

# Studer D19m

## *Digital System Components*

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2. Diagrams: D19m Frames
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## A Safety Information



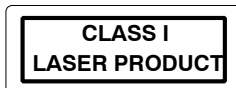
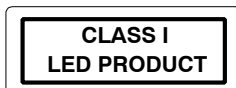
To reduce the risk of electric shock, do not remove covers. No user-serviceable parts inside. Refer servicing to qualified service personnel (i.e., persons having appropriate technical training and experience necessary to be aware of hazards to which they are exposed in performing a repair action, and of measures to minimize the danger of themselves).



This symbol alerts the user to the 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 alerts the user to *important instructions* for operating and maintenance in this 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 suffered 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 suffering an electric shock as well!***

#### If the Person is Unconscious:

- Lay the person down
- Turn him to one side
- Check the pulse
- Reanimate the person if respiration is poor
- *Call for a doctor immediately.*

## **B General Installation Instructions**

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Please consider besides these general instructions also any product-specific instructions in the “Installation” chapter of this manual.

### **B1 Unpacking**

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Check the equipment for any transport damage. If the unit is mechanically damaged, if liquids have been spilled or if objects have fallen into the unit, *it must not be connected to the AC power outlet, or it must be immediately disconnected by unplugging the power cable*. Repair must only be performed by trained personnel in accordance with the applicable regulations.

### **B2 Installation Site**

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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 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), appropriate precautions 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, placement of the unit on a soft surface, or installation of the unit within a rack or piece of furniture).
- The unit must not be heated up by external sources of heat radiation (sunlight, spot lights).

### **B3 Earthing and Power Supply**

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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 not operated. If the earthing connection can be interrupted, for example, by unplugging the mains plug of an external power supply unit, an additional, permanent earthing connection 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).

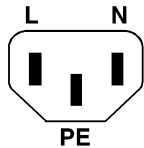
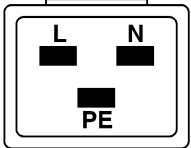
**Class I Equipment (Mains Operation)**

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.

Female Plugs (IEC320), Front-Side View:		
		
IEC 320 / C13		
		
IEC 320 / C19		
European Standard (CENELEC)		North American Standard (NAS)
Brown	L (Live)	Black
Blue	N (Neutral)	White
Green/Yellow	PE (Protective Earth)	Green (or Green/Yellow)

**Class III Equipment (Battery Operation up to 60 V<sub>DC</sub>)**

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 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 effective 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**

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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:

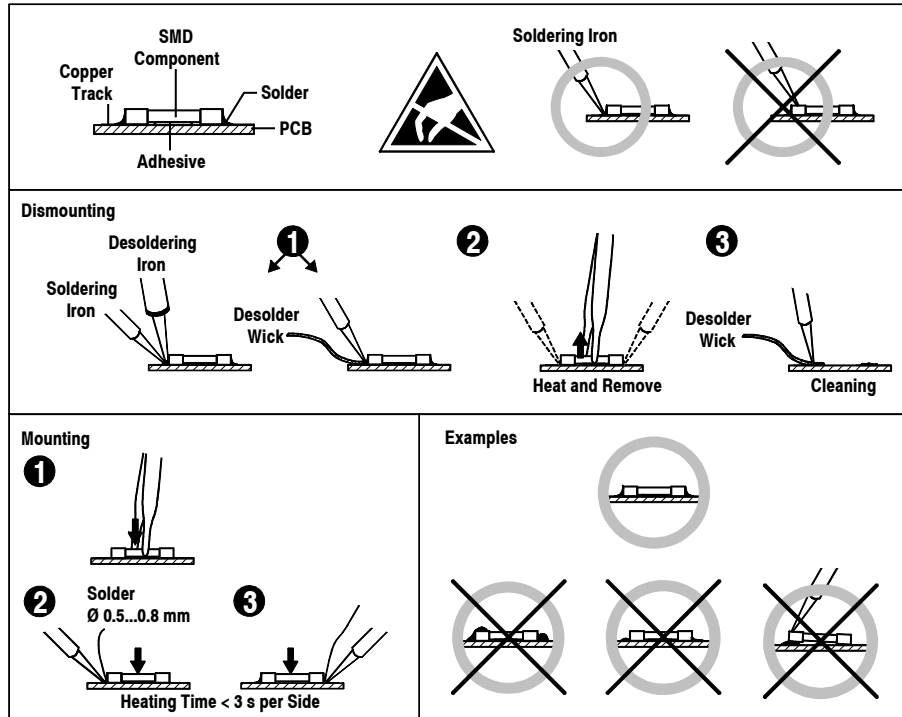
- *Explosion hazard* from lithium batteries, electrolytic capacitors and power semiconductors (watch the component's polarity. Do not short battery terminals. Replace batteries only by the same type).
- *Implosion hazard* from evacuated display units.
- *Radiation hazard* from laser units (non-ionizing), 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 has no commercially available SMD components in stock for service purposes. For repair, the corresponding devices have to 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.

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**G      Declarations of Conformity**

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**G1      Class A Equipment - FCC Notice**

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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.

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**G2      CE Declaration of Conformity**

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We,

**Studer Professional Audio GmbH,  
CH-8105 Regensdorf,**

declare under our sole responsibility that the product

**Studer D19m Racks 3 U/1 U  
(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

is in conformity with the following standards or normative documents:

- Safety:  
EN 60950:2000 (Class I equipment)
- Safety of laser products:  
EN 60825-1:1994 + A11 + A2, EN 60825-2:2000
- EMC:  
EN 50081-1:1992, EN 50082-1:1992

Regensdorf, February 27, 2002



B. Hochstrasser, President



P. Fiala, Manager QA

## 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/m<sup>3</sup>; 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 about 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 m<sup>3</sup>/min is required.

**Example:** A rack dissipating  $P = 800\text{ W}$  requires an air flow of  $0.8 * 2.65\text{ m}^3/\text{min}$  which corresponds to  $2.12\text{ m}^3/\text{min}$ .

- 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.

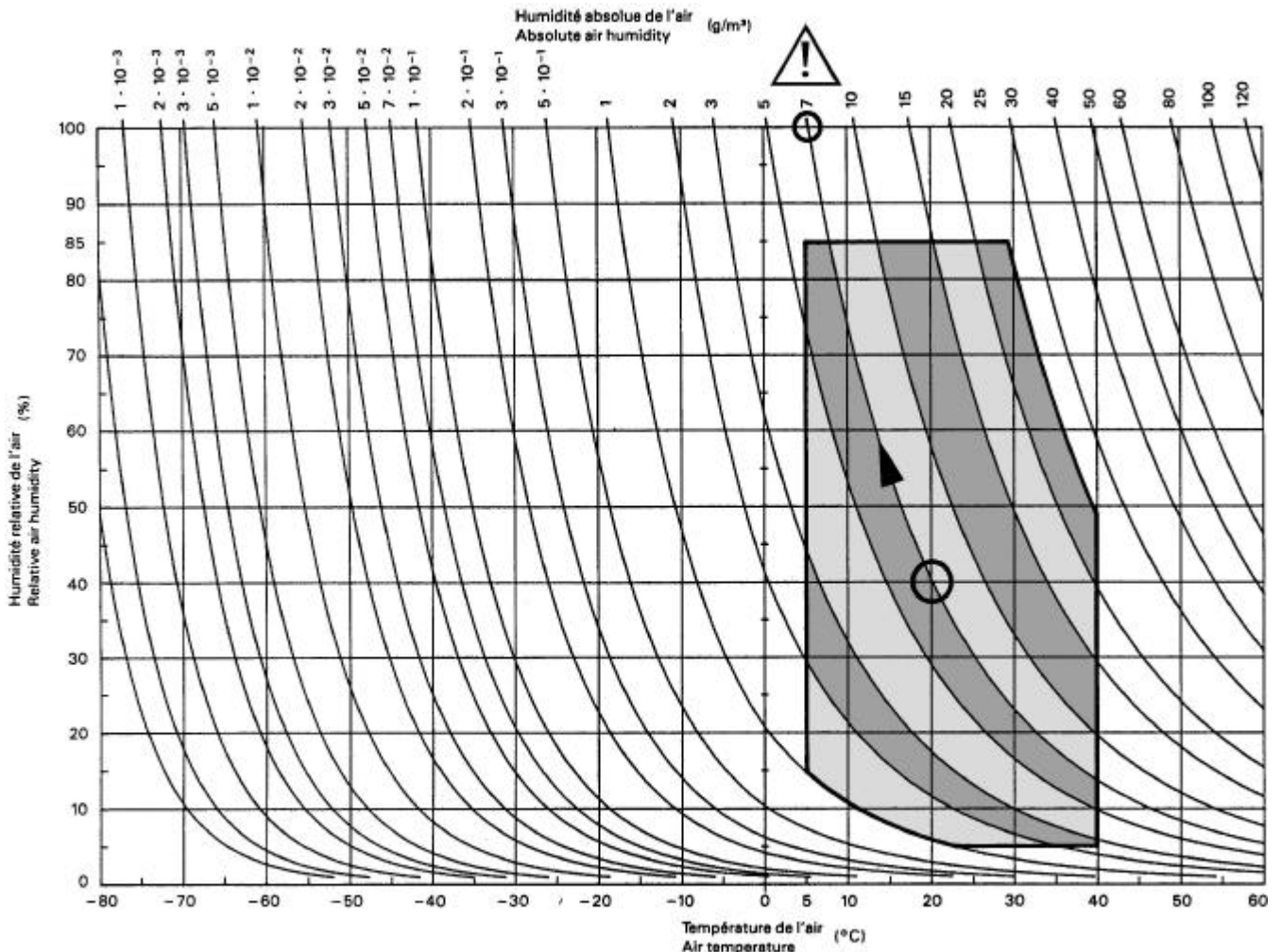
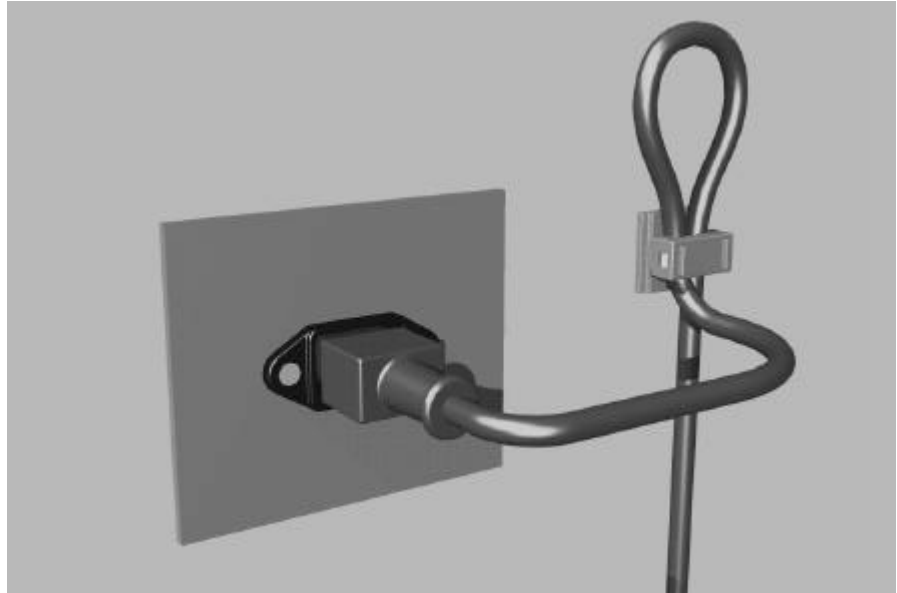


Figure B.3 – Climatogramme pour catégorie 3K3  
Climatogram for class 3K3

## 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

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Under no circumstance are third parties entitled to have access to the installation software on the original data media. The Customer shall safeguard the original data media accordingly.

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## **Warranty, Disclaimer, and Liability**

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For all issues not covered herewithin, refer to the "General Terms and Conditions of Sales and Delivery" being part of the sales contract.

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## D19m Assemblies in Alphabetical Order

Assembly	Order No.	Chapter
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ADATI Interface with AES Out	1.940.491	3
ADATO Interface	1.940.495	4
ADATO Interface with AES In	1.940.496	4
AESI Board	1.940.580	3
AESI SFC Board	1.940.540	3
AESO Board	1.940.585	4
Back Plane	1.940.550	2
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Power Distributor $\pm 15$ V + Diode	1.940.623	2
Power Distributor 5/24 V + Diode	1.940.624	2
Power Supply $\pm 15$ V/3.5 A	1.940.607	2
Power Supply 5 V/16 A	1.940.606	2
RCC Board	1.940.576	3
RS422-to-Optical Converter	1.940.577	2
RS422-to-Optical Converter	1.940.579	2
Supply Board	1.940.410	2
Supply Board	1.940.578	2
Supply Board, Redundant Input	1.940.412	2
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# 1 D19m SYSTEM BASICS

## 1.1 Introduction

The D19m series consists of single cards with a width of 100 mm (Eurocard width) that can be plugged into a 19" frame (3 or 1 height units). The output of the input cards feeds a time-division multiplex (TDM) bus. The purpose of this bus is to multiplex all the input signals, so that they can directly feed a MADI connection (multiplexer unit/MUX) via a MADI interface. Just the other way round, the signal coming from a MADI connection can be fed into the TDM bus, too, from where again all output cards can derive their information (demultiplexer unit/DEMUX). Beyond that, most card types can be used in standalone applications, too.

**TDM Bus** The TDM bus is a 16-bit wide bus with 128 time slots. The format is similar to the AES/EBU format, however distributed in parallel on two words. This means that 64 audio channels with 24 bits plus additional information (U-bits, C-bits etc..) can be transferred. The time slot allocation is given by the card addresses hardwired on the backplane. Thus an A/D converter card plugged into the first slot automatically gets the address 0 and writes to the bus only during its own, assigned time slots. Since ADAT and TDIF input cards occupy multiple channels on the bus, their address must be set with on-card DIP switches. All remaining cards are 4-channel and can be easily exchanged, e.g. an analog card may be replaced by a digital card. The clock signals (CK128, frame and sync) are sent by the MADI card (unless it is switched to slave mode) or the MADO card and are distributed on the backplane.

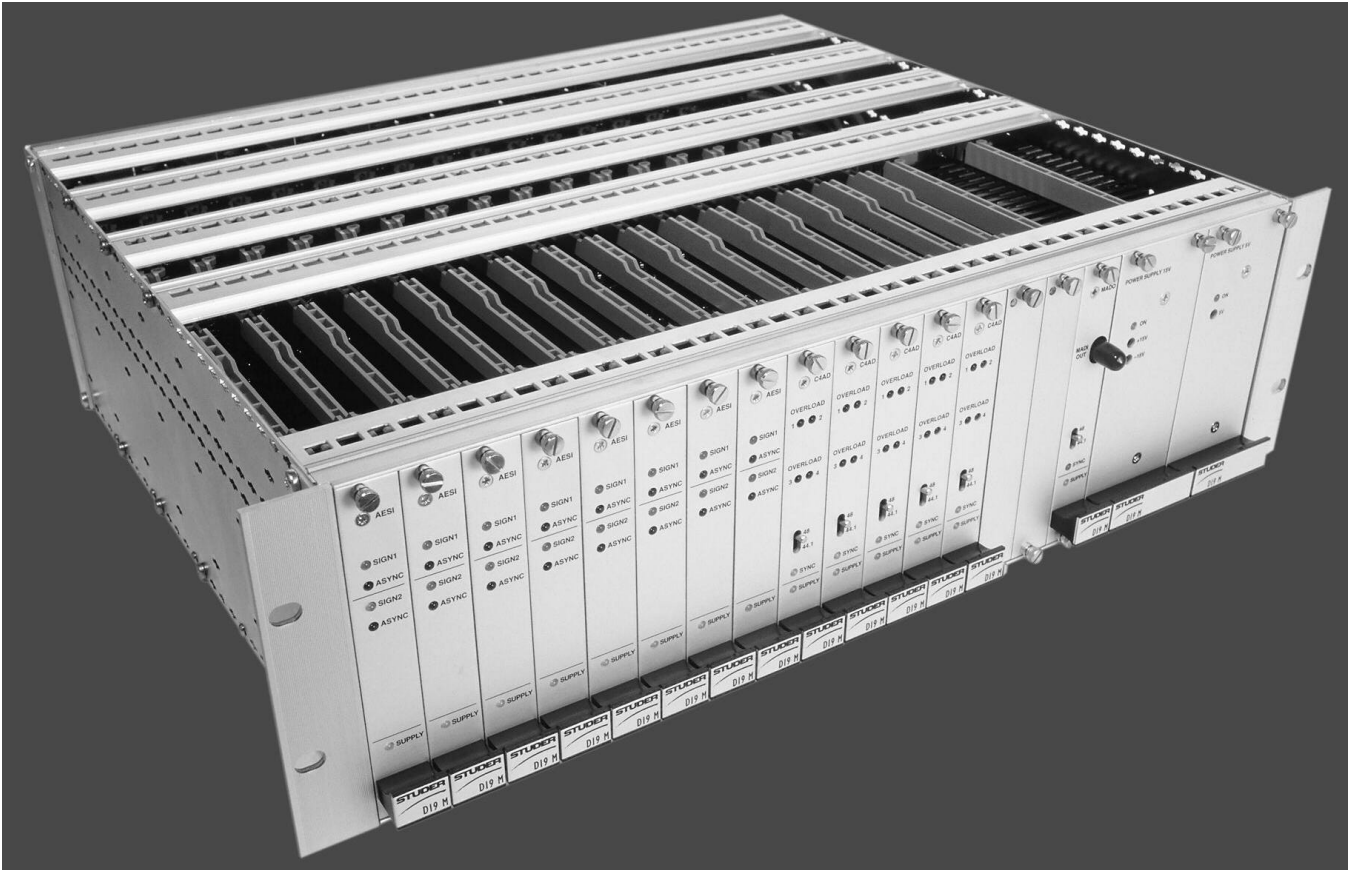
The AES/TDM signal selects between standalone and TDM bus operation for the individual cards. This signal is controlled by the MADI or MADO card, too. It decides e.g. whether the D/A converter card takes its input signal from the TDM bus or from the AES/EBU input, or whether the A/D converter card may write to the TDM bus or not. If individual cards in the rack should operate in standalone mode, an additional jumper is available on the backplane in order to interrupt this select signal for every card individually.

**Synchronization** Except for the AESI and AESO cards, all cards have a separate sync input. Depending on the jumper setting, this input receives the sync signal from the bus (AES/EBU signal with TTL level) or from a separate input (standard balanced AES/EBU signal according to AES11). Thanks to the AES/EBU inputs and outputs, the converter cards also can operate in standalone mode. It is possible to extract a sync signal from the MADI (when using MADI optical). However, this feature should be used only for large distances and stagebox systems. Otherwise it is recommended to use the AES/EBU sync line. This results in a smaller error probability (having two PLLs less in the path), reduced jitter, and allows the use of variable speed.

