C 124	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 125	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 126	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 127	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 128	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 129	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 130	59.68.0127	1 pce	1u0	EL 50V, 4.0*5.7
0	C 131	59.60.3317	1 pce	2n2	CER 50V, 10%, X7R, 0805
0	C 132	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 133	59.60.2373	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 134	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 135	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 136	not used	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 137	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 138	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 139	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 140	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 141	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 142	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 143	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 144	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 145	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 146	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 147	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 148	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 149	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 150	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 151	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 152	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 153	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 154	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 155	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 156	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 157	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 158	59.60.3901	1 pce	10n	CER 16V, 0402
0	C 159	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 160	59.60.3904	1 pce	10u	CER 6.3V, 0805
0	C 161	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 162	59.68.0111	1 pce	22u	EL 35V, 6.3*5.7
0	C 163	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 164	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 165	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 166	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 167	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 168	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 169	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 170	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 171	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 172	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 173	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 174	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 175	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 176	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 177	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 178	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 179	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 180	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 181	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 182	59.68.0025	1 pce	22u	EL 6V, 4.0*5.7
0	C 183	59.60.3317	1 pce	2n2	CER 50V, 10%, X7R, 0805
0	C 184	not used	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 185	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 186	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 187	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 188	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 189	59.60.2373	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 190	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 191	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 192	59.68.0111	1 pce	22u	EL 35V, 6.3*5.7
0	C 193	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 194	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 195	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 196	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 197	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 198	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 199	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 200	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 201	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 202	59.60.3321	1 pce	4n7	CER 50V, 10%, X7R, 0805
0	C 203	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 204	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 205	59.68.0033	1 pce	470u	EL 6V, 8.0*10.7

Sync Generator 1.680.060.20 (1)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 206	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 207	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 208	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 209	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 210	59.60.2373	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 211	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 212	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 213	59.60.2373	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 214	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 215	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 216	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 217	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 218	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 219	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	D 1	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 2	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 4	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 5	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 6	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 7	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 8	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 9	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 10	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 11	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 12	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 13	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 14	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 15	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 16	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 17	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 18	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 19	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 20	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 21	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	DL 1	50.04.2751	1 pce	grn	LED mit Halter
0	DL 2	50.04.2750	1 pce	red	LED mit Halter
0	DL 3	50.04.2750	1 pce	red	LED mit Halter
0	DL 4	50.04.2752	1 pce	yel	LED mit Halter
0	DL 5	50.04.2772	1 pce	2*yel	Dual-LED mit Halter
0	DL 6	50.04.2772	1 pce	2*yel	Dual-LED mit Halter
0	DL 7	50.04.2772	1 pce	2*yel	Dual-LED mit Halter
0	DL 8	50.04.2772	1 pce	2*yel	Dual-LED mit Halter
0	DV 1	50.60.9011	1 pce	5V6	5%, 0.2W, SOT 23
0	DV 2	50.60.9011	1 pce	5V6	5%, 0.2W, SOT 23
0	IC 1	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 2	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 3	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 4	50.61.0205	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0	IC 5	50.62.0302	1 pce	EL4511	Sync Separator
0	IC 6	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0	IC 7	50.63.2002	1 pce	MAX6358	Dual volt. uP supervisor
0	IC 8	50.62.0920	1 pce	CS8416	Digital Audio Receiver 192kHz
0	IC 9	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 10	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 11	50.65.0244	1 pce	74LVC244	Octal buffer/line driver 3.3V
0	IC 12	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 13	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 14	50.62.1014	1 pce	74HC 14	Hex Schmitt trigger inverter
0	IC 15	50.62.8053	1 pce	HC4053	Tripple 2ch analog mux/demux
0	IC 16	not used	1 pce	25.0MHz	VCXOscillator 3.3V
0	IC 17	50.61.2005	1 pce	LM2673ADJ	Step down converter
0	IC 18	89.01.1510	1 pce	19.200MHz	VCXO Xtal-Oscillator voltage c
0	IC 19	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0	IC 20	50.62.0920	1 pce	CS8416	Digital Audio Receiver 192kHz
0	IC 21	50.62.4946	1 pce	74HCT9046	PLL with bandgap contr VCO
0	IC 22	50.61.0205	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0	IC 23	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 24	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 25	50.61.0205	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0	IC 26	50.61.2003	1 pce	LM1117	Lin Reg 800mA adj
0	IC 27	50.61.2003	1 pce	LM1117	Lin Reg 800mA adj
1	IC 28	50.62.1000	1 pce	74HC 00	Quad 2input NAND
0	IC 29	50.62.3074	1 pce	74HCT 74	Dual D-type FF, preset clear
0	IC 30	not used	1 pce	TLC 2932	Phase-locked Loop
0	IC 31	50.62.4946	1 pce	74HCT9046	PLL with bandgap contr VCO
0	IC 32	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 33	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 34	50.63.4217	1 pce	EP1C3T	FPGA 2910 logic elements
0	IC 35	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 36	1.680.910.20	1 pce	EPCS1	SW 060 DSASTER (50.63.4297)
0	IC 37	50.61.2003	1 pce	LM1117	Lin Reg 800mA adj
0	IC 38	50.61.0205	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0	IC 39	50.61.2005	1 pce	LM2673ADJ	Step down converter
0	IC 40	not used	1 pce	25.0MHz	XTAL Oscillator 3.3V
0	IC 41	50.65.0000	1 pce	74LVC00	Quad NAND 3.3V
0	IC 42	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 43	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 44	50.62.0260	1 pce	TLC 2932	Phase-locked Loop
0	IC 45	not used	1 pce	74HCT9046	PLL with bandgap contr VCO
0	IC 46	50.61.9001	1 pce	LM393	Dual voltage comp. SO 8
0	IC 47	50.62.1014	1 pce	74HC 14	Hex Schmitt trigger inverter
0	IC 48	89.01.1603	1 pce	19.200MHz	TCXO Xtal-Oscillator temp comp
0	IC 49	50.62.3139	1 pce	74HCT139	Dual 2 to 4 line decoder
0	J 1	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 2	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 3	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 4	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 6	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 7	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 8	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 9	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 10	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 11	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 12	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 13	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 14	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 15	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 16	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 17	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 18	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 19	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 20	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 21	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 22	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 23	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 24	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 25	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 26	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	K 1	56.04.0197	1 pce	2*u	24V 125V 2A Ag/Au
0	K 2	56.04.0197	1 pce	2*u	24V 125V 2A Ag/Au
0	L 1	62.60.0113	1 pce	10uH	SMD 10% 1210
0	L 2	62.60.0113	1 pce	10uH	SMD 10% 1210
0	L 3	62.60.0518	1 pce	47uH	SMD 2.5A
0	L 4	62.60.0113	1 pce	10uH	SMD 10% 1210
0	L 5	not used	1 pce	10uH	SMD 10% 1210
0	L 6	62.60.0113	1 pce	10uH	SMD 10% 1210
0	L 7	62.60.0113	1 pce	10uH	SMD 10% 1210
0	L 8	62.60.0113	1 pce	10uH	SMD 10% 1210
0	L 9	not used	1 pce	10uH	SMD 10% 1210
0	L 10	62.60.0518	1 pce	47uH	SMD 2.5A
0	MP 1	1.680.060.11	1 pce		Syncgenerator PCB
0	MP 2	1.680.060.10	1 pce		NR-ETIKETTE 5 X 20
0	MP 3	43.01.0108	1 pce	Label	ESE-Warnschild
0	MP 4	54.01.0021	10 pcs	Jumper	0.63*0.63mm, Au
1	MP 5	43.10.0110	1 pce	A	Revisions-Etikette 5mm h'blau
0	P 1	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	P 2	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 3	54.13.0077	1 pce	15p	D-Sub, PCB, Winkel
0	P 4	54.13.0077	1 pce	15p	D-Sub, PCB, Winkel
0	P 5	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 6	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 7	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 8	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 9	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 10	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 11	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 12	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 13	54.14.5510	1 pce	10p	PCB-Buchse gerade
0	P 14	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 15	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 16	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 17	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 18	54.14.2001	1 pce	10p	1/20" Au, gerade, ohne Verrieg
0	P 19	54.14.2001	1 pce	10p	1/20" Au, gerade, ohne Verrieg
0	P 20	54.14.5520	1 pce	20p	PCB-Buchse gerade
0	P 21	54.02.0335	1 pce	1p	PCB-Flachst 6.3*0.8, gerade
0	P 22	54.02.0335	1 pce	1p	PCB-Flachst 6.3*0.8, gerade
0	Q 1	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 2	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 3	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 4	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 5	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 6	50.60.7001	1 pce	BT138B	Triac 8A, 600V, SOT 404
0	R 1	57.69.1097	1 pce	10k	CF 5% 0603
0	R 2	57.69.1097	1 pce	10k	CF 5% 0603
0	R 3	57.69.1097	1 pce	10k	CF 5% 0603
0	R 4	57.69.1097	1 pce	10k	CF 5% 0603
0	R 5	57.69.1097	1 pce	10k	CF 5% 0603
0	R 6	57.69.1097	1 pce	10k	CF 5% 0603
0	R 7	57.69.1097	1 pce	10k	CF 5% 0603
0	R 8	57.69.1097	1 pce	10k	CF 5% 0603
0	R 9	57.69.1097	1 pce	10k	CF 5% 0603
0	R 10	57.69.1097	1 pce	10k	CF 5% 0603
0	R 11	57.69.1097	1 pce	10k	CF 5% 0603
0	R 12	57.69.1097	1 pce	10k	CF 5% 0603
0	R 13	57.69.1097	1 pce	10k	CF 5% 0603
0	R 14	57.69.1097	1 pce	10k	CF 5% 0603
0	R 15	57.69.1097	1 pce	10k	CF 5% 0603
0	R 16	57.69.1097	1 pce	10k	CF 5% 0603
0	R 17	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 18	57.60.1820	1 pce	82R	MF, 1%, 0204, E24
0	R 19	57.60.1820	1 pce	82R	MF, 1%, 0204, E24
0	R 20	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0	R 21	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 22	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 23	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 24	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 25	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 26	57.60.1681	1 pce	680R	MF, 1%, 0204, E24
0	R 27	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 28	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 29	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 30	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 31	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 32	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 33	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 34	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 35	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 36	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 37	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 38	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 39	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 40	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 41	57.60.1271	1 pce	270R	MF, 1%, 0204, E24