**Split Rack Configuration** A MADI and a MADO card can share the TDM bus in a common "split rack". The available channels have to be split for MUX and DEMUX channels. In such a system, using the MADI card's sync out should be avoided whenever possible. Since the MADO card is always considered as a master by the software, a hardware modification is necessary in such a case. Therefore, it is recommended to use separate racks for MUX and DEMUX (refer to example in chapter 2.3.1).

**Routing** The MADI card transfers the MADI input signal to the TDM bus, and the MADO card converts the TDM bus signal to the MADI format. Without external control, the channels will transmit the signals in the MADI data stream and on the TDM bus in the same sequence. When using the RS485 interface it is possible, however, to arbitrarily change the allocation on the MADO card (application e.g. in Route56).

## 1.2 D19m 3U Frames



### Ordering Information:

	w. Backplane 1.940.550	w. Backplane 1.940.551
<b>Standard Rack</b>	1.940.592.xx-V	1.940.591.xx-V
<b>Deep Rack (recessed front)</b>	1.940.595.xx-V	1.940.594.xx-V

The same frames can be used for MUX and DEMUX units. The 19" frames have a height of 3U and are equipped with backplane, two power supply units (+5 V,  $\pm 15V$ ), and a connector panel with supply and control connectors.

The D19m series cards are plugged to the backplane. On the rear side of the backplane, connectors for the power supply, the audio and control signals can be found. Apart from the supply, also the clock, synchronization, and control signals are distributed. A jumper determines for each card whether it is linked to the TDM bus or operating in standalone mode.

### 1.2.1 Power Supplies

The 3U frames contain two supply units:  
 +5 V/20 A (1.940.606 or, in earlier racks, 1.940.601)  
 ±15 V/3.4 A (1.940.607 or, in earlier racks, 1.940.602)

The supply units are plug-in modules. For redundant supply configurations, a special rear panel is required.

### 1.2.2 Connector Panels

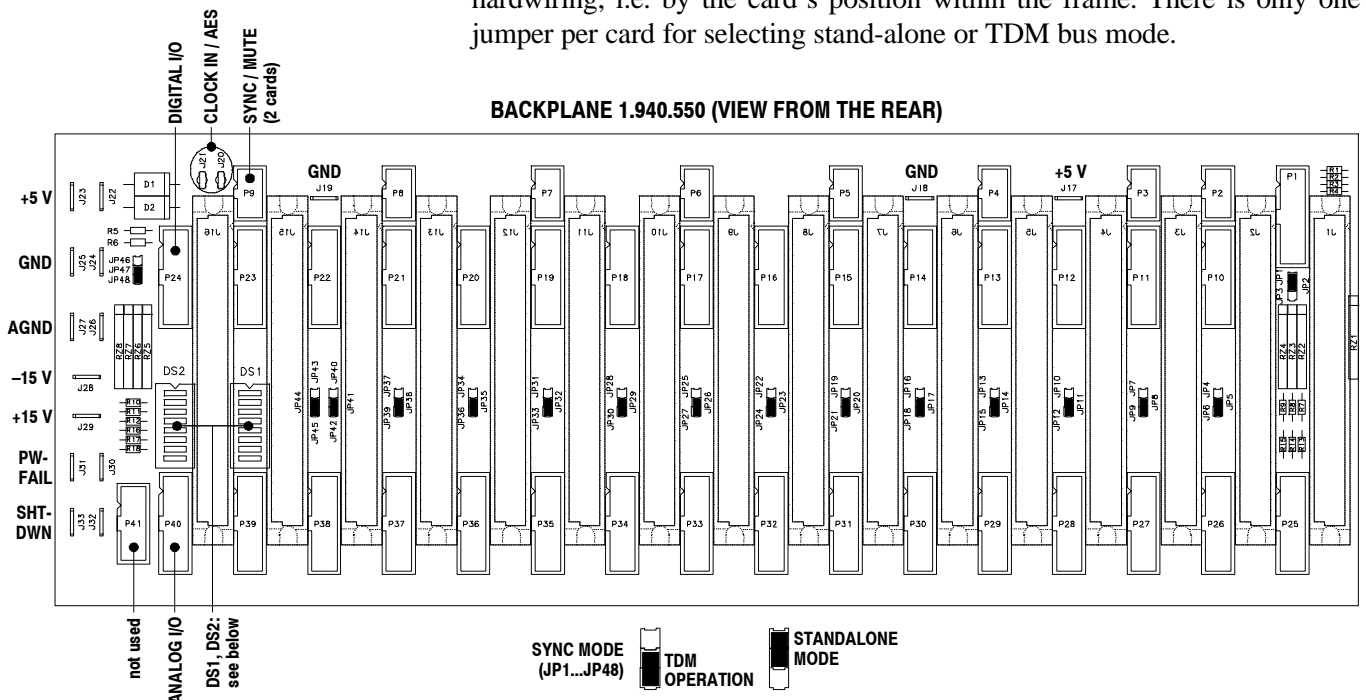
For audio signals, a variety of connector panels can be used (see chapter 1.4).

### 1.2.3 Backplane 1.940.550

(installed in Rack versions 1.940.592.xx-V and 1.940.595.xx-V)

The .550 backplane is used for applications with up to 16 audio cards. *However, it cannot be used together with the RCC controller card and Mic/Line input cards.*

16 identical card locations are available. The sync input is connected to the last, i.e. the 16<sup>th</sup> card location. The card address is given by the backplane hardwiring, i.e. by the card's position within the frame. There is only one jumper per card for selecting stand-alone or TDM bus mode.



For the connection to the rear panel, there are connectors for digital I/O, analog I/O, and sync/mute for each card location (see table).

Card Location	Digital I/O	Analog I/O	Sync/Mute	Sync Mode
1 (J1)	P1 (1...4)	P24 (1...4)	P2 (1)	JP1...JP3
2 (J2)	P10 (1...4)	P25 (1...4)	P2 (2)	JP4...JP6
3 (J3)	P11 (1...4)	P26 (1...4)	P3 (1)	JP7...JP9
4 (J4)	P12 (1...4)	P27 (1...4)	P3 (2)	JP10...JP12
5 (J5)	P13 (1...4)	P28 (1...4)	P4 (1)	JP13...JP15
6 (J6)	P14 (1...4)	P29 (1...4)	P4 (2)	JP16...JP18
7 (J7)	P15 (1...4)	P30 (1...4)	P5 (1)	JP19...JP21
8 (J8)	P16 (1...4)	P31 (1...4)	P5 (2)	JP22...JP24
9 (J9)	P17 (1...4)	P32 (1...4)	P6 (1)	JP25...JP27
10 (J10)	P18 (1...4)	P33 (1...4)	P6 (2)	JP28...JP30
11 (J11)	P19 (1...4)	P34 (1...4)	P7 (1)	JP31...JP33
12 (J12)	P20 (1...4)	P35 (1...4)	P7 (2)	JP34...JP36
13 (J13)	P21 (1...4)	P36 (1...4)	P8 (1)	JP37...JP39
14 (J14)	P22 (1...4)	P37 (1...4)	P8 (2)	JP40...JP42
15 (J15)	P23 (1...4)	P38 (1...4)	P9 (1)	JP43...JP45
16 (J16)	P24 (1...4)	P39 (1...4)	P9 (2)	JP46...JP48

The DIP switches DS1 and DS2 are reserved for configurations with multiple MADI cards.

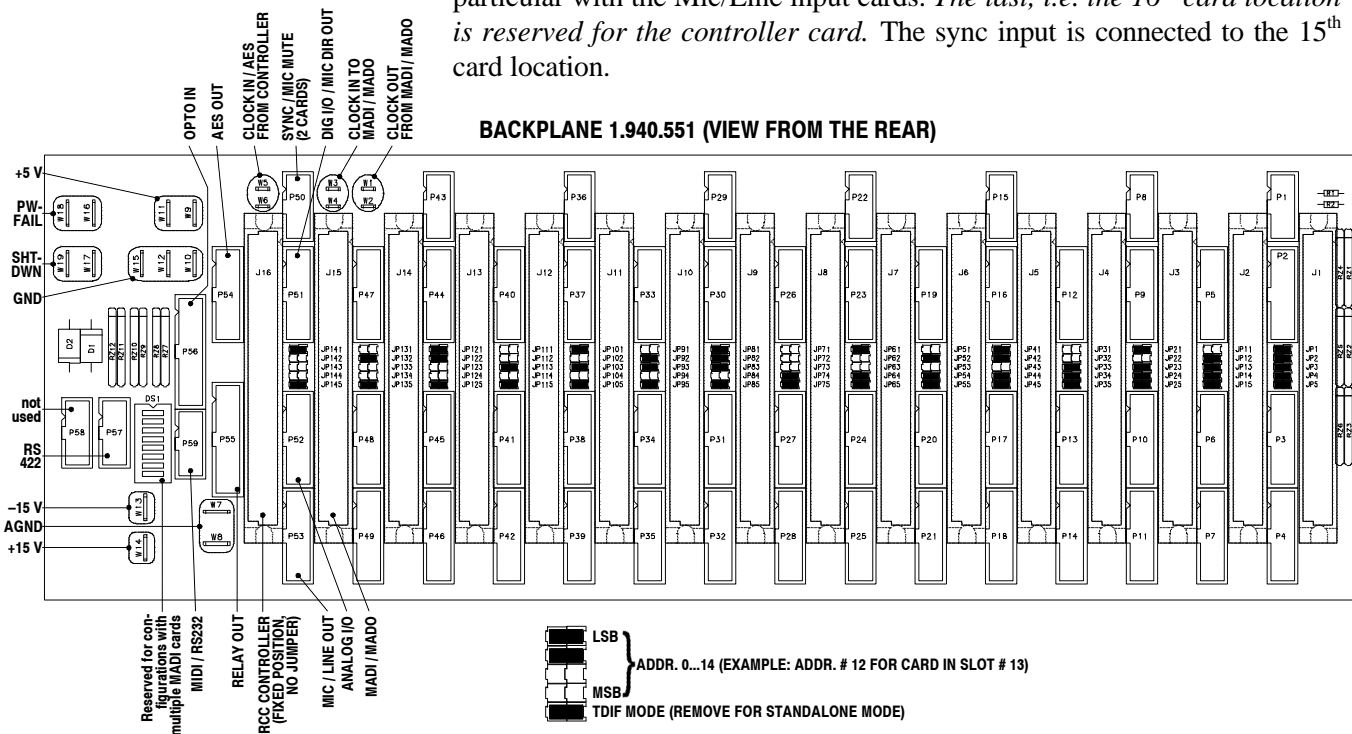
For pinout details of the flat cable connectors please refer to chapter 1.4.

### 1.2.4 Backplane 1.940.551

(installed in Rack versions 1.940.591.xx-V and 1.940.594.xx-V)

This frame is intended for the application of the RCC controller card and Mic/Line input cards.

This backplane has additional connectors for the second output (“split out”) and the mute input of the pre-amps. With this backplane the addresses are jumper-selected, allowing a more flexible allocation of the card positions, in particular with the Mic/Line input cards. *The last, i.e. the 16<sup>th</sup> card location is reserved for the controller card.* The sync input is connected to the 15<sup>th</sup> card location.

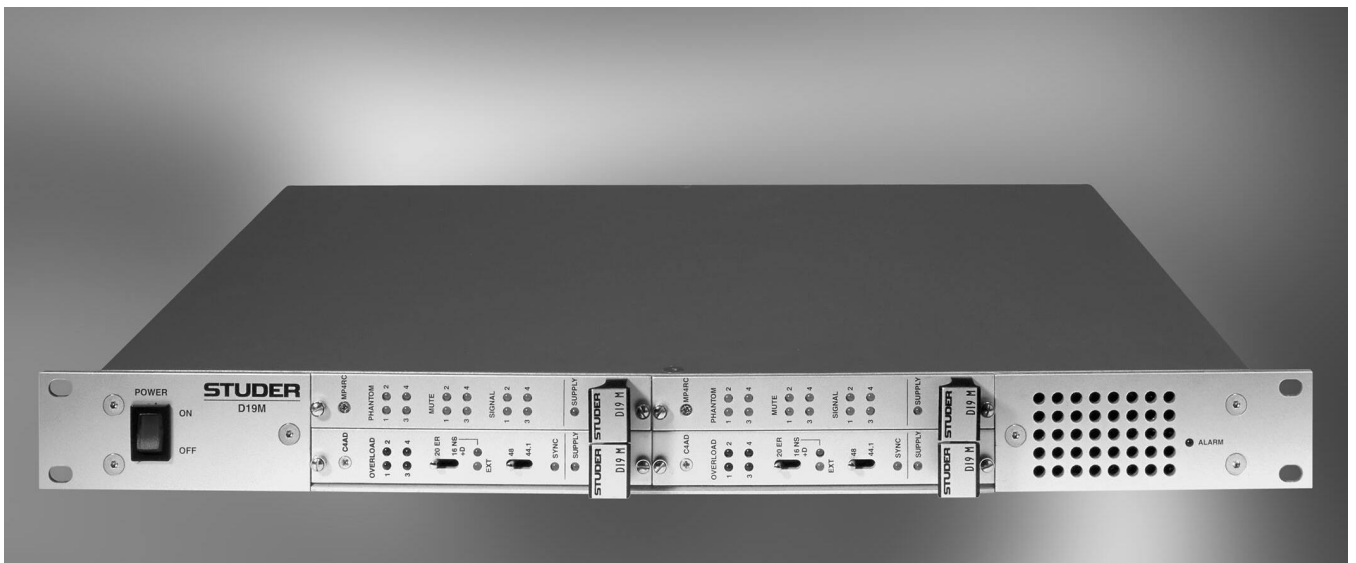


For the connection to the rear panel, there are connectors for digital I/O, analog I/O, mic/line out, and sync/mute for each card location (see table).

Card Location	Digital I/O	Analog I/O	Mic/Line Out	Sync/Mute
1 (J1)	P2 (1...4)	P3 (1...4)	P4 (1...4)	P1 (1)
2 (J2)	P5 (1...4)	P6 (1...4)	P7 (1...4)	P1 (2)
3 (J3)	P9 (1...4)	P10 (1...4)	P11 (1...4)	P8 (1)
4 (J4)	P12 (1...4)	P13 (1...4)	P14 (1...4)	P8 (2)
5 (J5)	P16 (1...4)	P17 (1...4)	P18 (1...4)	P15 (1)
6 (J6)	P19 (1...4)	P20 (1...4)	P21 (1...4)	P15 (2)
7 (J7)	P23 (1...4)	P24 (1...4)	P25 (1...4)	P22 (1)
8 (J8)	P26 (1...4)	P27 (1...4)	P28 (1...4)	P22 (2)
9 (J9)	P30 (1...4)	P31 (1...4)	P32 (1...4)	P29 (1)
10 (J10)	P33 (1...4)	P34 (1...4)	P35 (1...4)	P29 (2)
11 (J11)	P37 (1...4)	P38 (1...4)	P39 (1...4)	P36 (1)
12 (J12)	P40 (1...4)	P41 (1...4)	P42 (1...4)	P36 (2)
13 (J13)	P44 (1...4)	P45 (1...4)	P46 (1...4)	P43 (1)
14 (J14)	P47 (1...4)	P48 (1...4)	P49 (1...4)	P43 (2)
15 (J15)	P51 (1...4)	P52 (1...4)	P53 (1...4)	P50 (1)
16 (J16)	fixed position for the RCC Controller card			

For pinout details of the flat cable connectors please refer to chapter 1.4.

### 1.3 D19m 1U Frame



The system consists of a 1-unit 19" frame containing a power supply and a backplane (mother board) on which the complete TDM bus is wired. Up to four cards from the D19m family can be inserted.

The ±15 V and +5 V supplies are integrated. The mains voltage range is 90 to 250 V<sub>AC</sub>. A sync input amplifier and a small processor system for the control of the Mic/Line cards is contained as well.

The built-in fan is temperature-controlled, an overheat condition is indicated by a front-panel LED.

For rear-panel wiring, the standard D19m system connector panels can be used (see chapter 1.4).

**Typical Configuration Examples:**

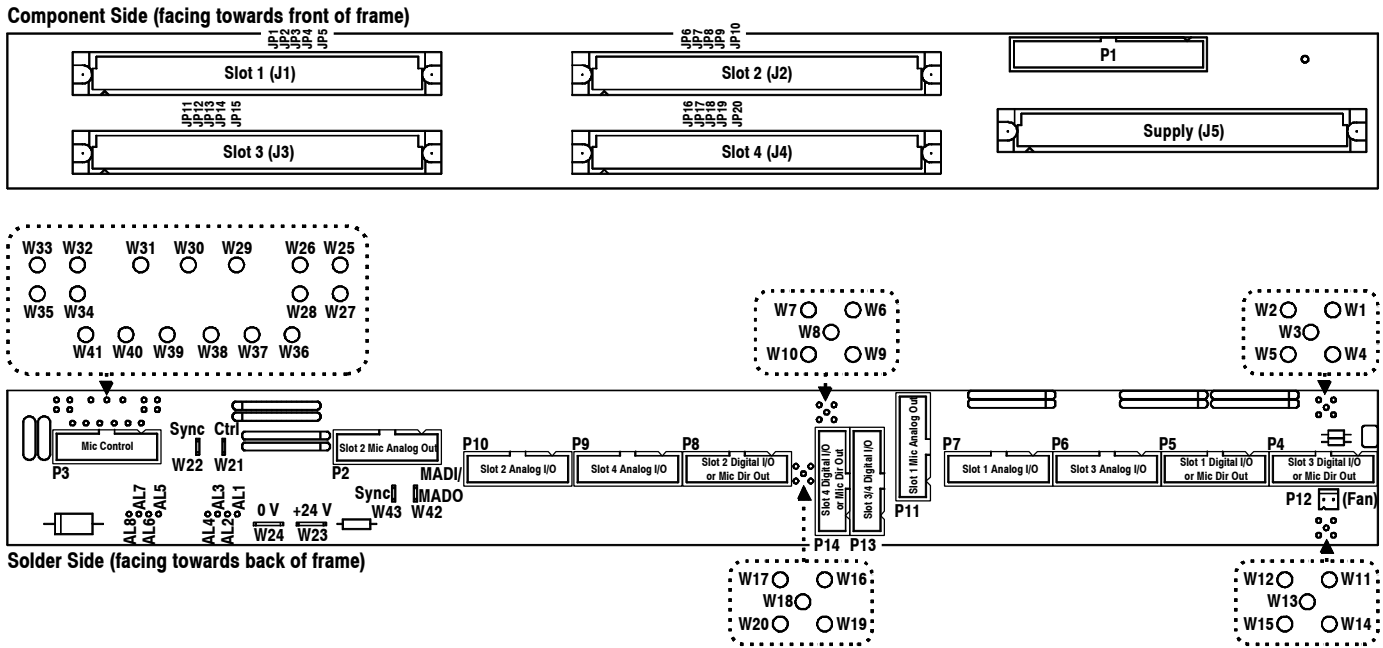
- 2 × Mic/Line cards and 2 × A/D cards in stand-alone mode, or
- 1 × MAD I In card and 3 × D/A cards, or
- 3 × ADAT In cards and 1 × MAD I Out card.

**Ordering Information:**

Standard 1U Frame

1.940.400.00

### 1.3.1 Backplane 1.940.553



**Connector Allocation:**

Connector	for Slot	Signals	Pinout
P2	2	Mic/Line Card, line out	M
P3	-	Control port	
P4	3	Digital In/Out (or Mic/Line Card Direct Out)	D
P5	1	Digital In/Out (or Mic/Line Card Direct Out)	D
P6	3	Analog In/Out	A
P7	1	Analog In/Out	A
P8	2	Digital In/Out (or Mic/Line Card Direct Out)	D
P9	4	Analog In/Out	A
P10	2	Analog In/Out	A
P11	1	Mic/Line Card, line out	M
P12	-	Fan	
P13	3, 4	Digital In/Out	D
P14	4	Digital In/Out (or Mic/Line Card Direct Out)	D

If slots 3 and 4 are equipped with Mic/Line cards, their line outputs will not be available. In such a case the resistors R173, 273, 373, and 473 must be removed on the Mic/Line cards. Instead, the 0 Ω bridges R174, 274, 374, and 474 must be inserted in order to have the line out signal at the card’s direct out pins.

The audio connectors (P2, P4...P11, P14) have the same standard pin assignment that is used for the 3U frame. This means that all the connector panels from the D19m system can be used for the 1U frame as well.

For more information on the audio connector pinout, please refer to chapter 1.4.

**P13:** P13 allows to connect two AES/EBU inputs or outputs to the slots 3 and 4 with a flat cable.

If this connector has to be connected directly to a 15-pin D-type connector on the rear panel, a special adapter must be assembled. The easiest way to achieve this is using a 15-pin flat cable pressed to the D-type connector. On the other end, cut off the 15th wire; the remaining 14 wires are split in the



center and pressed to the flat cable connector in such a way that the pins 8 and 9 are left free. For details, refer to the table below.

P13, pin no.	D-type, pin no.	P13, pin no.	D-type, pin no.
1	1	10	12
2	9	11	5
3	2	12	13
4	10	13	6
5	3	14	14
6	11	15	7
7	4	16	15

**Control Port (15-pin D-Type):**

Pin	Signal
1	24 V <sub>DC</sub> output, 1.6 A max.
2	24 V <sub>DC</sub> , ext. supply input for redundancy
3	connected to solder pad W36
4	GND
5	RS 422 input – (RB)
6	RS 422 input + (RA)
7	RS 422 output + (TA)
8	RS 422 output – (TB)
9	GND
10	24 V <sub>DC</sub> , ext. supply input for redundancy
11	connected to solder pad W37
12	connected to solder pad W38
13	connected to solder pad W39
14	connected to solder pad W40
15	connected to solder pad W41

**Further Wiring:**

For special applications, several signals are routed to solder pads (W...). So it is possible, for instance, to wire the MUTE signals of the Mic/Line cards, or to use the GPIO signals on the Supply Board.

**W1...W20**

can be used for mute signals (MP4RC four-channel mic amplifier cards) or for AES/EBU sync inputs (all cards, except AESI and AESO cards).

MUTE for:	Slot 1 (J1)	Slot 2 (J2)	Slot 3 (J3)	Slot 4 (J4)
Ch 1	W1	W6	W11	W16
Ch 2	W2	W7	W12	W17
Ch 3	W4	W9	W14	W19
Ch 4	W5	W10	W15	W20
GND	W3	W8	W13	W18

AES/EBU Sync In:	Slot 1 (J1)	Slot 2 (J2)	Slot 3 (J3)	Slot 4 (J4)
AESS0x +	W1	W6	W11	W16
AESS0x –	W2	W7	W12	W17

**W21, W22 / W42, W43**

For synchronizing the cards, an AES/EBU signal is fed via a MADI or a MADO card in slot 4. For this application the pins of the XLR connector must be wired to solder pads W42 and W43. P1 and P2 on the Supply Board must not be connected.

If neither a MADI nor a MADO card is installed, for synchronization the receiver on the Supply Board can be used. For this case, the pins of the XLR connector must be wired to the solder pads W21 and W22, and pins P1 and P2 of the Supply Board must be connected, the default input termi-

nation is 110  $\Omega$ . If a high-Z termination is required, remove the jumper P4-P5 on the Supply Board.

**W23, W24** The 24 V<sub>DC</sub> supply voltage from the AC/DC converter is fed to the 6.3 mm AMP flat pins W23 (+24 V) and W24 (GND). External devices with a current consumption of up to 1.6 A @ 24 V<sub>DC</sub> can be supplied from pin 1 of the control port. A maximum total supply current of 3.5 A must never be exceeded.

For redundancy, an additional external supply can be connected to pins 2 and 10 of the control port.

**W25...W28** For monitoring, signaling, supply supervision and similar purposes, two opto-coupler control inputs with integrated current sink are provided on the Supply Board (1.940.578). The current sink automatically limits the opto-coupler current to approx. 4 mA for an input voltage range of 2.5...48 V<sub>DC</sub>.

Pad	Signal
W25	IN1+
W26	IN2+
W27	IN1-
W28	IN2-

**W29** +24 V supply

**W30** GND

**W31** +5 V supply

**W32...W35** For monitoring, signaling, supply supervision and similar purposes, two open-collector control outputs are provided on the Supply Board (1.940.578) as standard. If required, these transistors optionally can control a relay each; the PCB has been designed in such a way that the relays as well as additional components for their correct function and for N/O-N/C relay contact selection can be retrofitted.

The relay contact rating is 1 A, 100 V, 30 W.

Pad	Signal
W32	R1G
W33	R2G
W34	R1A
W35	R1A

**W36...W41** On the Control Port connector P3, there are six free pins available for additional, customer-specific wiring.

Solder pad	P3, pin no.	Control Port (D-type), pin no.
W36	5	3
W37	6	11
W38	8	12
W39	10	13
W40	12	14
W41	14	15

**Address Setting:** When using the TDM bus or Mic/Line cards, the slots have to be addressed. This is done with solder bridges (i.e., pad pairs that can be connected with a tiny drop of solder) on the component side of the backplane board, according to the following table:

Slot	LSB	...	Address	...	MSB	TDM
1	JP 1		JP 2		JP 4	JP 5
2	JP 6		JP 7		JP 9	JP 10
3	JP 11		JP 12		JP 14	JP 15
4	JP 16		JP 17		JP 19	JP 20

Connected pad pairs correspond to a logical „0“.

The solder bridges JP5, 10, 15, and 20 are used to switch over from stand-alone to TDM operation; if these bridges are connected, this means „TDM operation“.

### Supply Board 1.940.578

On the Supply Board, a +5 V (IC8) and a  $\pm 15$  V supply (IC19, Q8 and T2) are implemented. Furthermore, a small processor system (IC16, IC9, IC10, IC11) is controlling the Mic/Line cards, and converting the RS422 signals to the I<sup>2</sup>C protocol.

The RS422 interface (IC2) can be replaced by an RS232 interface (IC1) or a MIDI interface (IC4, IC5).

The baud rate can be set to 31.25 kBd (jumper P8-P9 inserted) or to 38.4 kBd (jumper P7-P8 inserted).

In addition, two relays for the general-purpose output can be installed.

For synchronizing the cards in stand-alone mode, an AES/EBU input is provided; its termination impedance can be switched to high-Z (jumpers P5-P6 off, P4-P5 on). If a MADI or MADO Card is used in the system, the sync signal sent to the backplane must be disabled (P1-P2 on, P2-P33 off).

*The DIP switches are only used for factory tests and must always be set to OFF.*

### Connector Panels

For audio signals, the same connector panels as known from the 3U frame system can be used (see chapter 1.4). In addition, a 15-pin D-type connector panel is available, allowing to wire four AES/EBU inputs or outputs; so it is possible to realize, e.g., eight XLR inputs and four AES/EBU outputs in a single 1U unit.

## 1.4 Connector Panels

All audio and some control (sync, mute) signals are fed to flat cable connectors on the rear (solder) side of the backplane PCBs. A range of connector panels can be mounted at the rear of the frames; they are used for linking the frames to the outside world. All connector panels come with flat cables that plug into the flat cable connectors of the backplane PCBs.

As not only analog, but also digital audio and control signals are used, the pin assignment of the 16-pin (audio I/O) and 6-pin (sync) or 10-pin (sync or mute) flat cable connectors on the different backplanes is not identical in each case and needs some consideration. Please note as well that each sync/mute and sync connector is used for two cards.

Backplane:	1.940.550 (3U)	1.940.551 (3U)	1.940.553 (1U)
Digital I/O or Mic/Line Dir Out	P1, P10...P24	P2, P5, P9, P12, P16, P19, P23, P26, P30, P33, P37, P40, P44, P47, P51	P4, P5, P8, P14
Analog I/O	P25...P40	P3, P6, P10, P13, P17, P20, P24, P27, P31, P34, P38, P41, P45, P48, P52	P6, P7, P9, P10
Mic/Line Out	not available	P4, P7, P11, P14, P18, P21, P25, P28, P32, P35, P39, P42, P46, P49, P53	P2, P11, P4*, P14*
Mute/Sync (1 connector per 2 cards)	P2...P9	P1, P8, P15, P22, P29, P36, P43, P50	wired to solder pads W1...W20
*HW modification on Mic/Line card required			

### 16-Pin Flat Cable Pin Assignment (Audio I/O):

Pin	Analog I/O, Mic/Line Dir Out	Digital I/O	Pin	Analog I/O, Mic/Line Dir Out	Digital I/O
1	CH 1+	AES CH1/CH2+	9	n.c.	n.c.
2	CH 1-	AES CH1/CH2-	10	n.c.	n.c.
3	MGND	MGND	11	CH 4+	AES CH7/CH8+
4	MGND	MGND	12	CH 4-	AES CH7/CH8-
5	CH 2-	AES CH3/CH4-	13	MGND	MGND
6	CH 2+	AES CH3/CH4+	14	MGND	MGND
7	n.c.	n.c.	15	CH 3-	AES CH5/CH6-
8	n.c.	n.c.	16	CH 3+	AES CH5/CH6+

### 6-Pin Flat Cable Pin Assignment (Sync, on 1.940.550 only):

Pin	Sync IN (2 cards)	Pin	Sync IN (2 cards)
1	AES Sync 1 +	4	MGND
2	AES Sync 1 -	5	AES Sync 2 -
3	MGND	6	AES Sync 2 +

### 10-Pin Flat Cable Pin Assignment (Sync or Mute, on 1.940.551 only):

Pin	Sync IN (2 cards)	Mute IN (2 cards)	Pin	Sync IN (2 cards)	Mute IN (2 cards)
1	AES Sync 1 +	Mute 1 / 1	6	AES Sync 2 -	Mute 2 / 2
2	AES Sync 1 -	Mute 1 / 2	7	-	Mute 2 / 3
3	-	Mute 1 / 3	8	-	Mute 2 / 4
4	-	Mute 1 / 4	9	GND	GND
5	AES Sync 2 +	Mute 2 / 1	10	GND	GND

All rear connector panels available as well as the allocation of connector panels to the D19m plug-in cards are listed in the illustrations and tables below.

Considering the rack size, *please note that the connector panels may require more space than the plug-in cards*, depending on type and number of required connectors.

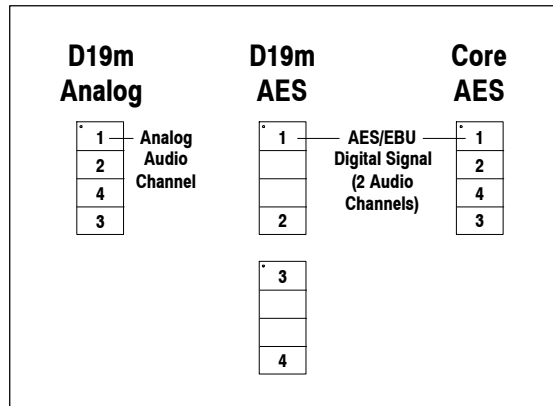
Application:	D19m	D19m	D19m	D19m	D19m	D19m	D19m	D19m	
Type:	AES In	AES Out	AES In	AES Out	TDIF In/Out	TDIF	AES In	AES Out	Please also refer to the "Core" section below!
Channels:	4	4	4	4	2 x 8	Wordclock Out	4	4	
<b>D19m Digital</b>									
	Order No. 1.940...:	.615	.616	.617	.618	.632	.633	.611	.612
		C = 47pF	C = 47pF	C = 47pF	C = 47pF	C = 47pF		75 W	75 W

Application:	D19m	D19m	D19m	D19m	D19m	D19m	D19m	D19m	D19m	D19m	Monitoring
Type:	Analog In/Out	Analog In/Out	Analog In/Out	Analog In	Analog Out	Analog In	Analog Out	Analog Insert	Control	32 Mutes	GPI/O
Channels:	12	10	10	4	4	4	4	4	8 GPI/O	8 GPI/O	
<b>D19m Analog</b>											
	Order No. 1.940...:	.609/.610	.614/.640	.613	.625	.626	.627	.628	.631	.630	.619
		C = 220 pF	C = 220 pF	C = 220 pF	C = 220 pF	C = 220 pF	C = 220 pF	C = 220 pF			

Application:	Core	Core	Core	Core	Core	Core	Core	
Type:	AES In	AES In	AES Out	AES Out	AES In	AES Out	AES In	
Channels:	8	4	8	4	4	4	4	
<b>Core</b>								
	Order No. 1.940...:	.635	.635	.636	.636	.637	.638	.641
		C = 47 pF	C = 47 pF	C = 47 pF	C = 47 pF	C = 47 pF	C = 47 pF	

Can also be used as 8-ch analog I/O for D19m; in such a case, replace C = 47 pF by 220 pF.

Please also note that the 16-pin flat cables are *not always* used for *four* I/O channels, according to the illustration below:



#### Available Connector Panels:

Order No.	Connector Type	Mono CH	Function	Width
1.940.609	1 × Siemens 39p, male, gold cont.	12	Analog IN/OUT (D19m Analog)	8 TE
1.940.610	1 × Siemens 39p, male	12	Analog IN/OUT (D19m Analog)	8 TE
1.940.611	4 × BNC (for D19m rack)	8	AES/EBU IN (D19m Digital)	4 TE
1.940.612	4 × BNC (for D19m rack)	8	AES/EBU OUT (D19m Digital)	4 TE
1.940.613	1 × Siemens 30p, female	12	Analog IN (D19m Analog)	8 TE
1.940.614	1 × Siemens 30p, male	12	Analog OUT (D19m Analog)	8 TE
1.940.615	1 × D-type 15p, female	8	AES/EBU IN (D19m Digital)	4 TE
1.940.616	1 × D-type 15p, male	8	AES/EBU OUT (D19m Digital)	4 TE
1.940.617	4 × XLR, 3p, female	8	AES/EBU IN (D19m Digital)	8 TE
1.940.618	4 × XLR, 3p, male	8	AES/EBU OUT (D19m Digital)	8 TE
1.940.619	2 × D-type 25p, female	4	GPI/O	4 TE
1.940.625	1 × D-type 15p, female	4	Analog IN (D19m Analog)	4 TE
1.940.626	1 × D-type 15p, male	4	Analog OUT (D19m Analog)	4 TE
1.940.627	4 × XLR, 3p, female	4	Analog IN (D19m Analog)	8 TE
1.940.628	4 × XLR, 3p, male	4	Analog OUT (D19m Analog)	8 TE
1.940.630	2 × D-type 25p, female	-	Control port (D19m Analog)	4 TE
1.940.631	4 × Bantam jack	4	Insert (RCC remote signals, D19m Analog)	4 TE
1.940.632	2 × D-type 25p, female	2 × 8	Dual TDIF in/out (D19m Digital)	4 TE
1.940.633	4 × BNC	4	Word Clock Out (D19m Digital)	4 TE
1.940.635	2 or 1 × D-type 15p, female	8 or 4	AES/EBU IN (Core), or Analog IN (D19m Analog)	4 TE
1.940.636	2 or 1 × D-type 15p, male	8 or 4	AES/EBU OUT (Core), or Analog OUT (D19m Analog)	4 TE
1.940.637	4 × XLR, 3p, female	8	AES/EBU IN (Core)	8 TE
1.940.638	4 × XLR, 3p, male	8	AES/EBU OUT (Core)	8 TE
1.940.640	1 × Siemens 30p, male, gold cont.	12	Analog OUT	8 TE
1.940.641	4 × BNC (for D950/Route5000 core)	8	AES/EBU IN	4 TE
1.940.642	4 × BNC (for D950/Route5000 core)	8	AES/EBU OUT	4 TE
1.940.590.02	Blank panel	-	-	4 TE
1.940.590.03	Blank panel	-	-	8 TE

### 1.4.1 Connector Panel Application

		Mono Ch	Width TE	Connector panels 1.940....	
<b>A/D and D/A Cards</b>					
1.940.562	D19m C4AD quad 24 bit A/D converter	4	4	609, 610, 613	625, 627
1.940.563	D19m C4AD quad 24 bit A/D converter w. noise shaping	4	4	609, 610, 613	625, 627
1.940.571	D19m C4DA quad 24 bit D/A converter	4	4	609, 610, 614	626, 628
1.940.575	D19m MP4RC quad remote controlled mic/line preamp	4	4	609, 610, 613	625, 627
1.940.576	D19m RCC controller for up to 14 MP4RC cards	56 (control only)	4	630	
<b>AES/EBU I/O Cards</b>					
1.940.540	D19m AESI SFC dual AES/EBU in w. SFC	4	4	611, 615, 617	
1.940.580	D19m AESI dual AES/EBU in	4	4	611, 615, 617	
1.940.585	D19m AESO dual AES/EBU out	4	4	612, 616, 618	
1.940.470	D19m AESO dual AES/EBU out w. dithering/SFC	4	4	612, 616, 618	
<b>MADI I/O Cards</b>					
1.940.500	D19m MADI in for coaxial cable	56	4	<i>Sync in</i>	
1.940.511	D19m MADI in for optical cable (SC)	56	4	<i>Sync in/out</i>	
1.940.512	D19m MADI in for optical cable (SC) w. redundant in	56	4	<i>Sync in/out</i>	
1.940.520	D19m MADO out for coaxial cable	56	4	<i>Sync in/out</i>	
1.940.531	D19m MADO out for optical cable (SC)	56	4	<i>Sync in/out</i>	
1.940.532	D19m MADO out for optical cable (SC) w. dual out	56	4	<i>Sync in/out</i>	
<b>TDIF I/O Cards</b>					
1.940.480	D19m TDIFI dual 8-channel TDIF in	16	4	632	
1.940.481	D19m TDIFI dual 8-channel TDIF in w. AES/EBU out	16	4	632	(+ AESO)
1.940.485	D19m TDIFO dual 8-channel TDIF out	16	4	632	
1.940.486	D19m TDIFO dual 8-channel TDIF out w. AES/EBU in	16	4	632	(+ AESI)
<b>ADAT I/O Cards</b>					
1.940.490	D19m ADATI dual 8-channel ADAT in	16	4	-	
1.940.491	D19m ADATI dual 8-channel ADAT in w. AES/EBU out	16	4	-	(+ AESO)
1.940.495	D19m ADATO dual 8-channel ADAT out	16	4	-	
1.940.496	D19m ADATO dual 8-channel ADAT out w. AES/EBU in	16	4	-	(+ AESI)
<b>Miscellaneous Assemblies</b>					
1.940.557	D19m sync receiver				
1.940.558	Optical/coax interface				
1.940.579	RS422/optical converter				