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Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 42	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 43	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 44	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 45	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 46	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0	R 47	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 48	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 49	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 50	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 51	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 52	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 53	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 54	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 55	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 56	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 57	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 58	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 59	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 60	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0	R 61	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0	R 62	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0	R 63	57.69.8302	1 pce	0.2A	PTC
0	R 64	57.69.8302	1 pce	0.2A	PTC
0	R 65	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 66	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 67	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 68	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 69	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 70	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 71	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 72	57.60.1332	1 pce	3k3	MF, 1%, 0204, E24
0	R 73	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 74	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 75	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 76	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 77	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 78	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 79	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 80	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 81	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 82	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 83	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 84	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 85	57.60.1302	1 pce	3k0	MF, 1%, 0204, E24
0	R 86	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 87	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 88	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 89	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 90	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 91	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 92	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 93	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 94	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 95	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 96	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 97	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 98	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 99	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 100	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 101	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 102	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 103	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 104	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 105	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 106	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 107	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 108	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 109	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 110	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 111	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0	R 112	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 113	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 114	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 115	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 116	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 117	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 118	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 119	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 120	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 121	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 122	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 123	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 124	57.60.1152	1 pce	1k5	MF, 1%, 0204, E24
0	R 125	57.60.1152	1 pce	1k5	MF, 1%, 0204, E24
0	R 126	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 127	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 128	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 129	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 130	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 131	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 132	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 133	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 134	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0	R 135	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0	R 136	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 137	57.60.1106	1 pce	10M	MF, 1%, 0204, E24
0	R 138	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 139	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 140	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 141	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 142	57.60.1332	1 pce	3k3	MF, 1%, 0204, E24
0	R 143	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 144	57.60.1302	1 pce	3k0	MF, 1%, 0204, E24
0	R 145	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 146	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 147	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 148	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 149	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 150	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 151	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 152	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 153	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 154	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 155	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 156	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 157	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0	R 158	57.60.1274	1 pce	270k	MF, 1%, 0204, E24
0	R 159	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0	R 160	57.60.1561	1 pce	560R	MF, 1%, 0204, E24
0	R 161	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0	R 162	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0	R 163	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 164	57.60.1391	1 pce	390R	MF, 1%, 0204, E24
0	R 165	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 166	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 167	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 168	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 169	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 170	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 171	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 172	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 173	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0	R 174	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 175	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 176	57.60.1562	1 pce	5k6	MF, 1%, 0204, E24
0	R 177	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 178	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 179	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 180	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 181	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 182	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0	R 183	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 184	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0	R 185	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 186	57.60.1822	1 pce	8k2	MF, 1%, 0204, E24
0	R 187	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 188	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 189	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 190	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 191	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 192	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 193	not used	1 pce	18k	MF, 1%, 0204, E24
0	R 194	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 195	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 196	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 197	57.60.1561	1 pce	560R	MF, 1%, 0204, E24
0	R 198	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 199	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 200	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 201	57.69.1097	1 pce	10k	CF 5% 0603
0	R 202	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 203	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 204	57.69.1097	1 pce	10k	CF 5% 0603
0	R 205	not used	1 pce	3k3	MF, 1%, 0204, E24
0	R 206	not used	1 pce	10R	MF, 1%, 0204, E24
0	R 207	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 208	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 209	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 210	57.69.1097	1 pce	10k	CF 5% 0603
0	R 211	57.69.1025	1 pce	10R	CF 5% 0603
0	R 212	57.69.1097	1 pce	10k	CF 5% 0603
0	R 213	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 214	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 215	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0	R 216	57.69.1097	1 pce	10k	CF 5% 0603
0	R 217	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 218	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 219	57.69.1097	1 pce	10k	CF 5% 0603
0	R 220	57.69.1097	1 pce	10k	CF 5% 0603
0	R 221	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 222	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 223	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 224	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 225	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 226	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0	R 227	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 228	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 229	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 230	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 231	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0	R 232	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0	R 233	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0	R 234	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0	R 235	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 236	57.60.1331	1 pce	330R	MF, 1%, 0204, E24
0	R 237	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 238	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 239	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 240	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 241	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 242	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 243	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 244	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 245	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 246	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 247	not used	1 pce	100k	MF, 1%, 0204, E24

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Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 248	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 249	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 250	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 251	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0	R 252	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 253	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 254	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 255	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 256	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 257	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 258	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 259	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 260	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0	R 261	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 262	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 263	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 264	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0	R 265	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 266	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 267	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 268	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 269	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 270	not used	1 pce	0R0	MF, 0204
0	R 271	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 272	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 273	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 274	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 275	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 276	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 277	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 278	not used	1 pce	0R0	MF, 0204
0	R 279	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 280	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 281	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 282	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 283	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 284	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 285	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 286	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 287	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 288	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 289	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 290	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 291	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 292	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 293	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 294	57.60.1821	1 pce	820R	MF, 1%, 0204, E24
0	R 295	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 296	57.60.1821	1 pce	820R	MF, 1%, 0204, E24
0	S 1	55.12.1108	1 pce	8p	DIL-Switch piano
0	S 2	55.12.1108	1 pce	8p	DIL-Switch piano
0	S 3	55.03.0286	1 pce	1*a	NETZSCHALTER MIT PRINTANSCHL.
0	S 4	55.11.0006	1 pce	SPST	Toggle 1 * on-on Ag
0	S 5	55.11.0006	1 pce	SPST	Toggle 1 * on-on Ag
0	S 6	55.11.0007	1 pce	SPDT	Toggle 1 * on-off-on Ag
0	S 7	55.11.0006	1 pce	SPST	Toggle 1 * on-on Ag
0	T 1	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 2	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 3	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 4	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 5	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 6	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 7	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 8	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 9	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 10	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 11	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 12	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 13	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 14	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 15	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 16	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 17	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 18	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 19	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 20	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 21	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 22	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	W 1	1.680.060.93	1 pce		LL Syncgenerator
0	W 5	1.023.567.05	1 pce	20p	Flachkabel 20-pol. 190mm