## 2 D19m MODULES

### 2.1 A/D and D/A Cards

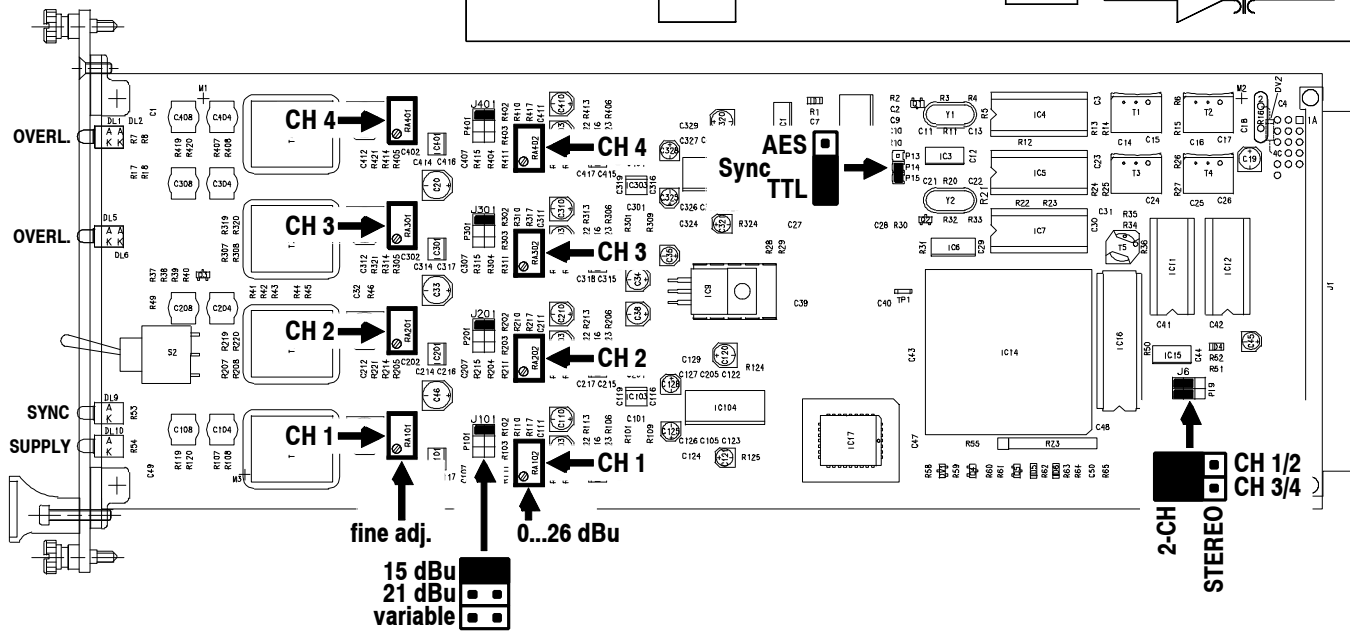
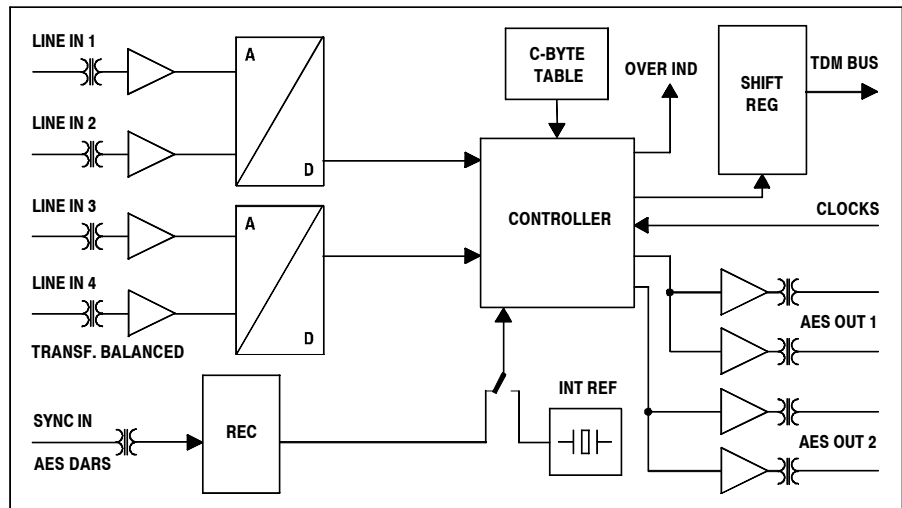
#### 2.1.1 D19m C4AD/24 – Quad 24 bit A/D Converter

1.940.562



The A/D card uses high-end 24 bit Delta-Sigma converters and can be used for standalone applications as well as for the D19m rack. On one card, four analog inputs (mono) are converted to two AES/EBU outputs; if a MADO card is used in the system, these signals can be converted to a MADi link. If the external sync signal fails or if the card is used in standalone applications, the sampling frequency will be generated on-board. For such cases the sampling frequency can be selected at the front panel (44.1 or 48 kHz). The channel status information contains the sampling frequency as well as source channel information depending on the card address.

*Jumper diagram of the earlier version 1.940.560 at the end of this chapter.*



- LEDs:**
- OVERLOAD 1...4* For each of the 4 channels an LED indicates when 0 dB<sub>FS</sub> level has been reached.
  - SYNC* Indicates that the digital outputs are synced.
  - SUPPLY* Indicates “power on” status.



**Jumpers:**

*Input level* 3 positions: 15 dBu (fixed), 21 dBu (fixed), or variable (0...26 dBu).

*Sync AES / TTL* *AES:* The sync input from the AES/EBU sync input is used (in case of standalone use of the A/D card).  
*TTL:* The sync input from the D19m rack is used. The internal TTL sync signal is generated by the MAD0 card in a D19m MUX frame respectively by the MADI card in a DEMUX frame.

*2-CH / STEREO* Defines the channel mode in the channel status bit.

**Alignment:**

Set jumper to 15 dBu or 21 dBu. Feed an analog signal with a level of +6 dBu or +12 dBu, respectively, to one of the analog inputs. Measure the digital level either locally on the AES/EBU outputs or via the TDM bus on the MADI output. Adjust the level with the corresponding FINE ADJUST trimmer potentiometer to  $-9 \text{ dB}_{\text{FS}}$ . If no digital measuring equipment is available, feed an analog signal with a level of +15 dBu or +21 dBu to the analog input and adjust the level with the corresponding FINE ADJUST trimmer potentiometer so that the overload LED just comes on. If an other input sensitivity has to be adjusted, set the jumper to position VARIABLE and use the 0...26 dBu trimmer potentiometer to adjust the desired level.

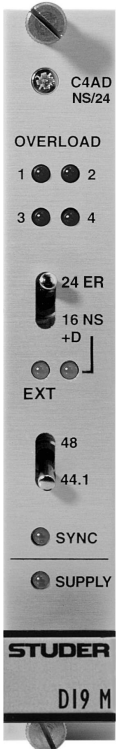
**Technical Data:**

AES/EBU sync input	Impedance	110 $\Omega$
	Sensitivity	min. 200 mV
AES/EBU outputs	Impedance	110 $\Omega$
	Output level (into 110 $\Omega$ )	5 V
Analog Input	Transformer-balanced	
Level (for 0 $\text{dB}_{\text{FS}}$ ) jumper-selectable	+15 dBu, +21 dBu, 0...26 dBu	Adjustable with trimmer potentiometer
Impedance	> 10 $\text{k}\Omega$	
Frequency response	20 Hz...20 kHz	-0.2 dB
THD + N	20 Hz...20 kHz, $-1 \text{ dB}_{\text{FS}}$ )	< $-97 \text{ dB}_{\text{FS}}$
	1 kHz, $-30 \text{ dB}_{\text{FS}}$	< $-108 \text{ dB}_{\text{FS}}$
Crosstalk	@ 1 kHz	< $-110 \text{ dB}_{\text{FS}}$
Power consumption	5 V	max. 0.4 A
	+15 V	max. 0.25 A
	-15 V	max. 0.06 A
Sampling frequency	external sync	28 kHz...55 kHz
	internal sync (standalone)	44.1/48 kHz
Operating temperature range	0...+40° C	



2.1.2 D19m C4AD NS/24 – Quad 24 bit A/D with Noise Shaping

1.940.563



Dithering and Noise Shaping:

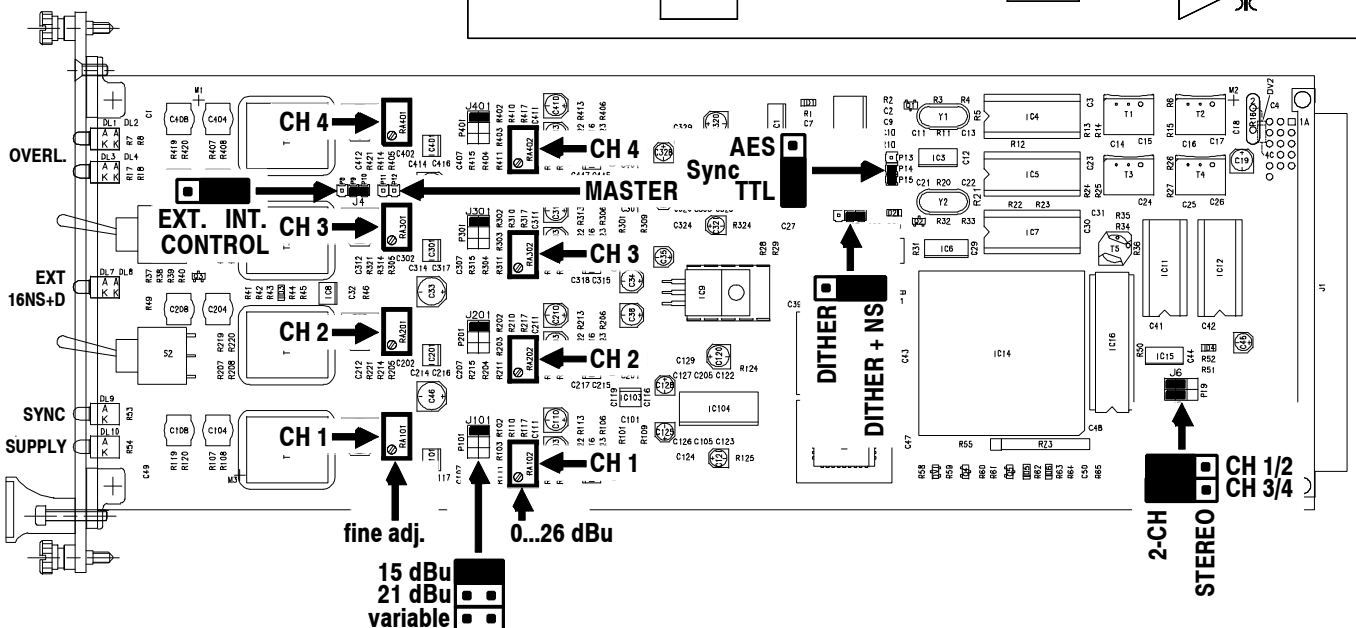
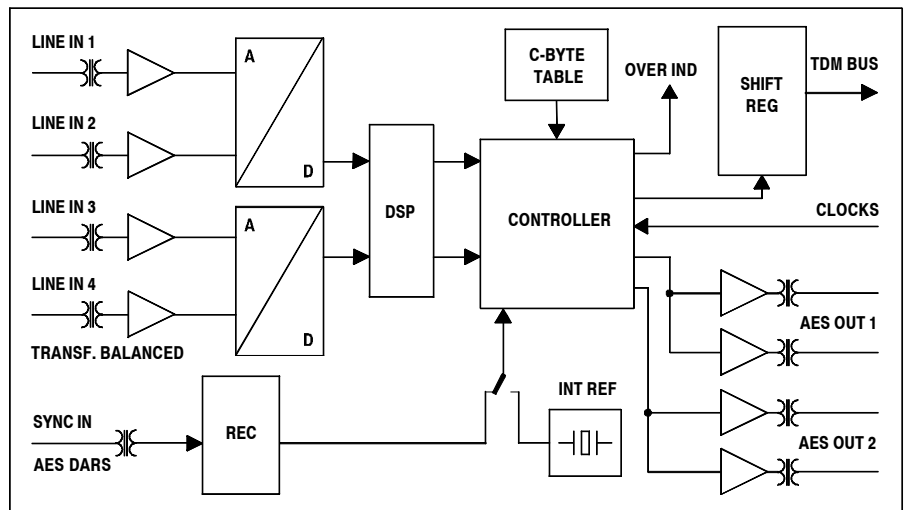
The A/D card uses high-end 24 bit Delta-Sigma converters and can be used for standalone applications as well as for the D19m rack. On one card, four analog inputs (mono) are converted to two AES/EBU outputs; if a MADO card is used in the system, these signals can be converted to a MADI link. The converted signal is also available as 16 bit word by using dithering or dithering and noise shaping algorithms.

If the external sync signal fails or if used in standalone applications, the sampling frequency will be generated on-board. For such cases the sampling frequency can be selected at the front panel (44.1 or 48 kHz).

The channel status information contains the sampling frequency as well as source channel information depending on the card address.

The card is equipped with 24-bit converters. If there is a need for 16 bit resolution, dithering *and* noise shaping or dithering only can be activated. Dithering helps to improve the low level signals whereas noise shaping allows to have almost the dynamic range of a 24 bit converter in the mid frequency range.

*Jumper diagram of the earlier version 1.940.561 at the end of this chapter.*



<b>LEDs:</b>	<i>OVERLOAD 1...4</i>	For each of the 4 channels an LED indicates when 0 dB <sub>FS</sub> level has been reached.
	<i>16 NS+D</i>	Indication for 16-bit output with dithering, or noise shaping and dithering.
	<i>SYNC</i>	Indicates that the digital outputs are synced.
	<i>SUPPLY</i>	Indicates “power on” status.
<b>Jumpers:</b>	<i>Input level</i>	3 positions: 15 dBu (fixed), 21 dBu (fixed), or variable (0...26 dBu).
	<i>Sync AES / TTL</i>	<i>AES</i> : The sync input from the AES/EBU sync input is used (in case of standalone use of the A/D card). <i>TTL</i> : The sync input from the D19m rack is used. The internal TTL sync signal is generated by the MADDO card in a D19m MUX frame respectively by the MADI card in a DEMUX frame.
	<i>2-CH / STEREO</i>	Defines the channel mode in the channel status bit.
	<i>DITHER / DITHER + NS</i>	Dithering and noise shaping, or dithering only.
	<i>MASTER</i>	Card is master for activating noise shaping and dithering in a D19m frame.
	<i>EXT./INT. CONTROL</i>	External noise shaping and dithering control (front panel switch has no effect), or noise shaping and dithering activated by front panel switch.

**Alignment:** Set jumper to 15 or 21 dBu position. Feed an analog signal with a level of +6 dBu or +12 dBu, respectively, to one of the analog inputs. Measure the digital level either locally on the AES/EBU outputs or via the TDM bus on the MADI output. Adjust the level with the corresponding FINE ADJUST trimmer potentiometer to -9 dB<sub>FS</sub>. If no digital measuring equipment is available, feed an analog signal with a level of +15 dBu or +21 dBu to the analog input and adjust the level with the corresponding FINE ADJUST trimmer potentiometer so that the overload LED just comes on. If an other input sensitivity has to be adjusted, set the jumper to position VARIABLE and use the 0...26 dBu trimmer potentiometer to adjust to the desired level.

**Technical Data:**

AES/EBU sync input	Impedance	110 Ω
	Sensitivity	min. 200 mV
AES/EBU outputs	Impedance	110 Ω
	Output level (into 110 Ω)	5V
Analog Input	Transformer-balanced	
Level (for 0 dB <sub>FS</sub> ) jumper-selectable	+15 dBu, +21 dBu, 0...26 dBu	adjustable with trimmer potentiometer
Impedance	> 10 kΩ	
Frequency response	20 Hz...20 kHz	-0.2 dB
THD + N (noise shaping OFF)	20 Hz...20 kHz, -1 dB <sub>FS</sub>	< -97 dB <sub>FS</sub>
	1 kHz, -30 dB <sub>FS</sub>	< -108 dB <sub>FS</sub>
Crosstalk	at 1 kHz	< -110 dB <sub>FS</sub>
Power consumption	5V	max. 0.6 A
	+15V	max. 0.25 A
	-15V	max. 0.06 A
Sampling frequency	with external sync	28 kHz...55 kHz
	internal Sync (standalone)	44.1/48 kHz
Temperature range	0°...+40 C	

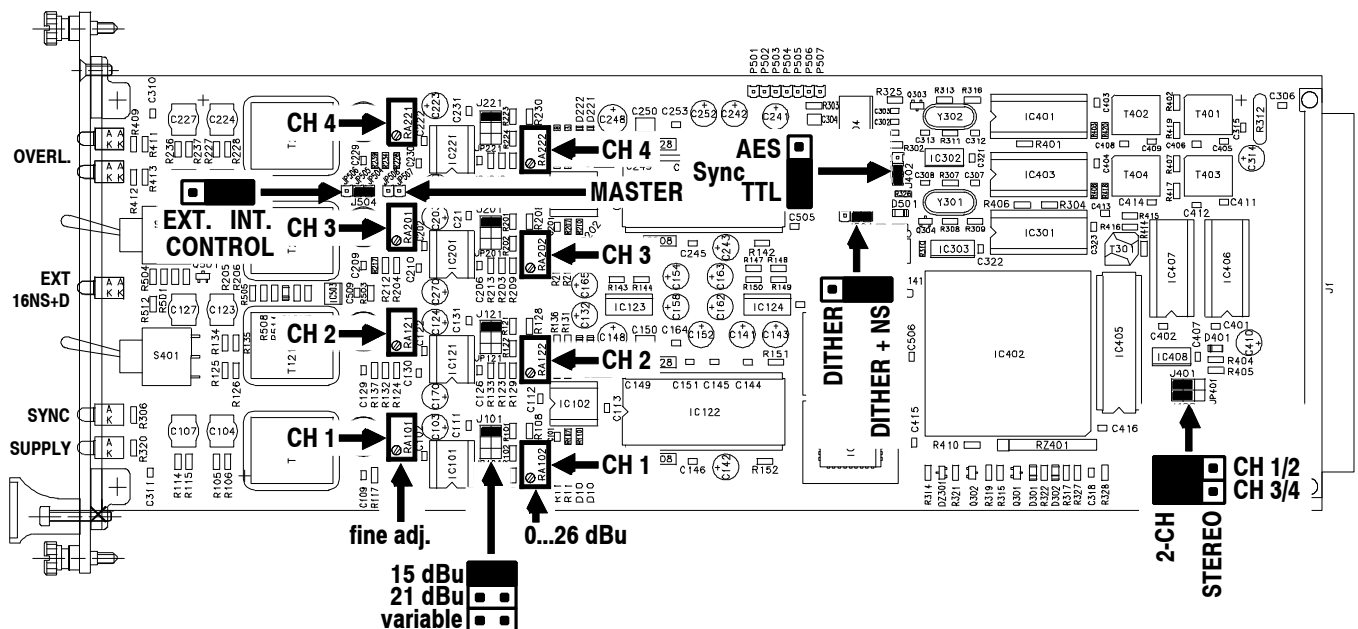
**Pin Assignment:**

96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	AES1AOUT+	GND	AES1AOUT-
7	AES1BOUT+	GND	AES1BOUT-
8	AES2AOUT+	GND	AES2AOUT-
9	AES2BOUT+	GND	AES2BOUT-
10	/D0	/BA0	/D8
11	/D1	/BA1	/D9
12	/D2	/BA2	/D10
13	/D3	/BA3	/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	/U
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22	ANA1IN+		ANA1IN-
23	MGND	MGND	MGND
24	ANA2IN+		ANA2IN-
25	MGND	MGND	MGND
26	ANA3IN+		ANA3IN-
27	MGND	MGND	MGND
28	ANA4IN+		ANA4IN-
29	AGND	AGND	AGND
30	-15V	-15V	-15V
31	+15V	+15V	+15V
32	MGND	MGND	MGND

MGND	Chassis
GND	Ground
SYNC	Sync input TTL
AES/DSD BUS	Switchover standalone/TDM
BA0 .. BA3	Card address
/D0.../D15	Inverted TDM bus data
/FRAME, /CK128	Clocks TDM Bus
/U	Noise shaping/dithering on/off

**Earlier Version 1.940.561:**



2.1.3 D19m C4DA/24/96 – Quad 24 bit D/A, 96 kHz Operation

1.940.571



96 kHz Operation:

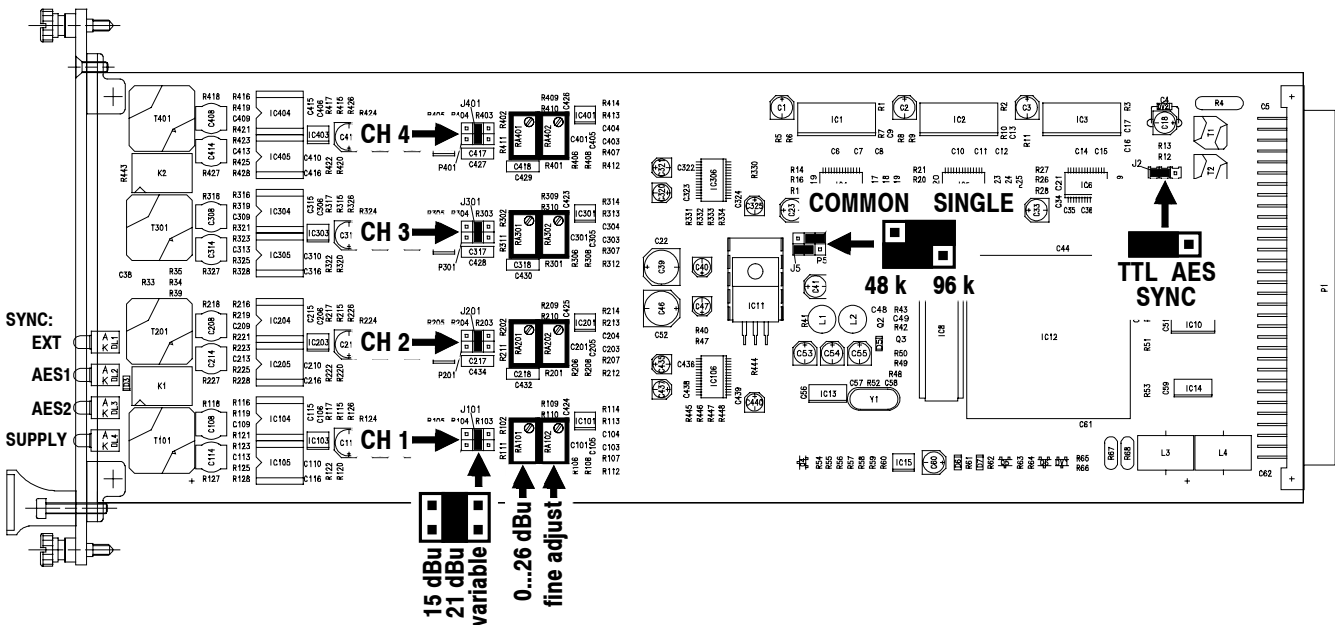
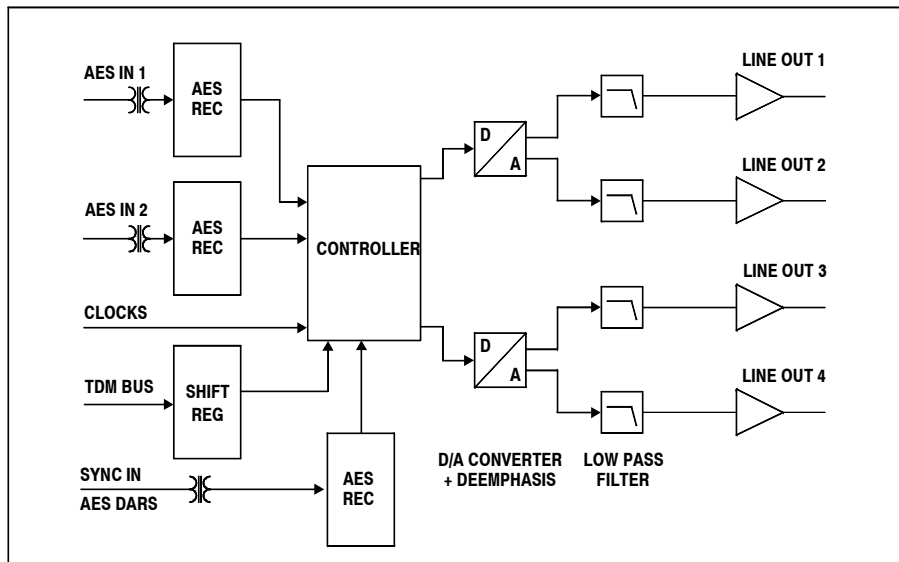
The C4DA/24/96 card can be used for standalone applications as well as in the D19m rack for TDM application. On one card, four digital channels are converted to four analog outputs. The converters receive their input signals either from the AES/EBU inputs (standalone application) or from the TDM bus.

The C4DA/24/96 card can be used next to the other D19m cards in a D19m rack. If in standalone applications the synchronization should fail, the clock will be generated from one of the AES/EBU inputs.

The channel status bits contain the source channel defined by the card address as well as the sampling frequency information.

The card can be used for sampling frequencies of 32 through 48 kHz. For standalone operation, also twice these values are allowed. When using the AES/EBU inputs in standalone mode, only the mode with two channels per line (transmitted with twice the transmission speed) is supported, but not the mode with one channel per line (CH1 in AES/EBU format corresponds to the first, CH2 to the second sample).

*Jumper diagram of the earlier version 1.940.570 at the end of this chapter.*



- LEDs:**
- SYNC EXT* Indication if the card is synced from the AES/EBU input or from the TTL sync clock.
  - SYNC AES1* is ON when the external sync fails, and the sync of the AES1 input is used to synchronize the card.
  - SYNC AES2* is ON when the external sync fails, and the sync of the AES2 input is used to synchronize the card (if no signal is connected to AES1).
  - SUPPLY* Indicates “power on” status.
- Jumpers:**
- Output level* 15 dBu fixed, 21 dBu fixed, or 0...26 dBu variable.
  - SYNC AES / TTL* *AES:* The unit will be synced from the AES/EBU input (in case of standalone use of the D/A card).  
*TTL:* The sync input from the D19m rack is used. The internal TTL sync signal is generated by the MADDO card in a D19m MUX frame or by the MADI card in a DEMUX frame.
  - 48 k / 96 k* For correct 96 kHz operation, the “96 k” jumper must be set for standalone application.
  - COMMON / SINGLE* When setting the jumper to “common”, a common switchover for several cards is allowed by pulling pin 18C on the backplane to GND; *in such a case, the 48/96 k jumper must be set to the 48 k position.*
- Alignment:** Feed a digital audio signal with a level of  $-10 \text{ dB}_{\text{FS}}$  either via one of the AES/EBU inputs or via the TDM bus to the C4DA/24/96 card. Set the jumpers to either 15 or 21 dBu and measure the corresponding analog outputs. Use the corresponding FINE ADJUST trimmer potentiometers to set the output to +5 or +11 dBu, respectively. If a different output level is required, set the jumper to position VARIABLE and use the 0...26 dBu trimmer potentiometers to adjust the desired level.  
Repeat this alignment for the second AES/EBU input.

**Technical data** (sampling frequency 48 kHz, output level 15 dBu @0 dB<sub>FS</sub>):

AES/EBU inputs	Impedance	110 Ω
	Sensitivity	min. 200 mV
Analog output		Electronically balanced
Frequency response	20 Hz...20 kHz	-0.2 dB
THD + N	20 Hz...20 kHz, $-1 \text{ dB}_{\text{FS}}$	$< -87 \text{ dB}_{\text{FS}}$
	1 kHz, $-30 \text{ dB}_{\text{FS}}$	$< -110 \text{ dB}_{\text{FS}}$
Crosstalk	@ 1 kHz	$< -110 \text{ dB}_{\text{FS}}$
Output impedance (analog output)		$< 40 \text{ Ω}$
Minimum load at maximum level	+24 dBu	300 Ω
Analog output level	for 0 dB <sub>FS</sub> , jumper-selectable	+15 dBu, +21 dBu; 0...26 dBu (adjustable with on-board trimmer potentiometer)
Power consumption	5 V	max. 0.2 A
	+15 V	max. 0.25 A
	-15 V	max. 0.15 A
Sampling frequency		30 kHz...54 kHz, or 60 kHz...108 kHz
Operating temperature range		0...+40° C

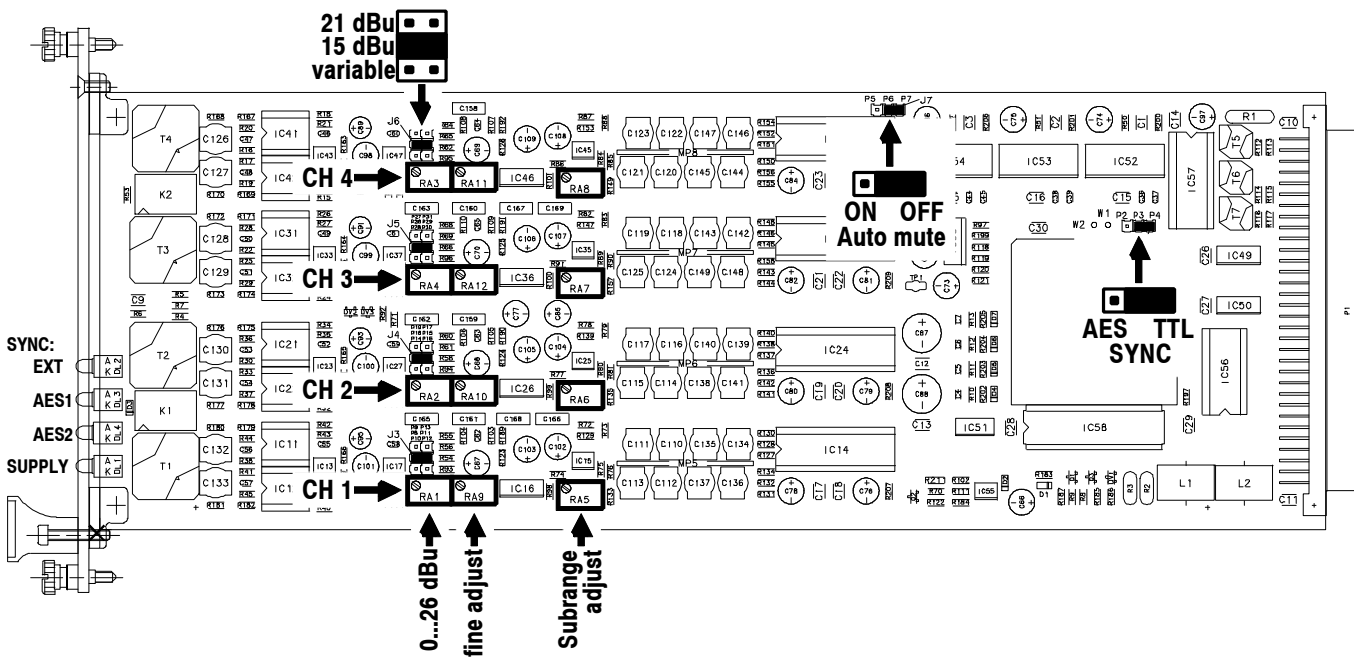
**Pin Assignment:**

96-pin, DIN 41612, female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	AES1IN+	GND	AES1IN-
7		GND	
8	AES2IN+	GND	AES2IN-
9		GND	
10	/D0	/BA0	/D8
11	/D1	/BA1	/D9
12	/D2	/BA2	/D10
13	/D3	/BA3	/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	/U
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22	ANA1OUT+		ANA1OUT-
23	MGND	MGND	MGND
24	ANA2OUT+		ANAOUT-
25	MGND	MGND	MGND
26	ANA3OUT+		ANA3OUT-
27	MGND	MGND	MGND
28	ANA4OUT+		ANA4OUT-
29	AGND	AGND	AGND
30	-15V	-15V	-15V
31	+15V	+15V	+15V
32	MGND	MGND	MGND

- MGND Chassis
- GND Ground
- SYNC Sync Input TTL
- AES/DSD BUS Switchover standalone/TDM bus operating
- BA0...BA3 Card address (ID)
- /D0.../D15 Inverted data on the TDM bus
- /FRAME, /CK128 Clocks TDM bus
- /U Switchover to twice the sampling frequency

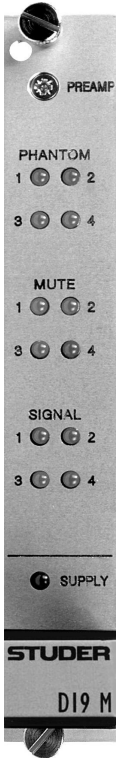
**Earlier Version 1.940.570:**





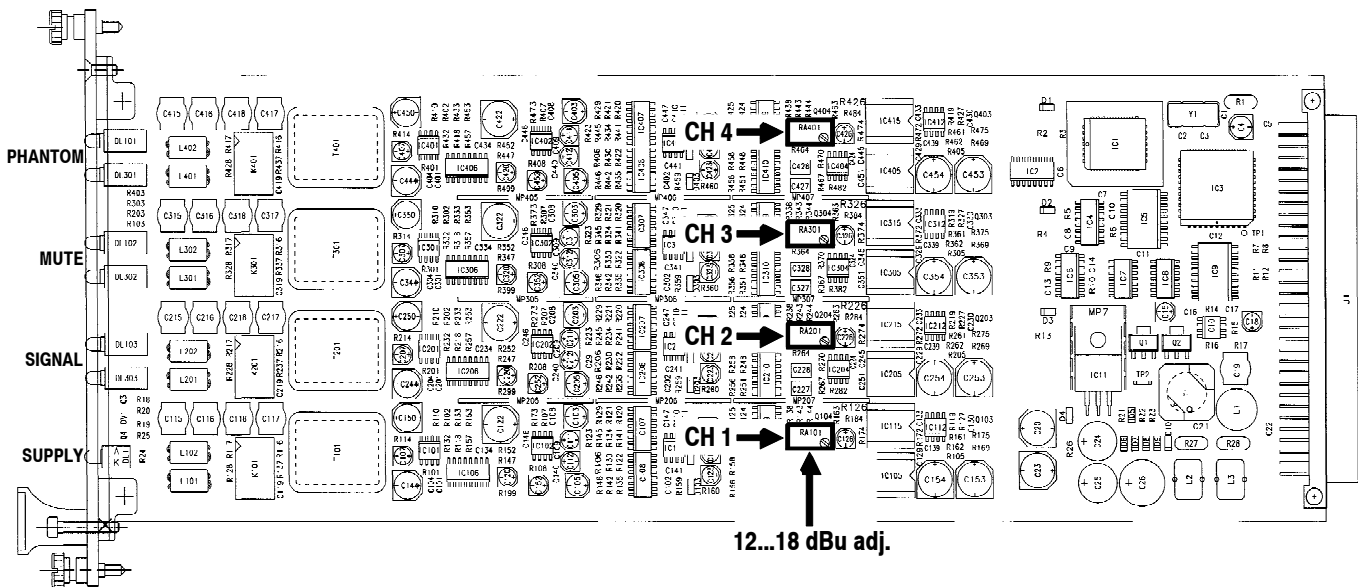
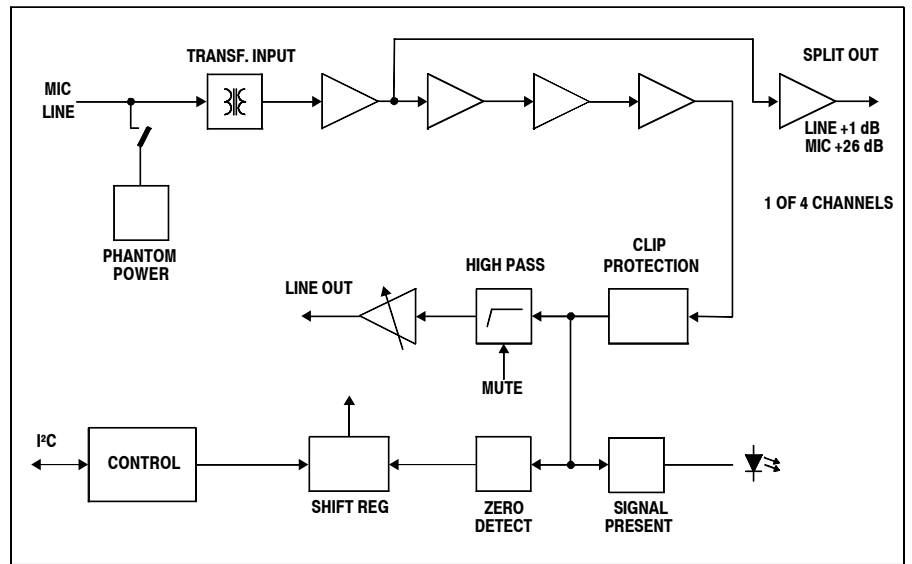
2.1.4 D19m MP4RC – Quad Remote Controlled Mic/Line In

1.940.575



The Mic/Line inputs (pre-amps) are equipped with 4 high-quality preamplifiers. The gain can be controlled in 1 dB steps over a wide range. The inputs are transformer-balanced and switchable between microphone and line level sensitivity. Phantom power, high-pass filter and gain are remote controlled for each channel individually. A simple limiter (clip protection) can be activated for all 4 channels in common. Control of the Mic/Line inputs is performed by an I<sup>2</sup>C bus coming from the D19m RCC remote controller card 1.940.576 via the backplane.