End of List

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description

Comments:

(01) IC28:LVC00->HC00;MP5 added;

Distributor 1.680.065.20 (0)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 2	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 3	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 4	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 5	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 6	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 7	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 8	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 9	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 10	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 11	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 12	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 13	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 14	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 15	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 16	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 17	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 18	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 19	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 20	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 21	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 22	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 23	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 24	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 25	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 26	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 27	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 28	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 29	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 30	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 31	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 32	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 33	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 34	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 35	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 36	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 37	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 38	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 39	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 40	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 41	not used	1 pce	470p	CER 50V, 5%, C0G, 0805
0	C 42	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 43	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 44	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 45	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 46	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 47	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 48	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 49	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 50	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 51	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 52	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 53	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 54	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 55	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 56	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 57	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 58	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 59	59.60.2241	1 pce	47p	CER 50V, 5%, C0G, 0603
0	C 60	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 61	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 62	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 63	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 64	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 65	not used	1 pce	22n	CER 50V, 10%, X7R, 0805
0	C 66	not used	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 67	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 68	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 69	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 70	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 71	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 72	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 73	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 74	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 75	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 76	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 77	not used	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 78	not used	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 79	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 80	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 81	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 82	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 83	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 84	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 85	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 86	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 87	59.60.3335	1 pce	68n	CER 50V, 10%, X7R, 0805
0	C 88	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 89	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 90	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 91	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 92	not used	1 pce	22n	CER 50V, 10%, X7R, 0805
0	C 93	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 94	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 95	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 96	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 97	not used	1 pce	68n	CER 50V, 10%, X7R, 0805
0	C 98	not used	1 pce	6n8	CER 50V, 10%, X7R, 0805
0	C 99	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 100	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 101	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 102	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 103	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 104	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 105	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 106	59.68.0033	1 pce	470u	EL 6V, 8.0*10.7
0	C 107	not used	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 108	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 109	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 110	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 111	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 112	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 113	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 114	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 115	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 116	not used	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 117	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 118	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 119	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 120	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 121	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 122	59.68.0111	1 pce	22u	EL 35V, 6.3*5.7
0	C 123	59.68.0111	1 pce	22u	EL 35V, 6.3*5.7
0	C 124	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 125	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 126	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 127	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 128	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 129	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 130	not used	1 pce	1u0	EL 50V, 4.0*5.7
0	C 131	not used	1 pce	2n2	CER 50V, 10%, X7R, 0805
0	C 132	not used	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 133	not used	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 134	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 135	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 136	not used	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 137	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 138	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 139	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 140	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 141	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 142	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 143	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 144	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 145	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 146	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 147	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 148	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 149	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 150	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 151	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 152	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 153	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 154	not used	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 155	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 156	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 157	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 158	59.60.3901	1 pce	10n	CER 16V, 0402
0	C 159	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 160	59.60.3904	1 pce	10u	CER 6.3V, 0805
0	C 161	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 162	not used	1 pce	22u	EL 35V, 6.3*5.7
0	C 163	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 164	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 165	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 166	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 167	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 168	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 169	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 170	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 171	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 172	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 173	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 174	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 175	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 176	not used	1 pce	220u	EL 35V, 10 *10.7
0	C 177	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 178	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 179	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 180	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 181	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 182	not used	1 pce	22u	EL 6V, 4.0*5.7
0	C 183	not used	1 pce	2n2	CER 50V, 10%, X7R, 0805
0	C 184	not used	1 pce	100p	CER 50V, 5%, C0G, 0603
0	C 185	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 186	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 187	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 188	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 189	not used	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 190	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 191	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 192	not used	1 pce	22u	EL 35V, 6.3*5.7
0	C 193	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 194	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 195	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 196	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 197	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 198	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 199	59.68.0117	1 pce	220u	EL 35V, 10 *10.7
0	C 200	not used	1 pce	10u	EL 16V, 4.0*5.7
0	C 201	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 202	59.60.3321	1 pce	4n7	CER 50V, 10%, X7R, 0805
0	C 203	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 204	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 205	not used	1 pce	470u	EL 6V, 8.0*10.7

Distributor 1.680.065.20 (0)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 206	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 207	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 208	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 209	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 210	not used	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 211	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 212	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 213	not used	1 pce	1n0	CER 50V, 5%, C0G, 0805
0	C 214	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 215	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 216	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 217	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 218	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 219	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	D 1	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 2	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 4	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 5	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 6	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 7	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 8	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 9	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 10	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 11	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 12	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 13	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 14	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 15	50.60.8102	1 pce	SS34	3A 40V Schottky
0	D 16	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 17	not used	1 pce	SS34	3A 40V Schottky
0	D 18	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 19	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 20	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	D 21	not used	1 pce	4448	200mA 75V 4ns SOD 80
0	DL 1	50.04.2751	1 pce	grn	LED mit Halter
0	DL 2	50.04.2750	1 pce	red	LED mit Halter
0	DL 3	not used	1 pce	red	LED mit Halter
0	DL 4	not used	1 pce	yel	LED mit Halter
0	DL 5	not used	1 pce	2*yel	Dual-LED mit Halter
0	DL 6	not used	1 pce	2*yel	Dual-LED mit Halter
0	DL 7	not used	1 pce	2*yel	Dual-LED mit Halter
0	DL 8	not used	1 pce	2*yel	Dual-LED mit Halter
0	DV 1	50.60.9011	1 pce	5V6	5%, 0.2W, SOT 23
0	DV 2	50.60.9011	1 pce	5V6	5%, 0.2W, SOT 23
0	IC 1	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 2	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 3	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 4	not used	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0	IC 5	not used	1 pce	EL4511	Sync Separator
0	IC 6	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0	IC 7	not used	1 pce	MAX6358	Dual volt. uP supervisor
0	IC 8	not used	1 pce	CS8416	Digital Audio Receiver 192kHz
0	IC 9	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 10	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 11	50.65.0244	1 pce	74LVC244	Octal buffer/line driver 3.3V
0	IC 12	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 13	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 14	50.62.1014	1 pce	74HC 14	Hex Schmitt trigger inverter
0	IC 15	not used	1 pce	HC4053	Tripple 2ch analog mux/demux
0	IC 16	not used	1 pce	25.0MHz	VCXOscillator 3.3V
0	IC 17	50.61.2005	1 pce	LM2673ADJ	Step down converter
0	IC 18	not used	1 pce	19.200MHz	VCXO Xtal-Oscillator voltage c
0	IC 19	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0	IC 20	not used	1 pce	CS8416	Digital Audio Receiver 192kHz
0	IC 21	not used	1 pce	74HCT9046	PLL with bandgap contr VCO
0	IC 22	not used	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0	IC 23	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 24	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 25	not used	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0	IC 26	50.61.2003	1 pce	LM1117	Lin Reg 800mA adj
0	IC 27	50.61.2003	1 pce	LM1117	Lin Reg 800mA adj
0	IC 28	not used	1 pce	74LVC00	Quad NAND 3.3V
0	IC 29	not used	1 pce	74HCT 74	Dual D-type FF, preset clear
0	IC 30	not used	1 pce	TLC 2932	Phase-locked Loop
0	IC 31	not used	1 pce	74HCT9046	PLL with bandgap contr VCO
0	IC 32	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 33	50.62.3540	1 pce	74HCT540	Octal buffer/line driver inv
0	IC 34	50.63.4217	1 pce	EP1C3T	FPGA 2910 logic elements
0	IC 35	not used	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 36	1.680.910.20	1 pce	EPCS1	SW 060 DSASTER (50.63.4297)
0	IC 37	not used	1 pce	LM1117	Lin Reg 800mA adj
0	IC 38	not used	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0	IC 39	not used	1 pce	LM2673ADJ	Step down converter
0	IC 40	not used	1 pce	25.0MHz	XTAL Oscillator 3.3V
0	IC 41	not used	1 pce	74LVC00	Quad NAND 3.3V
0	IC 42	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 43	50.62.3541	1 pce	74HCT541	Octal buffer/line driver tri
0	IC 44	not used	1 pce	TLC 2932	Phase-locked Loop
0	IC 45	not used	1 pce	74HCT9046	PLL with bandgap contr VCO
0	IC 46	50.61.9001	1 pce	LM393	Dual voltage comp. SO 8
0	IC 47	50.62.1014	1 pce	74HC 14	Hex Schmitt trigger inverter
0	IC 48	not used	1 pce	19.200MHz	TCXO Xtal-Oscillator temp comp
0	IC 49	not used	1 pce	74HCT139	Dual 2 to 4 line decoder
0	J 1	not used	3 pcs	1p	Pin, 1reihig, gerade
0	J 2	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 3	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 4	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 6	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 7	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 8	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 9	54.01.0020	1 pce	1p	Pin, 1reihig, gerade