A mute input signal per Mic/Line input permits to mute the signal independent of the remote control signal. The line output is electronically balanced. The Split Out supplies, regardless of the current gain setting, a signal which is 26 dB above the mic input signal or 1 dB above the line input signal).



- LEDs:**
- PHANTOM 1...4* Indicates active phantom powering for each channel.
  - MUTE 1...4* Indicates external mute, if active, for each channel.
  - SIGNAL 1...4* Indicates present signal for each channel.
  - SUPPLY* Indicates "power on" status.

**Alignment:**

- Set the mic input gain to minimum.
- Feed a balanced 0 dBu test signal into one of the mic inputs.
- Then adjust the level at the corresponding line output to 15 dBu, using the correct trimmer potentiometer according to the illustration.

**Technical Data:**

Input		Transformer-balanced	
Input sensitivity (for 15 dBu output level)	Mic	-60...0 dBu (adjustable in 1 dB steps)	
	Line	-10...+24 dBu (adjustable in 1 dB steps)	
Input impedance	Mic	> 1 k $\Omega$	
	Line	> 2 k $\Omega$	
Phantom power		48 V	
Output		Electronically balanced	
Output level	Line Out	15 $\pm$ 3 dBu (adjustable with trimmer pot)	
	Split Out	26 dB above mic input level, 1 dB above line input level	
Output impedance	Line Out, Split out	50 $\Omega$ each	
Min. load	Line Out, split out	600 $\Omega$ each	
High-pass filter		-3 dB @ 75 Hz, 12 dB/oct.	
Frequency response	Line	30 Hz...20 kHz	$\pm$ 0.1 dB
	Mic	30 Hz...20 kHz	$\pm$ 0.4 dB
THD + N	Line (0 dB gain, +10 dBu in)	95 dB <sub>FS</sub>	
	Mic (30 dB gain, -20 dBu in)	95 dB <sub>FS</sub>	
Equivalent input noise (source 200 $\Omega$ )	Mic (max gain)	-124 dBu	
Crosstalk	Mic (35 dB gain)	@ 1 kHz	< 110 dB <sub>FS</sub>
		@ 15 kHz	< 90 dB <sub>FS</sub>
	Line (0 dB gain)	@ 1 kHz	< 110 dB <sub>FS</sub>
		@ 15 kHz	< 90 dB <sub>FS</sub>
Power consumption	5 V / +15 V / -15 V	0.25 A / 0.30 A / 0.25 A	
Operating temperature range		0...40° C	

**Pin Assignment:**

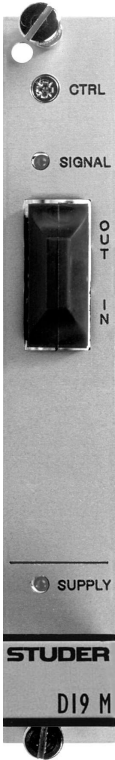
96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC	SCL	SDA
4	GND	GND	GND
5	/MUTE1	GND	/MUTE2
6	DIR OUT1+	/MUTE3	DIR OUT 1-
7	DIR OUT2+	/MUTE4	DIR OUT 2-
8	DIR OUT 3+	GND	DIR OUT 3-
9	DIR OUT 4+	GND	DIR OUT 4-
10		/BA0	
11		/BA1	
12		/BA2	
13		/BA3	
14		GND	
15			
16		GND	
17		GND	
18			
19	MGND	MGND	OUT2-
20	OUT1+	OUT1-	OUT2+
21	MGND	MGND	MGND
22	ANA1IN+		ANA1IN-
23	MGND	MGND	MGND
24	ANA2IN+	MGND	ANA2IN-
25	MGND	MGND	MGND
26	ANA3IN+	MGND	ANA3IN-
27	MGND	MGND	MGND
28	ANA4IN+	OUT4-	ANA4IN-
29	AGND	AGND	AGND
30	-15V	-15V	-15V
31	+15V	+15V	+15V
32	OUT3+	OUT4+	OUT3-

MGND	Chassis
GND	Ground
SCL, SDA	I <sup>2</sup> C Bus
/MUTE ..	Mute input (low active)
BA0 .. BA3	Card address
ANA..IN	balanced Mic/Line input
OUT...	balanced output
DIR OUT	Split Out

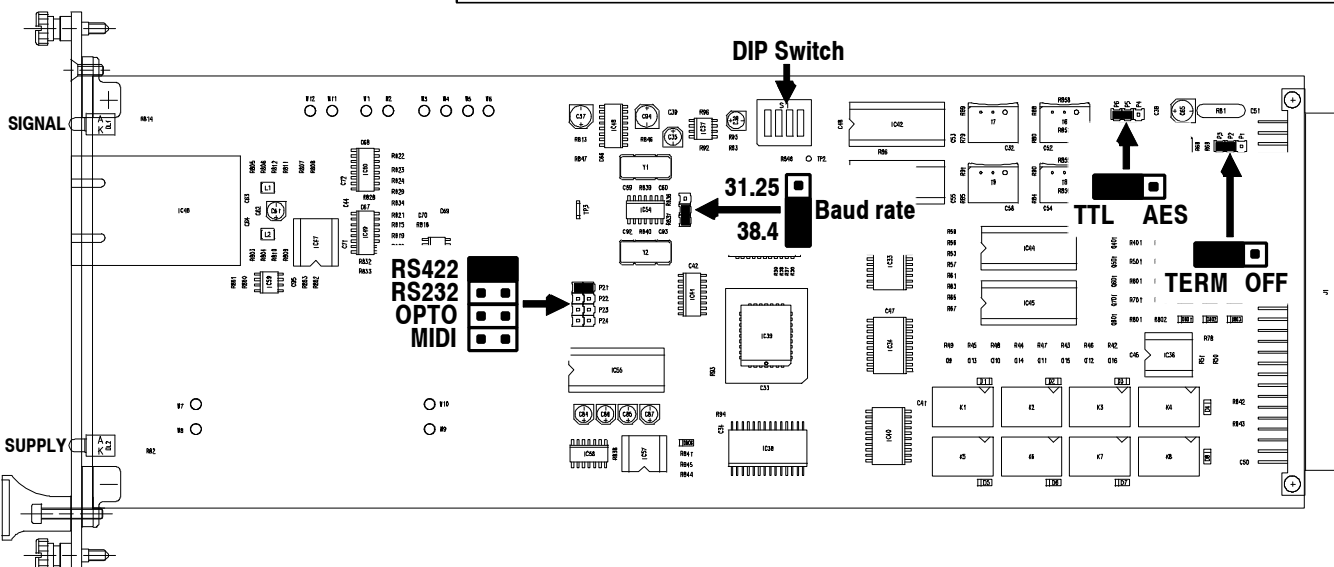
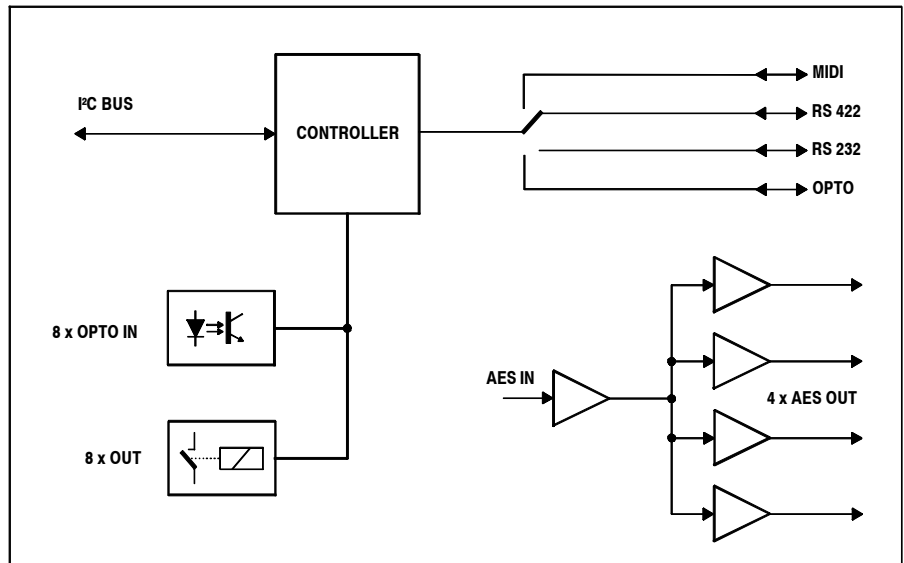
**2.1.5 D19m RCC – Remote Ctrl. Card for MP4RC Mic/Line In**

1.940.576



The purpose of the RCC card is controlling up to 14 Mic/Line input cards (pre-amps). Gain, high-pass filter, phantom powering and limiter (clip protection) can be set. In contrast to the audio cards, this card *must* be inserted into the 16<sup>th</sup> slot, i.e. the last one on the backplane, *and it works only in conjunction with the backplane version 1.940.551*. Control of the Mic/Line inputs is performed by an I<sup>2</sup>C bus on the backplane. For various signaling purposes, 8 opto-coupled inputs and 8 relay outputs can be used. An AES/EBU signal can be distributed to 4 outputs, primarily used for sync signal distribution. The standard 110 Ω input impedance of this AES/EBU input can be switched to hi-Z by means of a jumper, which allows to use the same signal also for syncing e.g. a MAD0 card.

Usually the D19m rack is controlled by a D950 mixing console (stagebox system). In this application, an RS422 signal is used for control. This control signal can be transmitted in balanced mode or via an optical interface. For other purposes, RS232 or MIDI control is possible as well. The baud rate of the control link can be jumper-selected to 31.25 or 38 kBaud. If more than one stagebox is used, they must be linked to the mixing console in a star configuration.



- LEDs:**                    *SIGNAL*    Indicates “control interface active”.  
                               *SUPPLY*    Indicates “power on” status.
- Jumpers:**                *RS422*    Control interface via RS422.  
                               *RS232*    Control interface via RS232.  
                               *OPTO*    Control interface via fiber optics.  
                               *MIDI*     Control interface via MIDI.  
                               *Baud rate*    Switchable 38/31.25 kBaud (MIDI).  
                               *TTL / AES*    Sync input from bus or from AES/EBU input.  
                               *TERM / OFF*    Termination for AES/EBU input (110 Ω – “TERM”, or hi-Z – “OFF”).
- DIP Switch:**            #1...4    For factory testing only; *standard setting for normal operation: all OFF*.

**Technical Data:**

AES/EBU input	Input impedance	110 Ω or hi-Z (selected w. jumper)
	Input sensitivity	min. 200 mV
AES/EBU output	Output impedance	110 Ω
	Output level (into 110 Ω)	5 V
Input level signaling		2.5...48 V
Relay output		1 A, 100 V, 30 W
Current consumption 5 V (with optical interface)		max. 0.9 A
Operating temperature range		0...40° C

**Pin Assignment:**

96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC	SCL	SDA
4	GND	GND	GND
5	AESIN+	GND	AESIN-
6	AES1OUT+		AES1OUT-
7	AES2OUT+		AES2OUT-
8	AES3OUT+	GND	AES3OUT-
9	AES4OUT+	GND	AES4OUT-
10	IN1+		IN1-
11	IN2+		IN2-
12	IN3+		IN3-
13	IN4+		IN4-
14	IN5+	GND	IN5-
15	IN6+	RS232RX	IN6-
16	IN7+	GND	IN7-
17	IN8+	GND	IN8-
18	TA		TB
19	RA	MGND	RB
20	R1A	R1R	R1G
21	R2A	R2R	R2G
22	R3A	R3R	R3G
23	R4A	R4R	R4G
24	R5A	RS232TX	R5G
25	R6A	MIDI IN+	R6G
26	R7A	MIDI IN-	R7G
27	R8A	MIDI T+	R8G
28	MIDI T-	MIDI O+	MIDI O-
29			
30			
31			
32	MGND	MGND	MGND

- MGND    Chassis                    MIDI XXX    MIDI control interface  
 GND     Ground                        R..A        Relay output: Normally open contact  
 SYNC    Sync input TTL                R..R        Relay output: Normally closed contact (relay 1 to 4 only)  
 SCL, SDA    I<sup>2</sup>C Bus                        R..G        Relay output: Common  
 TA, TB    RS422 control output  
 RA, RB    RS422 control input  
 RS232 RX, TX    RS232 control interface

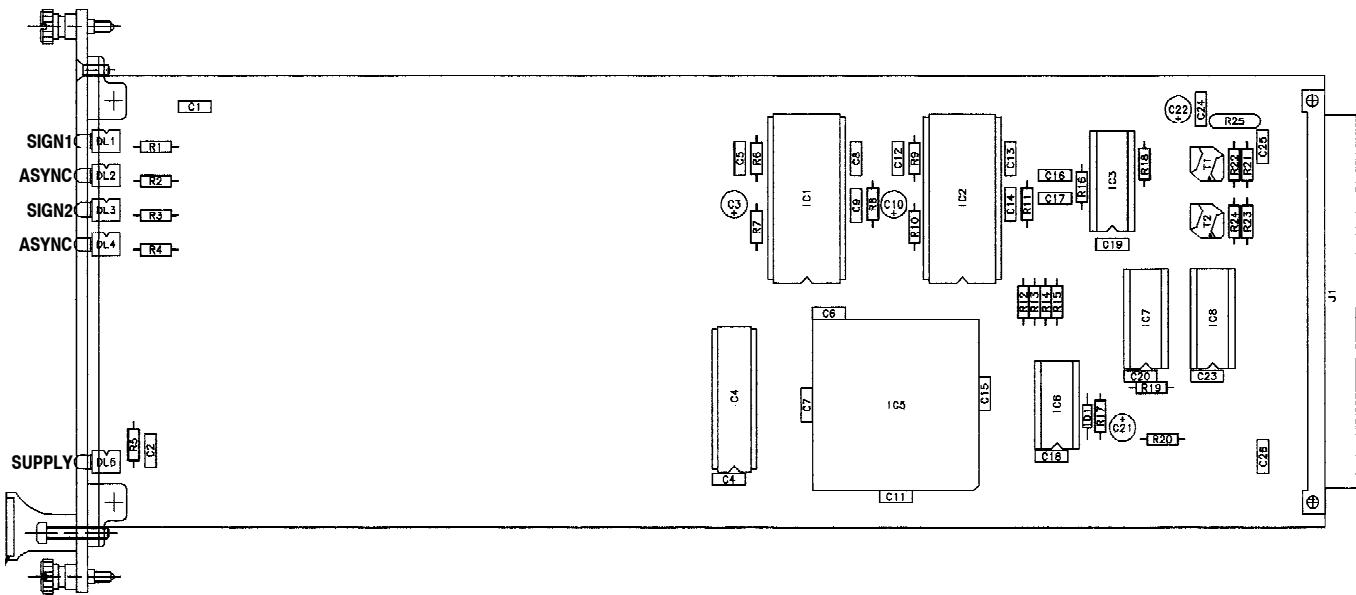
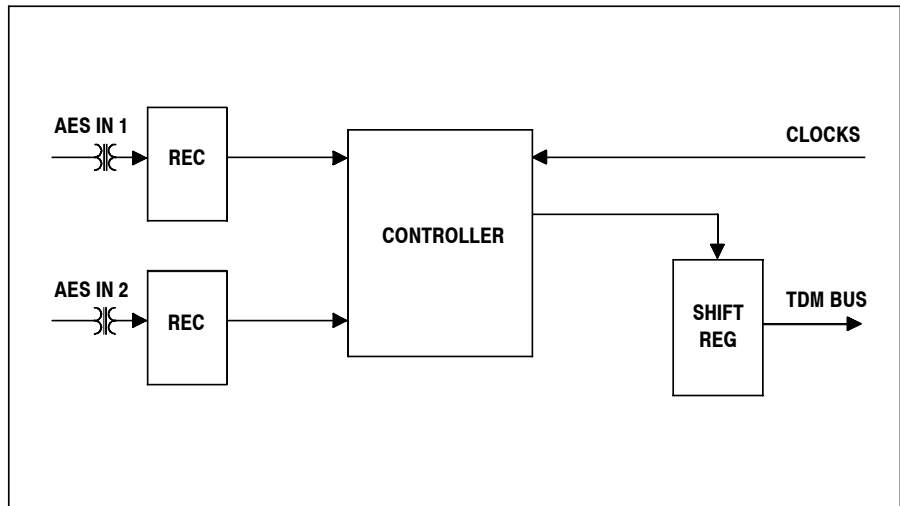
## 2.2 AES/EBU I/O Cards

### 2.2.1 D19m AESI – Dual AES/EBU In

1.940.580



The AESI card routes two AES/EBU input signals to the TDM bus, where they are read from a MADO card and can then be output through a MADI link. The sampling frequency can be between 28 kHz and 55 kHz. The channel status information is transmitted to the TDM bus without changes



- LEDs:**
- SIGN 1/2* The LEDs are ON when a valid AES/EBU signal is available at the inputs IN1 or IN2.
  - ASYNC 1/2* The LEDs are ON when the input signal is not synchronized to the system clock.
  - SUPPLY* Indicates “power on” status.