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	J 10	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 11	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 12	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 13	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 14	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 15	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 16	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 17	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 18	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 19	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 20	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 21	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 22	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 23	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 24	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	J 25	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	J 26	54.01.0020	3 pcs	1p	Pin, 1reihig, gerade
0	K 1	56.04.0197	1 pce	2*u	24V 125V 2A Ag/Au
0	K 2	56.04.0197	1 pce	2*u	24V 125V 2A Ag/Au
0	L 1	not used	1 pce	10uH	SMD 10% 1210
0	L 2	not used	1 pce	10uH	SMD 10% 1210
0	L 3	62.60.0518	1 pce	47uH	SMD 2.5A
0	L 4	not used	1 pce	10uH	SMD 10% 1210
0	L 5	not used	1 pce	10uH	SMD 10% 1210
0	L 6	not used	1 pce	10uH	SMD 10% 1210
0	L 7	not used	1 pce	10uH	SMD 10% 1210
0	L 8	not used	1 pce	10uH	SMD 10% 1210
0	L 9	not used	1 pce	10uH	SMD 10% 1210
0	L 10	not used	1 pce	47uH	SMD 2.5A
0	MP 1	1.680.060.11	1 pce		Syncgenerator PCB
0	MP 2	1.680.065.10	1 pce		NR-ETIKETTE 5 X 20
0	MP 3	43.01.0108	1 pce	Label	ESE-Warnschild
0	MP 4	54.01.0021	9 pcs	Jumper	0.63*0.63mm, Au
0	P 1	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	P 2	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 3	54.13.0077	1 pce	15p	D-Sub, PCB, Winkel
0	P 4	54.13.0077	1 pce	15p	D-Sub, PCB, Winkel
0	P 5	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 6	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 7	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 8	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 9	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 10	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 11	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 12	54.21.2019	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0	P 13	54.14.5510	1 pce	10p	PCB-Buchse gerade
0	P 14	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 15	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 16	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 17	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 18	54.14.2001	1 pce	10p	1/20" Au, gerade, ohne Verrieg
0	P 19	54.14.2001	1 pce	10p	1/20" Au, gerade, ohne Verrieg
0	P 20	54.14.5520	1 pce	20p	PCB-Buchse gerade
0	P 21	54.02.0335	1 pce	1p	PCB-Flachst 6.3*0.8, gerade
0	P 22	54.02.0335	1 pce	1p	PCB-Flachst 6.3*0.8, gerade
0	Q 1	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 2	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 3	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 4	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 5	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0	Q 6	50.60.7001	1 pce	BT138B	Triac 8A, 600V, SOT 404
0	R 1	57.69.1097	1 pce	10k	CF 5% 0603
0	R 2	57.69.1097	1 pce	10k	CF 5% 0603
0	R 3	57.69.1097	1 pce	10k	CF 5% 0603
0	R 4	57.69.1097	1 pce	10k	CF 5% 0603
0	R 5	57.69.1097	1 pce	10k	CF 5% 0603
0	R 6	57.69.1097	1 pce	10k	CF 5% 0603
0	R 7	57.69.1097	1 pce	10k	CF 5% 0603
0	R 8	57.69.1097	1 pce	10k	CF 5% 0603
0	R 9	57.69.1097	1 pce	10k	CF 5% 0603
0	R 10	57.69.1097	1 pce	10k	CF 5% 0603
0	R 11	57.69.1097	1 pce	10k	CF 5% 0603
0	R 12	57.69.1097	1 pce	10k	CF 5% 0603
0	R 13	57.69.1097	1 pce	10k	CF 5% 0603
0	R 14	57.69.1097	1 pce	10k	CF 5% 0603
0	R 15	57.69.1097	1 pce	10k	CF 5% 0603
0	R 16	57.69.1097	1 pce	10k	CF 5% 0603
0	R 17	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 18	not used	1 pce	82R	MF, 1%, 0204, E24
0	R 19	57.60.1820	1 pce	82R	MF, 1%, 0204, E24
0	R 20	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0	R 21	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 22	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 23	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 24	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 25	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 26	not used	1 pce	680R	MF, 1%, 0204, E24
0	R 27	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 28	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 29	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 30	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 31	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 32	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 33	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 34	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 35	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 36	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 37	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 38	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 39	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 40	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 41	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 42	57.60.1271	1 pce	270R	MF, 1%, 0204, E24