**Technical Data:**

AES/EBU inputs	Impedance	110 Ω
	Sensitivity	min. 200 mV
Power consumption	5 V	Max. 0.3 A
Input sampling frequency		28 kHz...55 kHz
Operating temperature range		0...+40° C

**Pin Assignment:**

96-pin DIN 41612 female

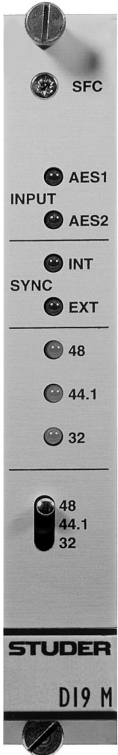
Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3			
4	GND	GND	GND
5		GND	
6	AES1IN+	GND	AES1IN-
7		GND	
8	AES2IN+	GND	AES2IN-
9		GND	
10	/D0	/BA0	/D8
11	/D1	/BA1	/D9
12	/D2	/BA2	/D10
13	/D3	/BA3	/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22			
23	MGND	MGND	MGND
24			
25	MGND	MGND	MGND
26			
27	MGND	MGND	MGND
28			
29			
30			
31			
32	MGND	MGND	MGND

MGND  
GND  
AES/DSD BUS  
BA0...BA3  
/D0.../D15  
/FRAME, /CK128

Chassis  
Ground  
TDM bus active  
Card address (ID)  
Inverted data on the TDM bus  
Clocks TDM bus

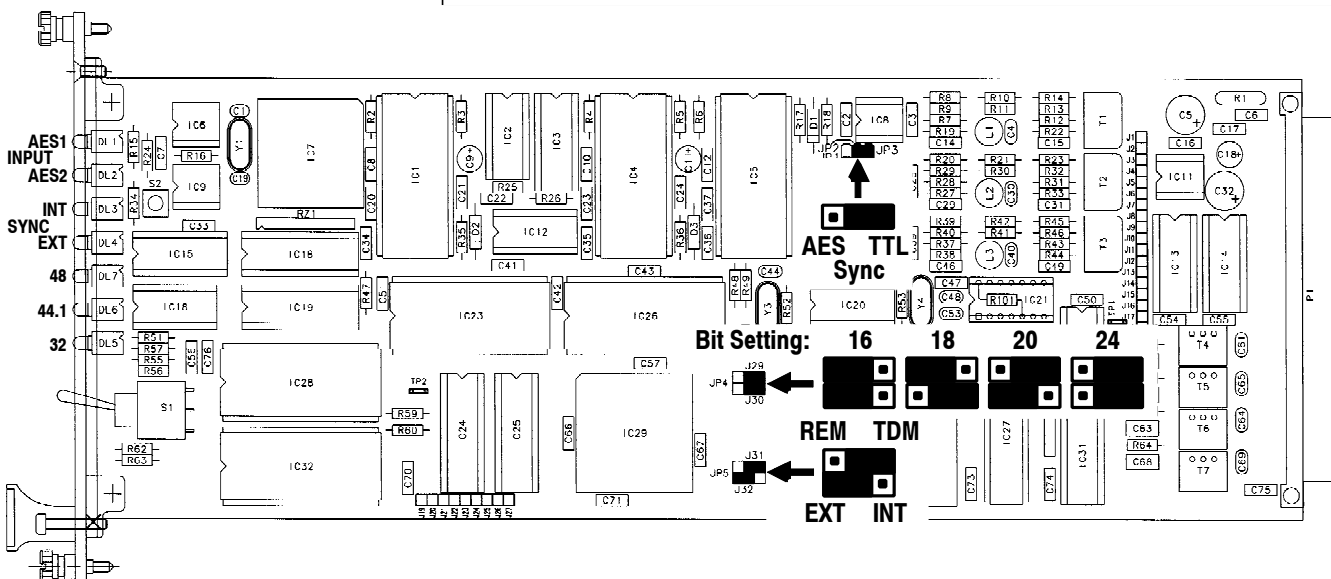
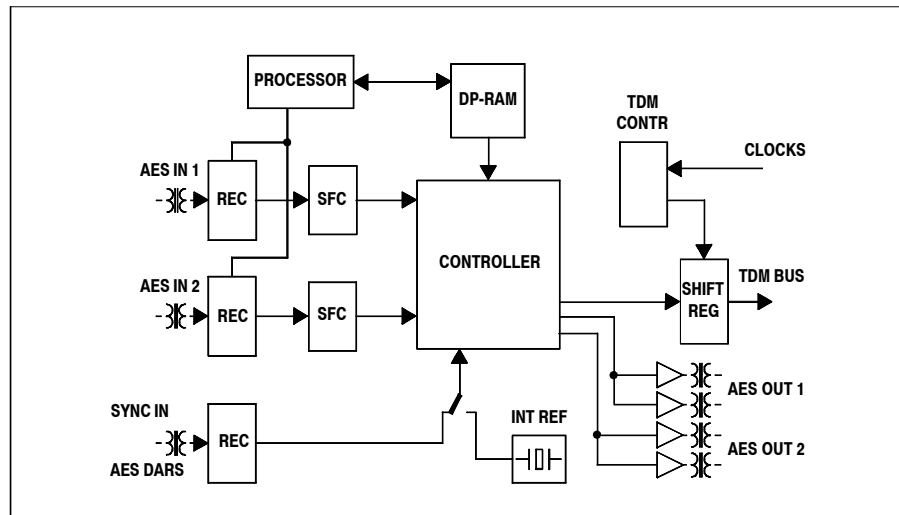
**2.2.2 D19m AESI SFC – Dual AES/EBU In w. Asynchronous SFC**

1.940.540



The AESI SFC card can be used for standalone applications as well as for the D19m rack. It routes two asynchronous AES/EBU input signals to the TDM bus, where they are read from a MADO card and can then be output through a MADI link. At the same time, each of the two AES/EBU inputs is fed to two AES/EBU outputs.

The AESI SFC card can be used next to the other D19m cards in a D19m rack. Incoming AES/EBU signals are converted via a sampling frequency converter either to an internal sampling frequency (32 kHz, 44.1 kHz, or 48 kHz, selectable with a front panel switch), or to the sampling frequency of an external sync signal. When the external sync signal fails, the internal sync reference will be used automatically. The input and output sampling frequencies can be between 25 kHz and 55 kHz, and their ratio must be between 0.5 and 2. The channel status information will be transmitted from the inputs to the outputs, and the sampling frequency information will be corrected correspondingly.



- LEDs:**
- INPUT AES1/2* The LEDs are on when a valid AES/EBU signal is available at the input IN1 or IN2.
  - SYNC INT/EXT* Depending on how the card is synced, the corresponding LED is on.



*SYNC INT* = the internal sync generator is used (in case no external sync signal is available).

*SYNC EXT* = TTL sync or AES sync input is used.

48/44.1/32 The current sampling frequency of the digital output will be indicated.

**Jumpers:**

*AES / TTL* *AES*: The sync input from the AES/EBU input is used (in case of standalone use of the SFC card).

*TTL*: The sync input from the D19m rack is used. The internal TTL sync signal is generated by the MADO card in a D19m MUX frame.

*Bit Setting* 16, 18, 20, 24 bit.

*REM / TDM* *TDM* (default): no U-bit handling.

*REM* (remote): will be used for additional external U-bit handling (not implemented yet).

*EXT / INT* *INT* (internal): the internal reference is used, independent of the sync input.

*EXT* (external): the card is synced to the AES sync input (jumper AES-TTL set to AES) or to the TTL sync (jumper AES-TTL set to TTL).

**Technical Data:**

AES/EBU inputs	Impedance	110 Ω
	Sensitivity	min. 200 mV
AES/EBU outputs	Impedance	110 Ω
	Output level (into 110 Ω)	4 V
Dynamic range	20 Hz...20 kHz, -60 dB <sub>FS</sub>	> 120 dB
THD + N	20 Hz...20 kHz, 0 dB <sub>FS</sub>	< 94 dB <sub>FS</sub>
	1 kHz, 0 dB <sub>FS</sub> , f <sub>s</sub> in/ f <sub>s</sub> out 0.7...1.4	< 106 dB <sub>FS</sub>
Audio delay		3 ms
Power consumption	5 V	max. 0.55 A
Input sampling frequency		25 kHz...55 kHz
Operating temperature range		0...+40 C

**Pin Assignment:**

96-pin, DIN 41612, female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC	/H I <sup>2</sup> C	/D I <sup>2</sup> C
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	AES1IN+	GND	AES1IN-
7		GND	
8	AES2IN+	GND	AES2IN-
9		GND	
10	/D0	/BA0	/D8
11	/D1	/BA1	/D9
12	/D2	/BA2	/D10
13	/D3	/BA3	/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	/U
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22	AES1AOUT+		AES1AOUT-
23	MGND	MGND	MGND
24	AES1BOUT+		AES1BOUT-
25	MGND	MGND	MGND
26	AES2AOUT+		AES2AOUT-
27	MGND	MGND	MGND
28	AES2BOUT+		AES2BOUT-
29			
30			
31			
32	MGND	MGND	MGND

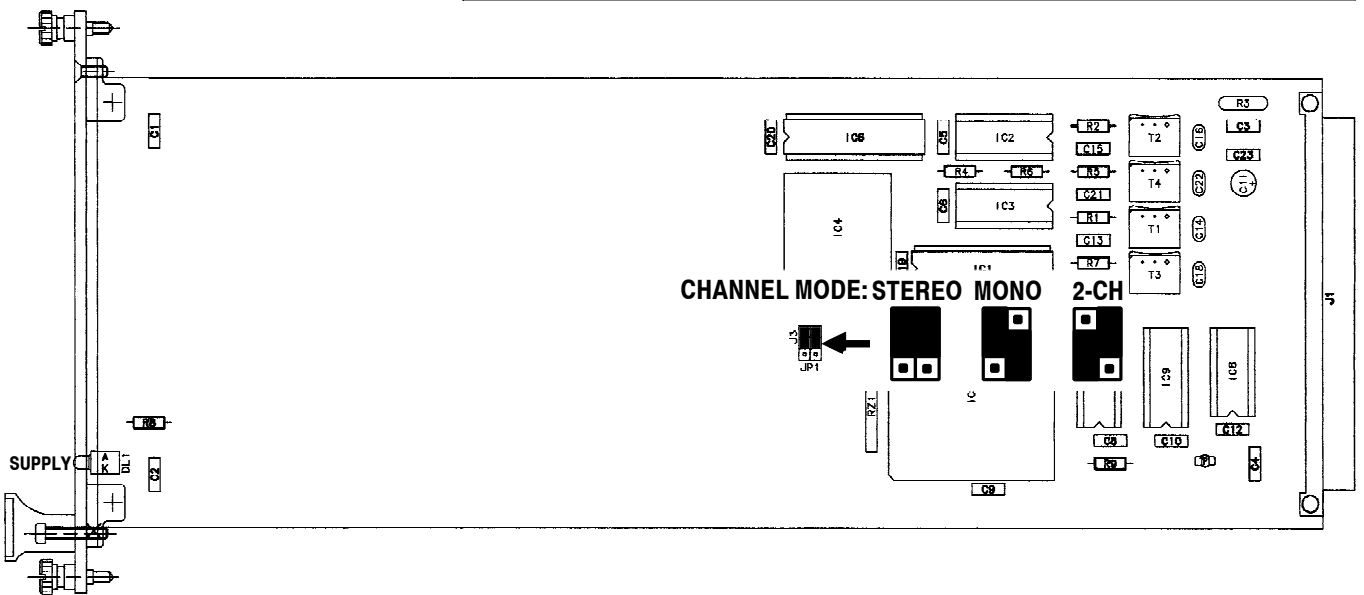
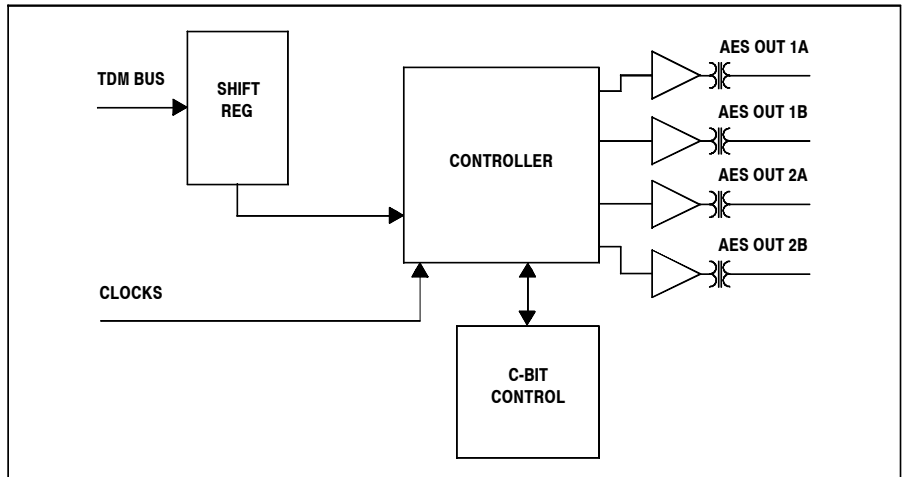
MGND	Chassis
GND	Ground
SYNC	Sync input TTL
AES/DSD BUS	Switchover between standalone and TDM application
BA0...BA3	Card address (ID)
/D0.../D15	Inverted data on the TDM bus
/U	Inverted U-bit
/FRAME, /CK128	Clocks TDM bus

**2.2.3 D19m AESO – Dual AES/EBU Out**

1.940.585



The AESO card has been developed for the use in the D19m rack. On one card, four channels coming from the TDM bus are converted to either two AES/EBU outputs (stereo or two-channel), or to 4 AES/EBU outputs (mono). The signal on the TDM bus is normally coming from the MADI card (input). The channel status information is transmitted from the TDM bus to the AES/EBU outputs, according to the jumper settings.



- LED:** *SUPPLY* Indicates “power on” status.
- Jumpers:**
  - MONO* Each TDM channel will be set to an AES/EBU channel, e.g.:  
 CH1 – AES out 1a / CH2 – AES out 1b  
 CH3 – AES out 2a / CH4 – AES out 2b.
  - STEREO* Two channels from the TDM bus are available as STEREO pair on two AES/EBU channels, e.g.:  
 CH1/CH2 – AES out 1, LEFT/RIGHT  
 CH3/CH4 – AES out 2, LEFT/RIGHT.
  - 2-CH* Two TDM channels are available as a two-channel pair on two AES/EBU channels, e.g.:  
 CH1/CH2 – AES out 1, CH1/CH2  
 CH3/CH4 – AES out 2, CH3/CH4.

**Technical Data:**

AES/EBU outputs	Impedance	110 $\Omega$
	Output level with 110 $\Omega$ load	5 V
Power consumption	5 V	max. 0.3 A
Input sampling frequency		28...55 kHz
Temperature range		0...+40° C

**Pin Assignment:**

96-pin, DIN 41612, female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3			
4	GND	GND	GND
5		GND	
6	AES1AOUT+	GND	AES1AOUT-
7	AES1BOUT+	GND	AES1BOUT-
8	AES2AOUT+	GND	AES2AOUT-
9	AES2BOUT+	GND	AES2BOUT-
10	/D0	/BA0	/D8
11	/D1	/BA1	/D9
12	/D2	/BA2	/D10
13	/D3	/BA3	/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22			
23	MGND	MGND	MGND
24			
25	MGND	MGND	MGND
26			
27	MGND	MGND	MGND
28			
29			
30			
31			
32	MGND	MGND	MGND

MGND

GND

BA0...BA3

/D0.../D15

/FRAME, /CK128

Chassis

Ground

Card address (ID)

Inverted data on the TDM bus

Clocks TDM bus



**Technical Data:**

SYNC input (AES/EBU signal)	Impedance	110 $\Omega$
	Sensitivity	min. 200 mV
AES/EBU outputs	Impedance	110 $\Omega$
	Output level with 110 $\Omega$ load	5 V
Input sampling frequency		28...56 kHz
Output sampling frequency		28...108 kHz
Input/output sampling frequency ratio		1:3 ... 3:1
Power consumption	5 V	max. 0.35 A
Temperature range		0...+40° C

**Pin Assignment:**

96-pin, DIN 41612, female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	AES1AOUT+	GND	AES1AOUT-
7	AES1BOUT+	GND	AES1BOUT-
8	AES2AOUT+	GND	AES2AOUT-
9	AES2BOUT+	GND	AES2BOUT-
10	/D0	/BA0	/D8
11	/D1	/BA1	/D9
12	/D2	/BA2	/D10
13	/D3	/BA3	/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22			
23	MGND	MGND	MGND
24			
25	MGND	MGND	MGND
26			
27	MGND	MGND	MGND
28			
29			
30			
31			
32	MGND	MGND	MGND

MGND	Chassis
GND	Ground
SYNC	Sync input TTL
BA0 .. BA3	Card address
/D0.../D15	Inverted data on the TDM bus
/FRAME, /CK128	Clocks TDM Bus

## 2.3 MADI I/O Cards

### 2.3.1 D19m MADI – MADI In for Coaxial Cable

1.940.500

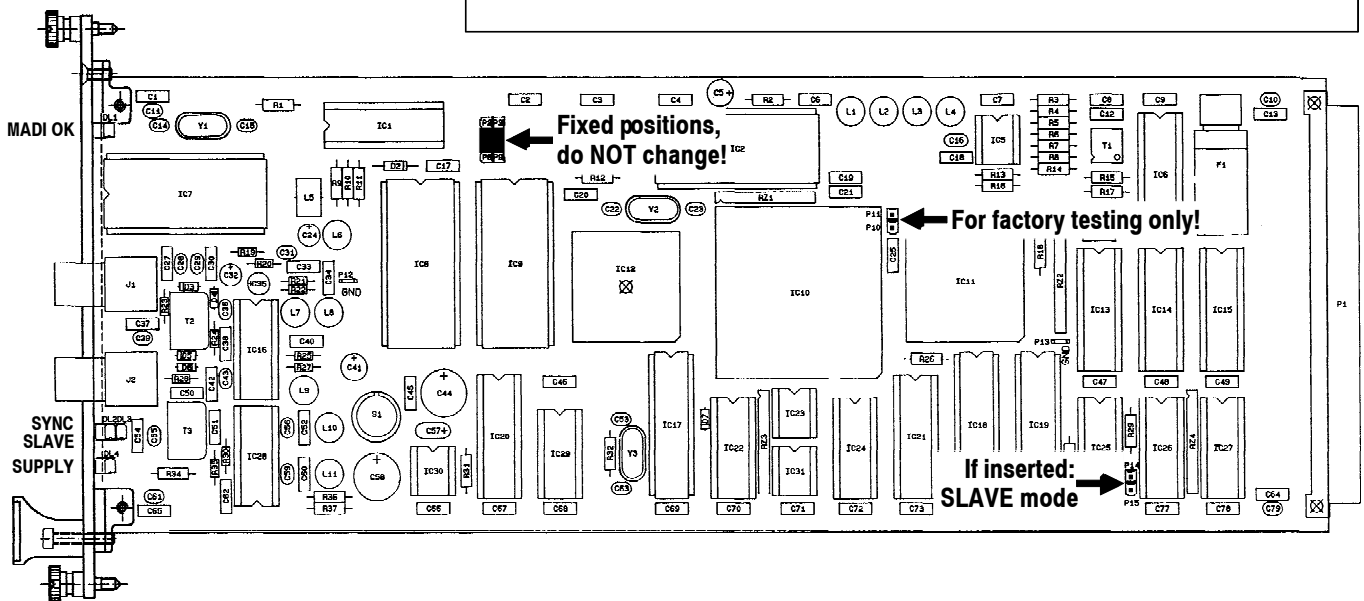
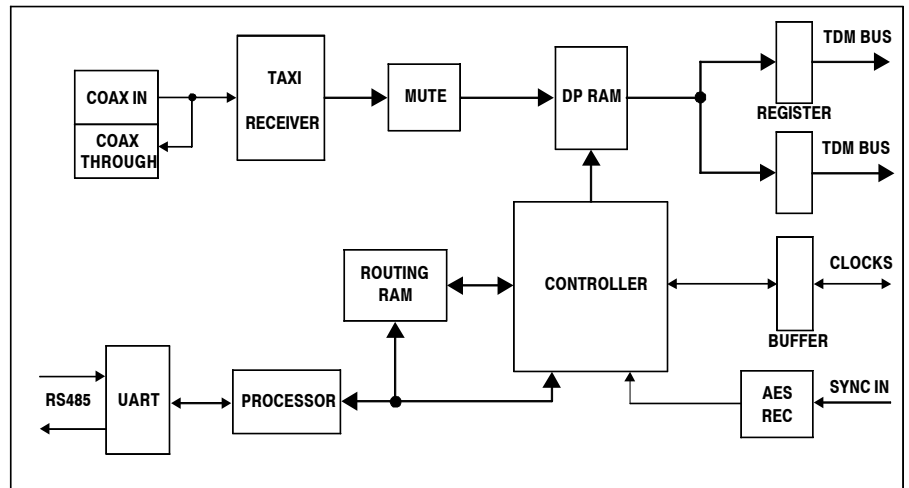


The MADI card is used as a demultiplexer for the MADI input signal in a D19m rack. The MADI input signal will be converted to the TDM bus. AESO cards as well as A/D cards (output cards) receive their signals from the TDM bus. Any MADI channel can be routed to any output card. The MADI card is equipped with a coaxial input (BNC connector) as well as a BNC “through” output.