Distributor 1.680.065.20 (0)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 43	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 44	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 45	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 46	not used	1 pce	4k7	MF, 1%, 0204, E24
0	R 47	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 48	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 49	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 50	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 51	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 52	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 53	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 54	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 55	57.60.1271	1 pce	270R	MF, 1%, 0204, E24
0	R 56	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 57	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 58	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 59	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 60	not used	1 pce	100k	MF, 1%, 0204, E24
0	R 61	not used	1 pce	100k	MF, 1%, 0204, E24
0	R 62	not used	1 pce	47R	MF, 1%, 0204, E24
0	R 63	57.69.8302	1 pce	0.2A	PTC
0	R 64	57.69.8302	1 pce	0.2A	PTC
0	R 65	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 66	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 67	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 68	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 69	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 70	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 71	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 72	not used	1 pce	3k3	MF, 1%, 0204, E24
0	R 73	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 74	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 75	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 76	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 77	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 78	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 79	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 80	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 81	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 82	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 83	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 84	not used	1 pce	10R	MF, 1%, 0204, E24
0	R 85	not used	1 pce	3k0	MF, 1%, 0204, E24
0	R 86	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 87	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 88	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 89	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 90	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 91	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 92	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 93	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 94	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 95	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 96	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 97	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 98	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 99	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 100	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 101	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 102	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 103	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 104	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 105	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 106	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 107	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 108	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 109	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 110	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 111	not used	1 pce	47R	MF, 1%, 0204, E24
0	R 112	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 113	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 114	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 115	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 116	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 117	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 118	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 119	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 120	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0	R 121	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 122	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 123	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 124	57.60.1152	1 pce	1k5	MF, 1%, 0204, E24
0	R 125	57.60.1152	1 pce	1k5	MF, 1%, 0204, E24
0	R 126	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 127	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 128	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 129	not used	1 pce	10R	MF, 1%, 0204, E24
0	R 130	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 131	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 132	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 133	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 134	not used	1 pce	4k7	MF, 1%, 0204, E24
0	R 135	not used	1 pce	1M0	MF, 1%, 0204, E24
0	R 136	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 137	not used	1 pce	10M	MF, 1%, 0204, E24
0	R 138	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 139	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 140	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 141	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 142	57.60.1332	1 pce	3k3	MF, 1%, 0204, E24
0	R 143	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 144	not used	1 pce	3k0	MF, 1%, 0204, E24
0	R 145	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 146	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 147	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 148	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 149	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 150	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0	R 151	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 152	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 153	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 154	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 155	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 156	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 157	not used	1 pce	47R	MF, 1%, 0204, E24
0	R 158	not used	1 pce	270k	MF, 1%, 0204, E24
0	R 159	not used	1 pce	47R	MF, 1%, 0204, E24
0	R 160	not used	1 pce	560R	MF, 1%, 0204, E24
0	R 161	not used	1 pce	4k7	MF, 1%, 0204, E24
0	R 162	not used	1 pce	4k7	MF, 1%, 0204, E24
0	R 163	not used	1 pce	47k	MF, 1%, 0204, E24
0	R 164	57.60.1391	1 pce	390R	MF, 1%, 0204, E24
0	R 165	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 166	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 167	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0	R 168	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 169	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 170	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 171	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 172	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 173	not used	1 pce	47R	MF, 1%, 0204, E24
0	R 174	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 175	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 176	not used	1 pce	5k6	MF, 1%, 0204, E24
0	R 177	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 178	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 179	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 180	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 181	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 182	not used	1 pce	100k	MF, 1%, 0204, E24
0	R 183	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 184	not used	1 pce	1M0	MF, 1%, 0204, E24
0	R 185	not used	1 pce	18k	MF, 1%, 0204, E24
0	R 186	not used	1 pce	8k2	MF, 1%, 0204, E24
0	R 187	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 188	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 189	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 190	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 191	not used	1 pce	18k	MF, 1%, 0204, E24
0	R 192	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 193	not used	1 pce	18k	MF, 1%, 0204, E24
0	R 194	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 195	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 196	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 197	57.60.1561	1 pce	560R	MF, 1%, 0204, E24
0	R 198	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 199	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 200	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 201	57.69.1097	1 pce	10k	CF 5% 0603
0	R 202	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 203	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 204	57.69.1097	1 pce	10k	CF 5% 0603
0	R 205	not used	1 pce	3k3	MF, 1%, 0204, E24
0	R 206	not used	1 pce	10R	MF, 1%, 0204, E24
0	R 207	not used	1 pce	10R	MF, 1%, 0204, E24
0	R 208	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 209	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 210	57.69.1097	1 pce	10k	CF 5% 0603
0	R 211	57.69.1025	1 pce	10R	CF 5% 0603
0	R 212	57.69.1097	1 pce	10k	CF 5% 0603
0	R 213	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 214	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 215	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0	R 216	57.69.1097	1 pce	10k	CF 5% 0603
0	R 217	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 218	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 219	57.69.1097	1 pce	10k	CF 5% 0603
0	R 220	57.69.1097	1 pce	10k	CF 5% 0603
0	R 221	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 222	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 223	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 224	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 225	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 226	not used	1 pce	47R	MF, 1%, 0204, E24
0	R 227	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 228	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 229	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 230	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 231	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0	R 232	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0	R 233	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0	R 234	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0	R 235	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 236	not used	1 pce	330R	MF, 1%, 0204, E24
0	R 237	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 238	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 239	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 240	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 241	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 242	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 243	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 244	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 245	not used	1 pce	10R	MF, 1%, 0204, E24
0	R 246	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 247	not used	1 pce	100k	MF, 1%, 0204, E24
0	R 248	not used	1 pce	100R	MF, 1%, 0204, E24

Distributor 1.680.065.20 (0)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 249	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 250	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 251	not used	1 pce	4k7	MF, 1%, 0204, E24
0	R 252	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 253	not used	1 pce	18k	MF, 1%, 0204, E24
0	R 254	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 255	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 256	not used	1 pce	10R	MF, 1%, 0204, E24
0	R 257	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 258	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 259	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 260	not used	1 pce	1M0	MF, 1%, 0204, E24
0	R 261	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 262	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 263	not used	1 pce	18k	MF, 1%, 0204, E24
0	R 264	not used	1 pce	4k7	MF, 1%, 0204, E24
0	R 265	not used	1 pce	1k8	MF, 1%, 0204, E24
0	R 266	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 267	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0	R 268	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 269	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 270	57.60.1000	1 pce	0R0	MF, 0204
0	R 271	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 272	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 273	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 274	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 275	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 276	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 277	not used	1 pce	10k	MF, 1%, 0204, E24
0	R 278	57.60.1000	1 pce	0R0	MF, 0204
0	R 279	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 280	not used	1 pce	1k0	MF, 1%, 0204, E24
0	R 281	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 282	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 283	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 284	not used	1 pce	100R	MF, 1%, 0204, E24
0	R 285	not used	1 pce	470R	MF, 1%, 0204, E24
0	R 286	not used	1 pce	470R	MF, 1%, 0204, E24
0	R 287	not used	1 pce	470R	MF, 1%, 0204, E24
0	R 288	not used	1 pce	470R	MF, 1%, 0204, E24
0	R 289	not used	1 pce	470R	MF, 1%, 0204, E24
0	R 290	not used	1 pce	470R	MF, 1%, 0204, E24
0	R 291	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 292	57.60.1471	1 pce	470R	MF, 1%, 0204, E24
0	R 293	not used	1 pce	470R	MF, 1%, 0204, E24
0	R 294	not used	1 pce	820R	MF, 1%, 0204, E24
0	R 295	not used	1 pce	470R	MF, 1%, 0204, E24
0	R 296	not used	1 pce	820R	MF, 1%, 0204, E24
0	S 1	55.12.1108	1 pce	8p	DIL-Switch piano
0	S 2	55.12.1108	1 pce	8p	DIL-Switch piano
0	S 3	55.03.0286	1 pce	1*a	NETZSCHALTER MIT PRINTANSCHL.
0	S 4	not used	1 pce	SPST	Toggle 1 * on-on Ag
0	S 5	not used	1 pce	SPST	Toggle 1 * on-on Ag
0	S 6	not used	1 pce	SPDT	Toggle 1 * on-off-on Ag
0	S 7	not used	1 pce	SPST	Toggle 1 * on-on Ag
0	T 1	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 2	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 3	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 4	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 5	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 6	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 7	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 8	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 9	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 10	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 11	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 12	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 13	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 14	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 15	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 16	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 17	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 18	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 19	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 20	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 21	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	T 22	63.60.0011	1 pce	1:1	AES/EBU Transformer
0	W 1	1.680.060.93	1 pce		LL Syncgenerator
0	W 5	1.023.567.05	1 pce	20p	Flachkabel 20-pol. 190mm

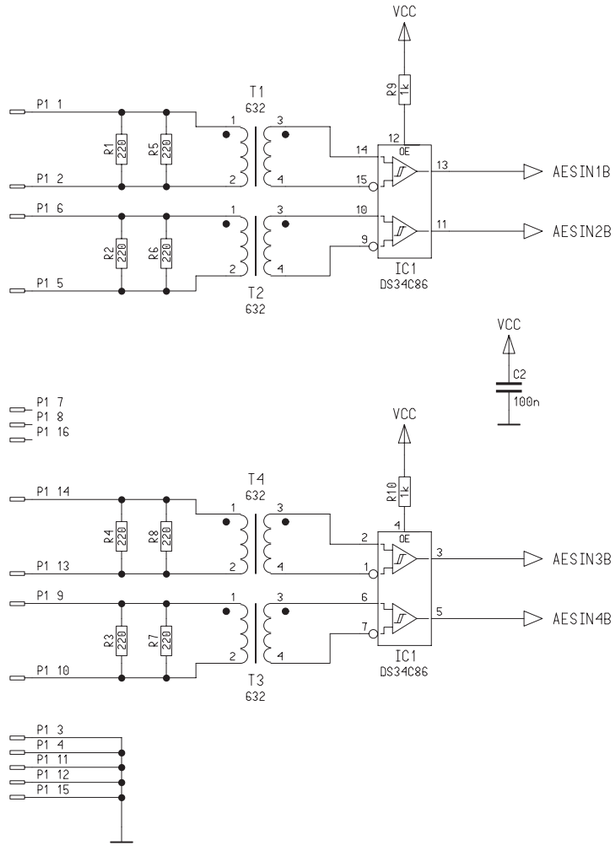
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description

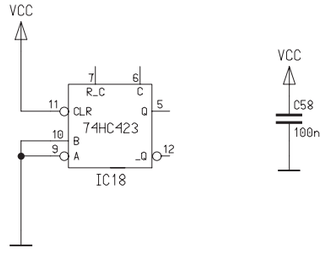
End of List

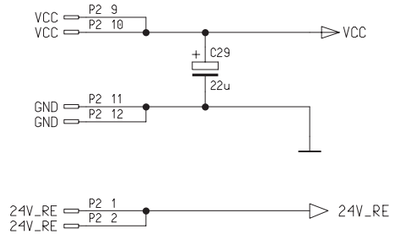
Comments:

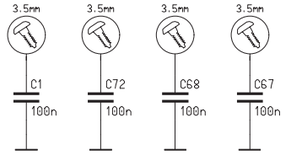
[20] 27.05.05 ML

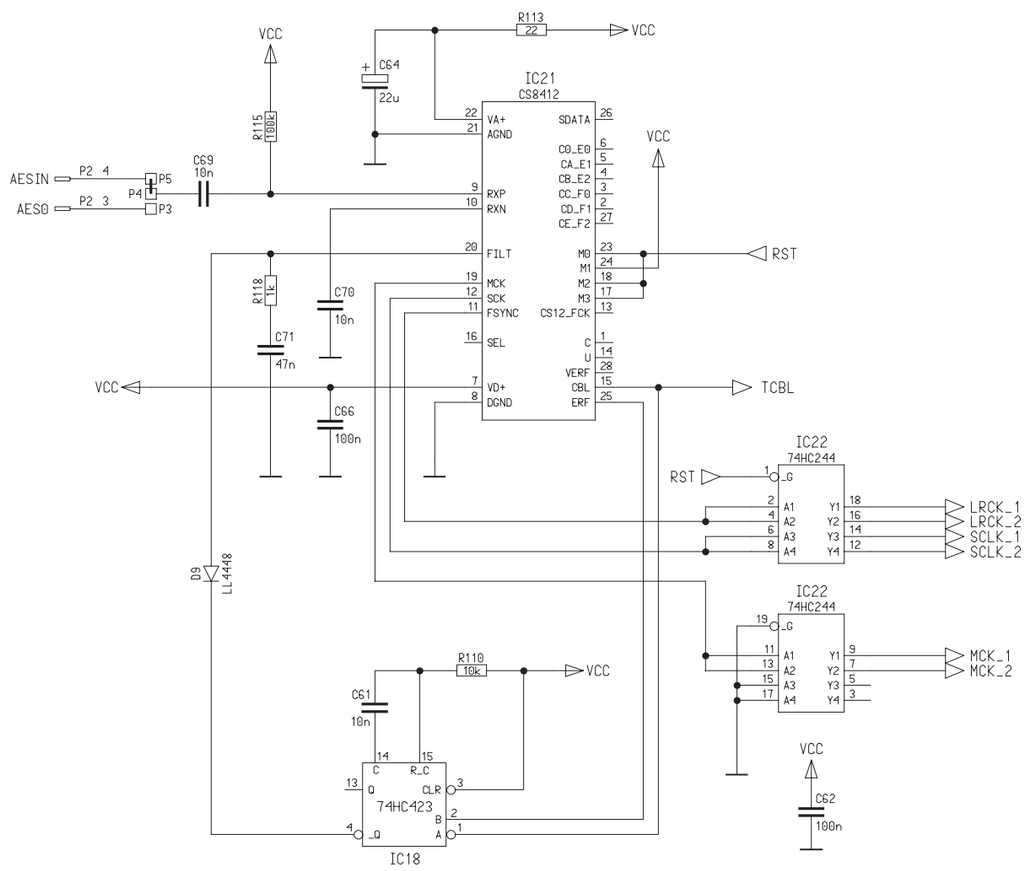
Redundancy Input (Option) 1.680.040.00 (1)

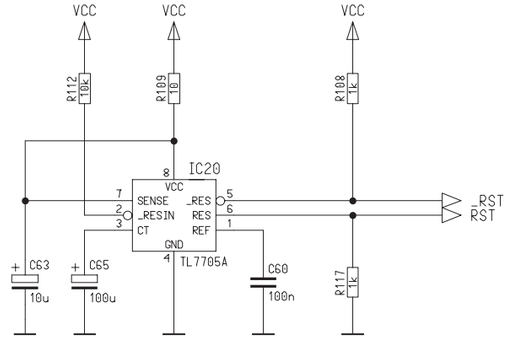






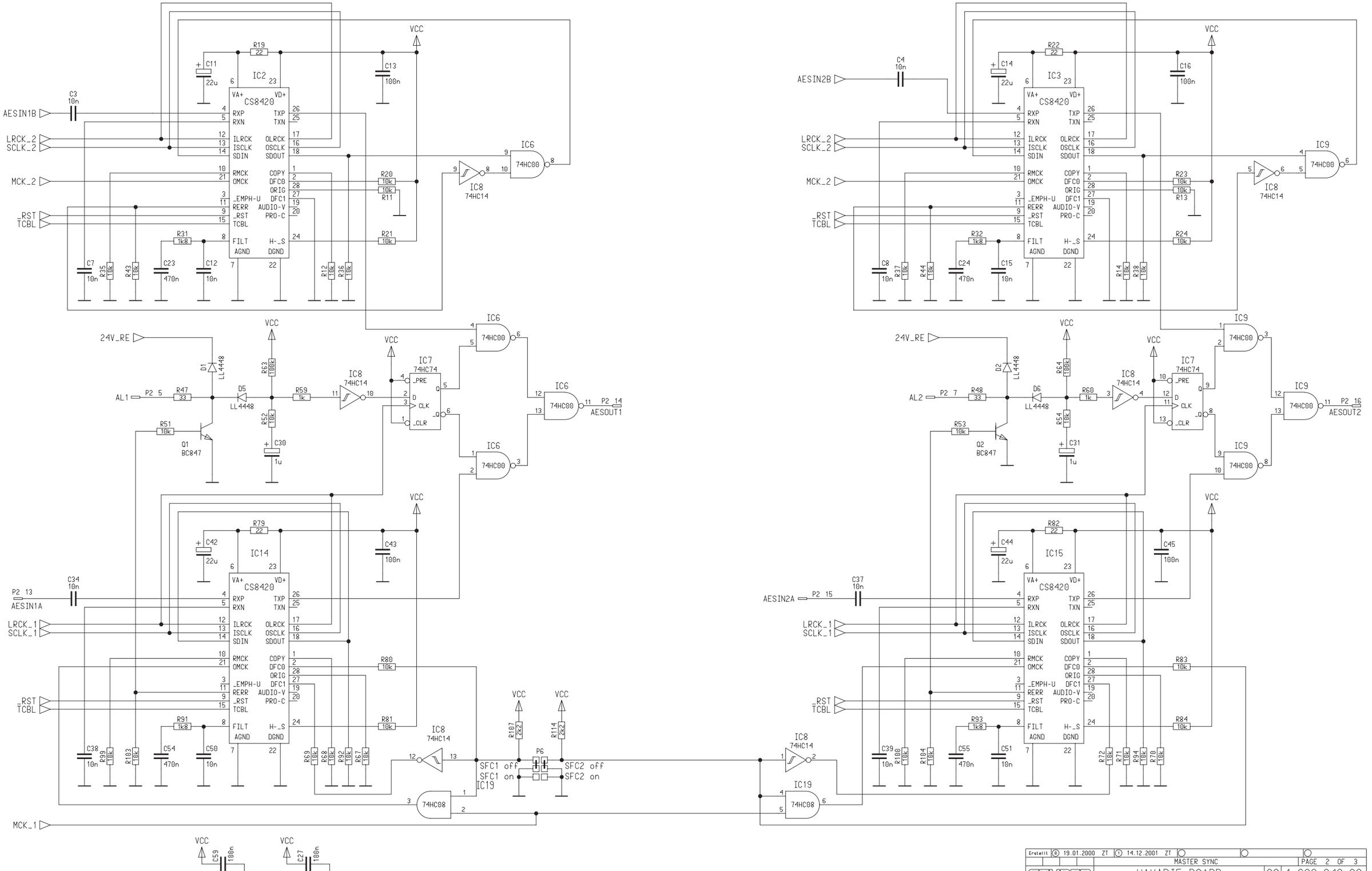






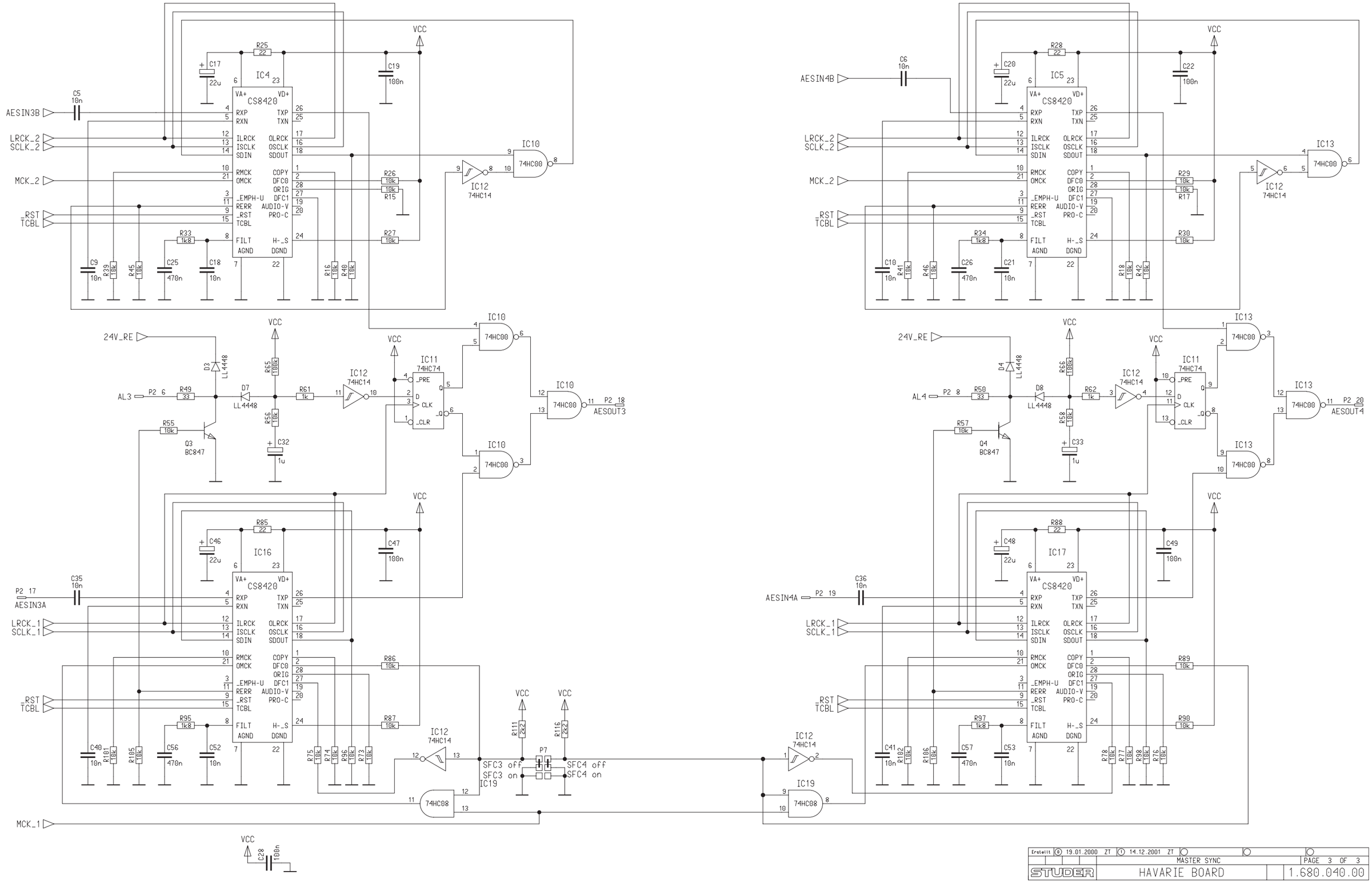
Erstellt 19.01.2000 ZT / 14.12.2001 ZT			
STUDER	MASTER SYNC	PAGE 1 OF 3	
	HAVARIE BOARD		1.680.040.00

Redundancy Input (Option) 1.680.040.00 (1)



Erstellt	19.01.2000 ZT	14.12.2001 ZT			
			MASTER SYNC		PAGE 2 OF 3
STUDER	HAVARIE BOARD			SC	1.680.040.00

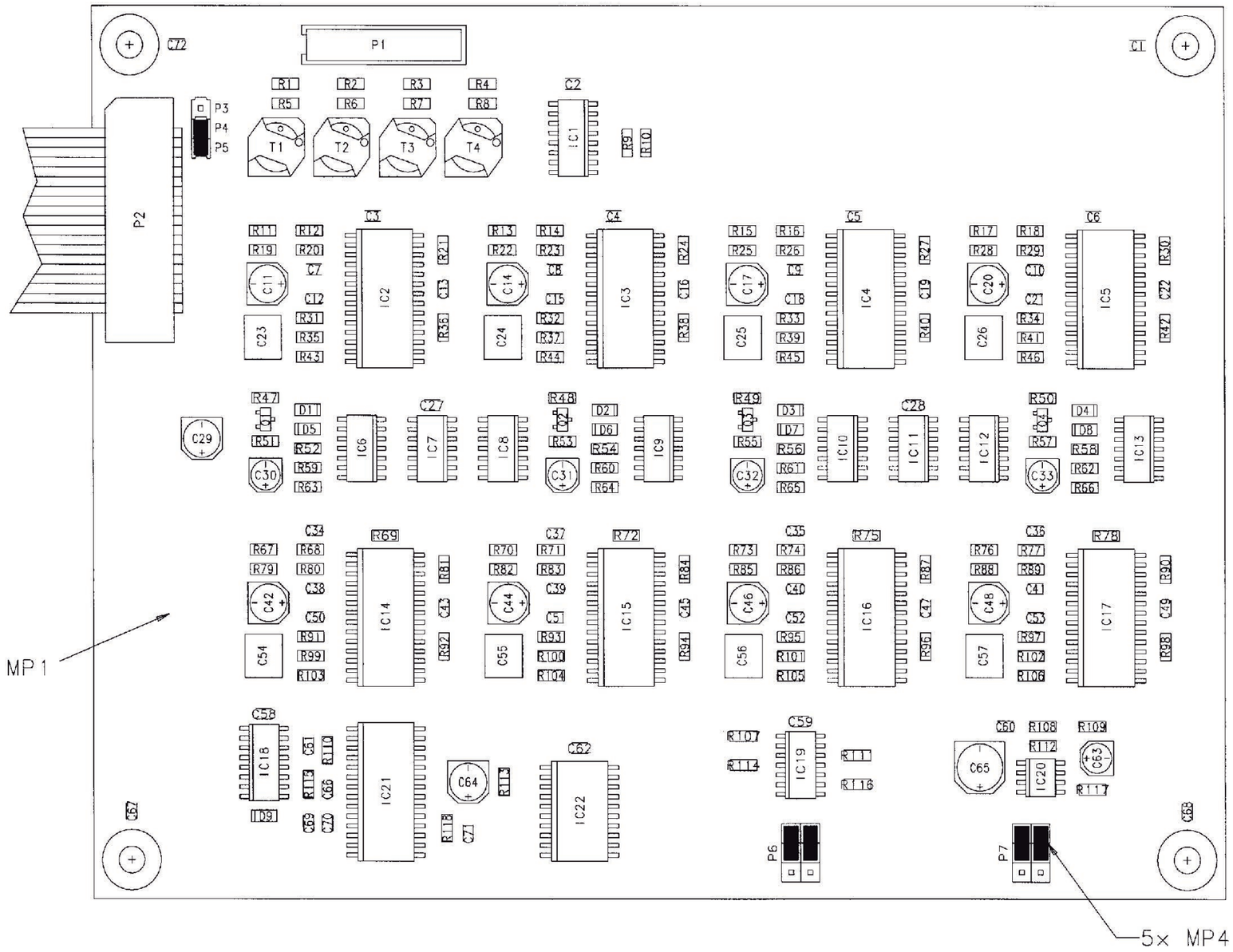
Redundancy Input (Option) 1.680.040.00 (1)



Erstellt	19.01.2000 ZT	14.12.2001 ZT			
		MASTER SYNC		PAGE 3 OF 3	
STUDER	HAVARIE BOARD		1.680.040.00		

Date printed: 07.06.05

Redundancy Input (Option) 1.680.040.00 (1)



Edition Ausgabe	19.01.2000	PZ.			0
	Date Datum	Visa Gez.	Checked Gepr.	Seen Ges.	Index
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STUDER REGENSDORF — Description Bezeichnung: HAVARIE BOARD, ESE — Z — Number Nummer: 1.680.040.00

Date printed: 07.06.05

Redundancy Input (Option) 1.680.040.00 (1)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 2	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 3	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 4	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 5	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 6	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 7	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 8	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 9	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 10	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 11	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 12	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 13	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 14	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 15	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 16	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 17	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 18	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 19	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 20	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 21	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 22	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 23	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220
0	C 24	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220
0	C 25	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220
0	C 26	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220
0	C 27	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 28	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 29	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 30	59.68.0127	1 pce	1u0	EL 50V, 4.0*5.7
0	C 31	59.68.0127	1 pce	1u0	EL 50V, 4.0*5.7
0	C 32	59.68.0127	1 pce	1u0	EL 50V, 4.0*5.7
0	C 33	59.68.0127	1 pce	1u0	EL 50V, 4.0*5.7
0	C 34	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 35	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 36	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 37	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 38	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 39	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 40	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 41	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 42	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 43	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 44	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 45	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 46	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 47	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 48	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 49	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 50	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 51	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 52	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 53	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 54	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220
0	C 55	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220
0	C 56	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220
0	C 57	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220
0	C 58	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 59	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 60	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 61	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 62	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 63	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0	C 64	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0	C 65	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0	C 66	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 67	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 68	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	C 69	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 70	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0	C 71	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805
0	C 72	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0	D 1	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 2	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 4	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 5	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 6	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 7	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 8	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	D 9	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0	IC 1	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0	IC 2	50.62.0916	1 pce	CS8420	Sample Rate Converter 24bit
0	IC 3	50.62.0916	1 pce	CS8420	Sample Rate Converter 24bit
0	IC 4	50.62.0916	1 pce	CS8420	Sample Rate Converter 24bit
0	IC 5	50.62.0916	1 pce	CS8420	Sample Rate Converter 24bit
1	IC 6	50.62.1000	1 pce	74HC 00	Quad 2input NAND
0	IC 7	50.62.1074	1 pce	74HC 74	Dual D-type FF, preset clear
0	IC 8	50.62.1014	1 pce	74HC 14	Hex Schmitt trigger inverter
1	IC 9	50.62.1000	1 pce	74HC 00	Quad 2input NAND
1	IC 10	50.62.1000	1 pce	74HC 00	Quad 2input NAND
0	IC 11	50.62.1074	1 pce	74HC 74	Dual D-type FF, preset clear
0	IC 12	50.62.1014	1 pce	74HC 14	Hex Schmitt trigger inverter
1	IC 13	50.62.1000	1 pce	74HC 00	Quad 2input NAND
0	IC 14	50.62.0916	1 pce	CS8420	Sample Rate Converter 24bit
0	IC 15	50.62.0916	1 pce	CS8420	Sample Rate Converter 24bit
0	IC 16	50.62.0916	1 pce	CS8420	Sample Rate Converter 24bit
0	IC 17	50.62.0916	1 pce	CS8420	Sample Rate Converter 24bit
0	IC 18	50.62.1423	1 pce	74HC423	Dual multivibr monost retrigg
0	IC 19	50.62.1008	1 pce	74HC 08	Quad 2input AND
0	IC 20	50.63.2001	1 pce	7705B	Reset Generator
0	IC 21	50.62.0913	1 pce	CS8412	AES-Receiver
0	IC 22	50.62.1244	1 pce	74HC244	Octal buffer line driver/recei
1	MP 1	1.680.040.12		*see comments*	Havarie PCB
0	MP 2	1.680.040.10	1 pce	*see comments*	NR-ETIKETTE 5 X 20
0	MP 3	43.01.0108	1 pce	Label	ESE-Warnschild
0	MP 4	54.01.0021	5 pcs	Jumper	0.63*0.63mm, Au
1	MP 5	43.10.0110		A	Revisions-Etikette 5mm h'blau
0	P 1	54.14.5516	1 pce	16p	PCB-Buchse gerade
0	P 2	1.023.112.06	1 pce		FLACHKABEL 20 POL. 0,06M
0	P 3	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	P 4	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	P 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0	P 6	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0	P 7	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0	Q 1	50.60.0001	1 pce	BC847B	NPN 45V 100mA SOT 23
0	Q 2	50.60.0001	1 pce	BC847B	NPN 45V 100mA SOT 23
0	Q 3	50.60.0001	1 pce	BC847B	NPN 45V 100mA SOT 23
0	Q 4	50.60.0001	1 pce	BC847B	NPN 45V 100mA SOT 23
0	R 1	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 2	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 3	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 4	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 5	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 6	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 7	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 8	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0	R 9	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 10	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 11	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 12	57.60.1103	1 pce	*see comments* 10k	MF, 1%, 0204, E24
0	R 13	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 14	57.60.1103	1 pce	*see comments* 10k	MF, 1%, 0204, E24
0	R 15	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 16	57.60.1103	1 pce	*see comments* 10k	MF, 1%, 0204, E24
0	R 17	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 18	57.60.1103	1 pce	*see comments* 10k	MF, 1%, 0204, E24
0	R 19	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 20	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 21	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 22	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 23	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 24	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 25	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 26	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 27	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 28	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 29	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 30	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 31	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 32	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 33	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 34	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 35	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 36	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 37	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 38	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 39	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 40	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 41	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 42	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 43	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 44	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 45	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 46	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 47	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0	R 48	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0	R 49	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0	R 50	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0	R 51	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 52	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 53	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 54	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 55	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 56	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 57	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 58	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 59	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 60	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 61	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 62	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 63	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0	R 64	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0	R 65	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0	R 66	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0	R 67	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 68	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 69	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 70	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 71	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 72	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 73	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 74	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 75	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 76	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 77	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 78	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 79	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 80	57.60.1103	1 pce	10k	MF, 1%, 0204, E24

Redundancy Input (Option) 1.680.040.00 (1)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 81	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 82	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 83	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 84	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 85	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 86	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 87	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 88	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 89	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 90	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 91	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 92	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 93	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 94	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 95	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 96	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 97	57.60.1182	1 pce	1k8	MF, 1%, 0204, E24
0	R 98	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 99	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 100	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 101	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 102	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 103	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 104	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 105	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 106	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 107	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0	R 108	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 109	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 110	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 111	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0	R 112	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 113	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0	R 114	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0	R 115	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0	R 116	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0	R 117	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	R 118	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0	T 1	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER
0	T 2	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER
0	T 3	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER
0	T 4	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description

End of List

Comments:

Modifications of assembly used PCB 1.680.040.11:
- Resistors R11, R13, R15, R17 are connected to GND (instead of VCC).
- Pin 24 of IC 21 is connected to VCC (instead of RST) by use of wire bridge.

(PCB 1.680.040.12 is without modifications)