In standard applications the MADI card is synchronized via the AES sync input of the D19m rack. It generates the required clock signal for the TDM bus as well as the TTL sync signal for the output cards.

If the MADI card is set to SLAVE mode, it will receive the sync and clock signals from the backplane.

Via the RS485 interface the MADI card can be remote controlled. In that case the frame address will be set via the DIP switches on the backplane.



- LEDs:**
- MADI OK* Indicates that a valid MADI input signal is connected.
  - SYNC* Indicates that the card is synchronized to the sync source.
  - SLAVE* Card is configured as slave on the TDM bus.
  - SUPPLY* Indicates “power on” status.

**Jumpers:** *SLAVE* If this jumper is inserted, the clock and the sync signals will be read from the bus; otherwise, the MADi card writes the clock and the sync signals to the bus.

**Technical Data:**

AES/EBU sync input	Impedance	110 $\Omega$
	Sensitivity	min. 200 mV
MADI input coaxial	Connector type	BNC
	Impedance	75 $\Omega$
	Maximum cable length	50 m
Power consumption	5 V	Max. 0.8 A
Temperature range		0...+40° C

**Pin Assignment:**

96-pin DIN 41612 female

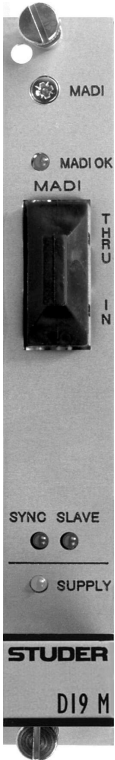
Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6		GND	
7		GND	
8		GND	
9		GND	
10	/D0		/D8
11	/D1		/D9
12	/D2		/D10
13	/D3		/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19			
20		CA0	
21		CA1	
22	TA	CA2	TB
23		CA3	
24	RA	CA4	RB
25		CA5	
26		CA6	
27		CA7	
28			
29			
30			
31			
32	MGND	MGND	MGND

MGND	Chassis
GND	Ground
SYNC	Sync Input TTL
AES/DSD BUS	Switchover standalone/TDM bus operating
BA0...BA3	Card address (ID)
/D0.../D15	Inverted data on the TDM bus
/FRAME, /CK128	Clocks TDM bus



**2.3.2 D19m MADI – MADI In for Optical Fibre Cable**

1.940.511/1.940.512



The MADI card is used as demultiplexer for the MADI input signal in a D19m rack. The MADI input signal will be converted to the TDM bus. AESO cards as well as A/D cards (output cards) receive their signals from the TDM bus. Any MADI channel can be routed to any output card.

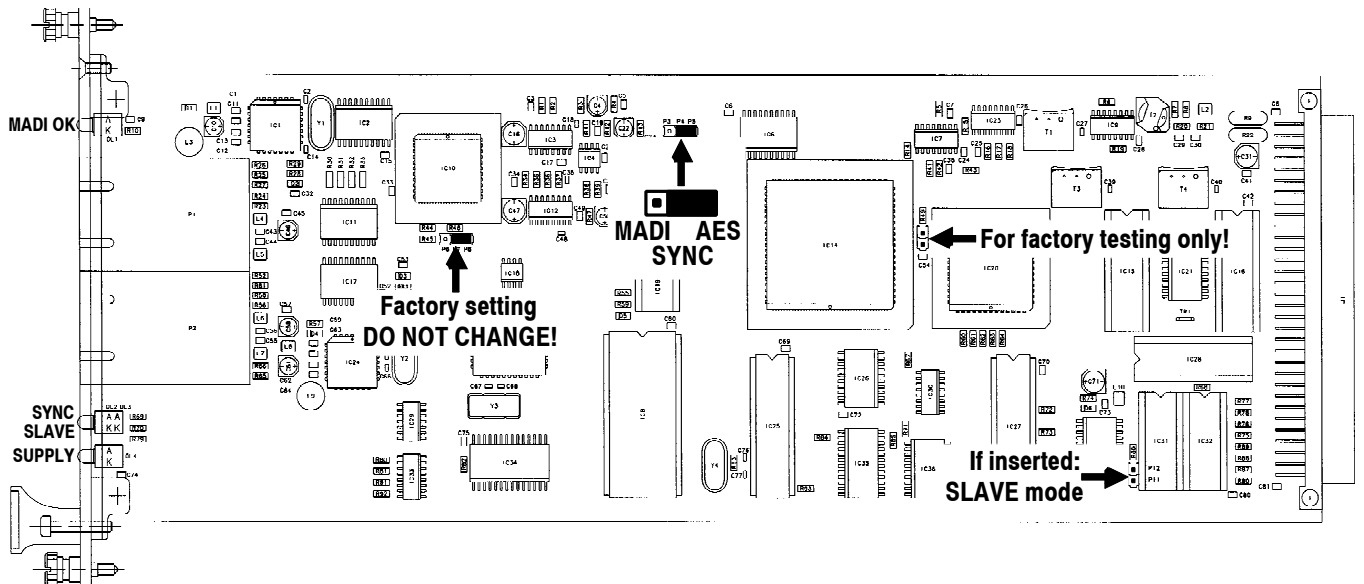
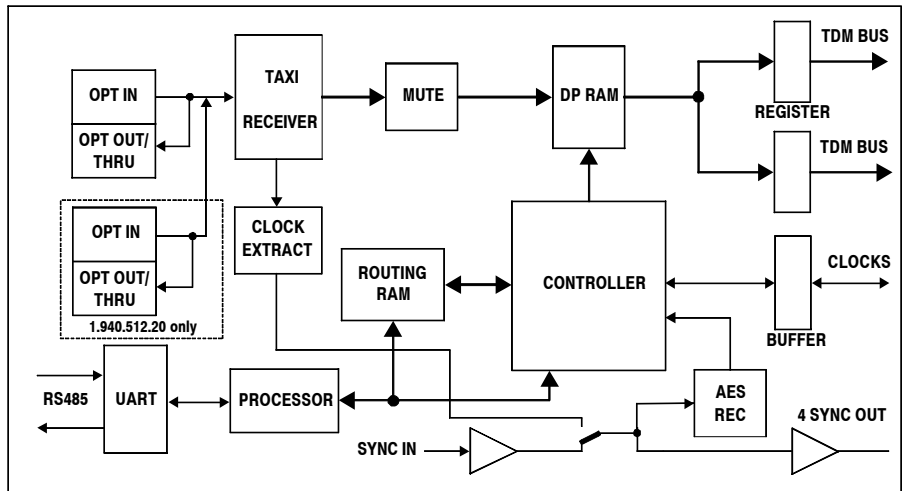
The MADI card 1.940.511 is equipped with an optical input (SC connector) as well as an optical “through” output. Version 1.940.512 (D19m MADI RED) has an additional MADI input for redundancy.

In standard applications, the MADI card is synchronized via the AES sync input of the D19m rack. It generates the required clock signal for the TDM bus as well as the TTL sync signal for the output cards.

If the MADI card is set to SLAVE mode, it will receive the sync and clock signals from the backplane. If necessary, the sync signal can be extracted from the MADI stream. However, this method is recommended only for long distances and stagebox applications, because the fault tolerance is lower and the jitter is higher (2 PLLs involved). Besides, varispeed is impossible in such a case.

Via the RS485 interface the MADI card can be remote controlled. In that case the frame address will be set via the DIP switches on the backplane.

*The earlier version 1.940.510 is equipped with an ST connector instead of the SC connector (jumper diagram at the end of this chapter).*



<b>LEDs:</b>	<i>MADI OK</i>	Indicates that a valid MADI input signal is connected.
	<i>SYNC</i>	Indicates that the card is synchronized to the sync source.
	<i>SLAVE</i>	Card is configured as slave on the TDM bus.
	<i>SUPPLY</i>	Indicates “power on” status.

<b>Jumpers:</b>	<i>SYNC MADI / AES</i>	Synchronization from MADI or AES/EBU.
	<i>SLAVE</i>	If this jumper is inserted, the clock and the sync signals will be read from the bus; otherwise, the MADI card writes the clock and the sync signals to the bus.

**Technical Data:**

AES/EBU sync input	Impedance	110 $\Omega$
	Sensitivity	min. 200 mV
AES/EBU sync output	Impedance	110 $\Omega$
	Output level (into 110 $\Omega$ )	5 V
MADI input optical	Connector type	SC
	Wave length	1300nm
	Fiber cable type multimode	62.5/120 $\mu$ m
	Maximum cable length	500 m
Power consumption	5 V	max. 1.2 A
Temperature range	0...+40 C	

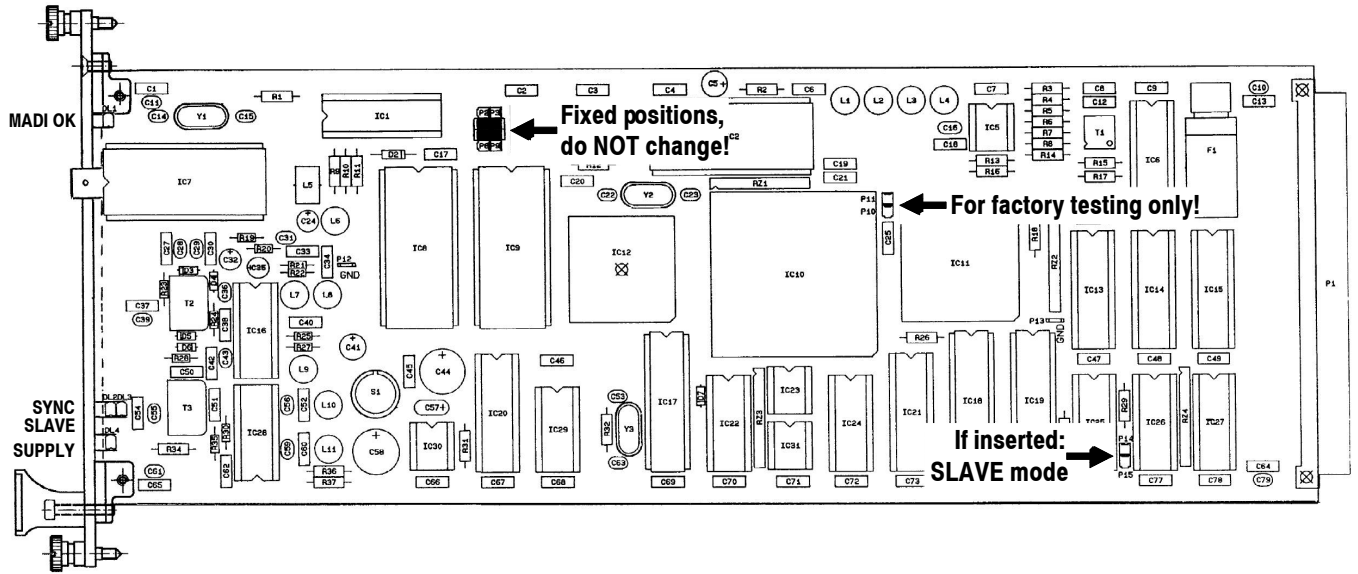
**Pin Assignment:**

96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC	HIIC	DIIC
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	AESOUT1+	GND	AESOUT1-
7	AESOUT2+	GND	AESOUT2-
8	AESOUT3+	GND	AESOUT3-
9		GND	
10	/D0		/D8
11	/D1		/D9
12	/D2		/D10
13	/D3		/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19			
20		CA0	
21		CA1	
22	TA	CA2	TB
23		CA3	
24	RA	CA4	RB
25		CA5	
26		CA6	
27		CA7	
28			
29			
30			
31			
32	MGND	MGND	MGND

MGND	Chassis	/D0.../D15	Inverted TDM Bus data
GND	Ground	/FRAME, /CK128	Clocks TDM Bus (Input in Slave Mode)
SYNC	Sync output TTL (Input in Slave Mode)	TA, TB	RS485 Output
		RA, RB	RS485 Input
AES/DSD BUS	Switchover stand alone / TDM (Input in Slave Mode)	AESOUT	Sync Output
AESSYNC	Sync Input		
CA0 .. CA7	Frame address		

**Earlier Version 1.940.510:**



**2.3.3 D19m MADO – MADI Out for Coaxial Cable**

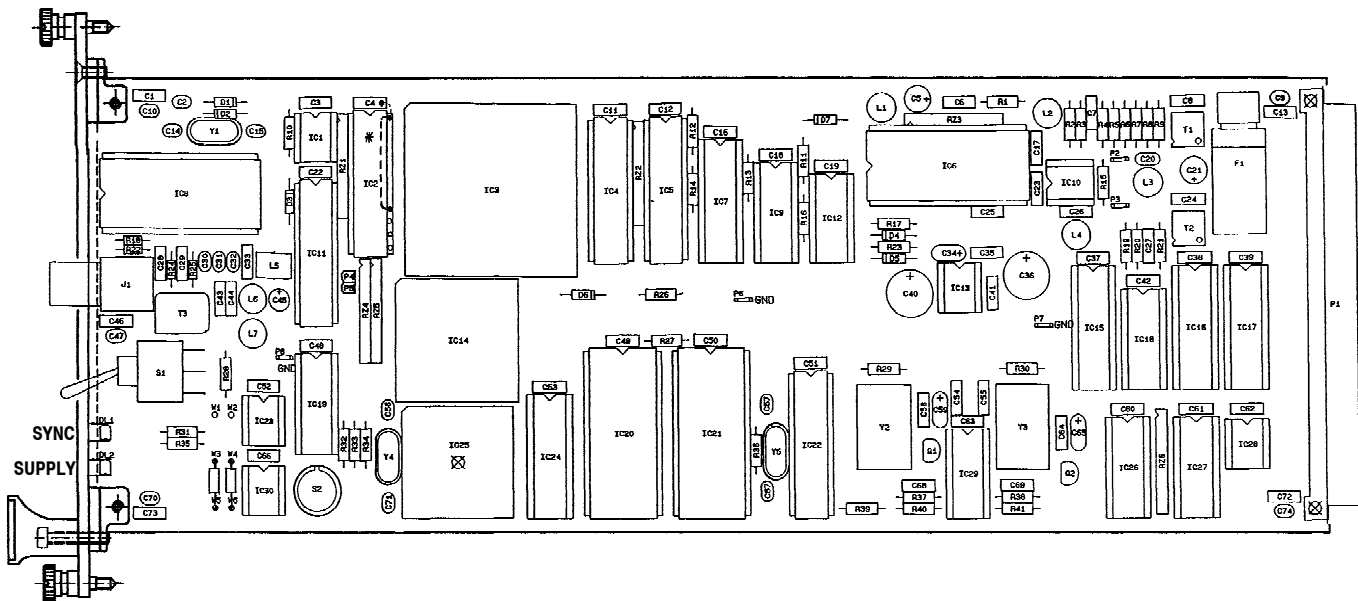
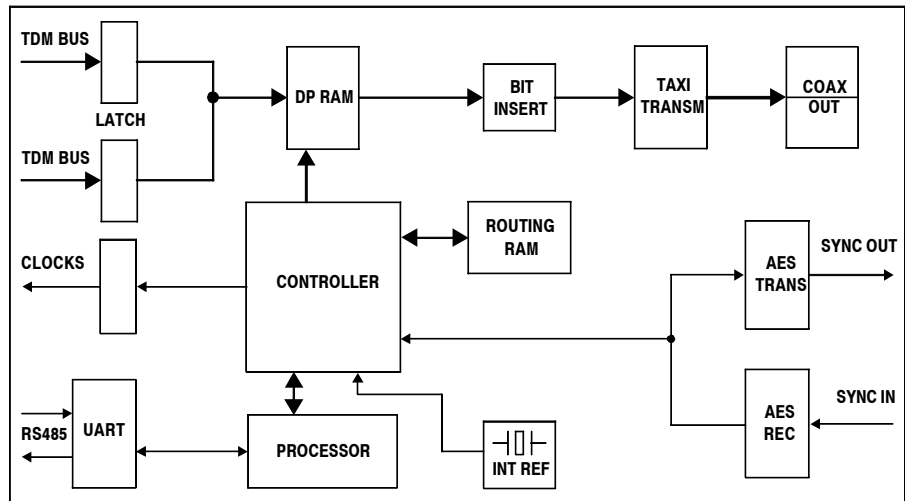
1.940.520



The “MADO” MADI output card serves as multiplexer in a D19m rack. The TDM bus data, written by analog or digital input cards to the bus, are read and output as a MADI signal. The channel allocation can be selected by the control software.

The card is synchronized by the sync input and distributes the clock signals required for the TDM bus. Four additional AES/EBU sync outputs are available. If the external sync signal is invalid, the internal generator is automatically activated and generates a sync signal. Since the frequency accuracy is  $\pm 1$  ppm and an AES/EBU signal is output as sync signal, this can be used for the synchronization of a studio.

The MADO cards can be controlled by RS485 from an external device. The frame address is set by a DIP switch on the backplane.



- LEDs:**
  - SYNC* Indicates “sync” status.
  - SUPPLY* Indicates “power on” status.
- Jumper:**
  - Pins P4/P5* For factory testing purposes only.

**Technical Data:**

AES/EBU sync input	Input impedance	110 Ω
	Input sensitivity	min. 200 mV
AES/EBU sync output	Output impedance	110 Ω
	Output level (into 110 Ω)	5 V
Internal reference 44.1/48 kHz	Clock accuracy	±1 ppm
MADI output coaxial	Connector type BNC, impedance	75 Ω
	max. length of transmission	50 m
Current consumption 5 V		max. 0.8 A
Operating temperature range		0...40° C

**Pin Assignment:**

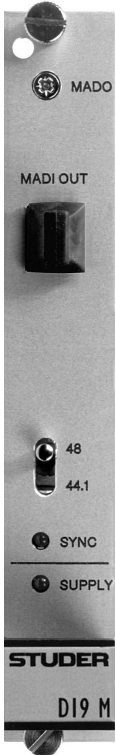
96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	AESOUT+	GND	AESOUT-
7		GND	
8		GND	
9		GND	
10	/D0		/D8
11	/D1		/D9
12	/D2		/D10
13	/D3		/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19			
20		CA0	
21		CA1	
22	TA	CA2	TB
23		CA3	
24	RA	CA4	RB
25		CA5	
26		CA6	
27		CA7	
28			
29			
30			
31			
32	MGND	MGND	MGND

MGND	Chassis
GND	Ground
SYNC	Sync output TTL
AES/DSD BUS	Switchover standalone/TDM
AESSYNC	Sync Input
AESOUT	Sync Output
CA0 .. CA7	Frame address
/D0.../D15	Inverted data TDM bus
/FRAME, /CK128	Clocks TDM bus (input in slave mode)
TA, TB	RS485 output
RA, RB	RS485 input

**2.3.4 D19m MAD0 – MADI Out for Optical Fibre Cable**

1.940.531/1.940.532



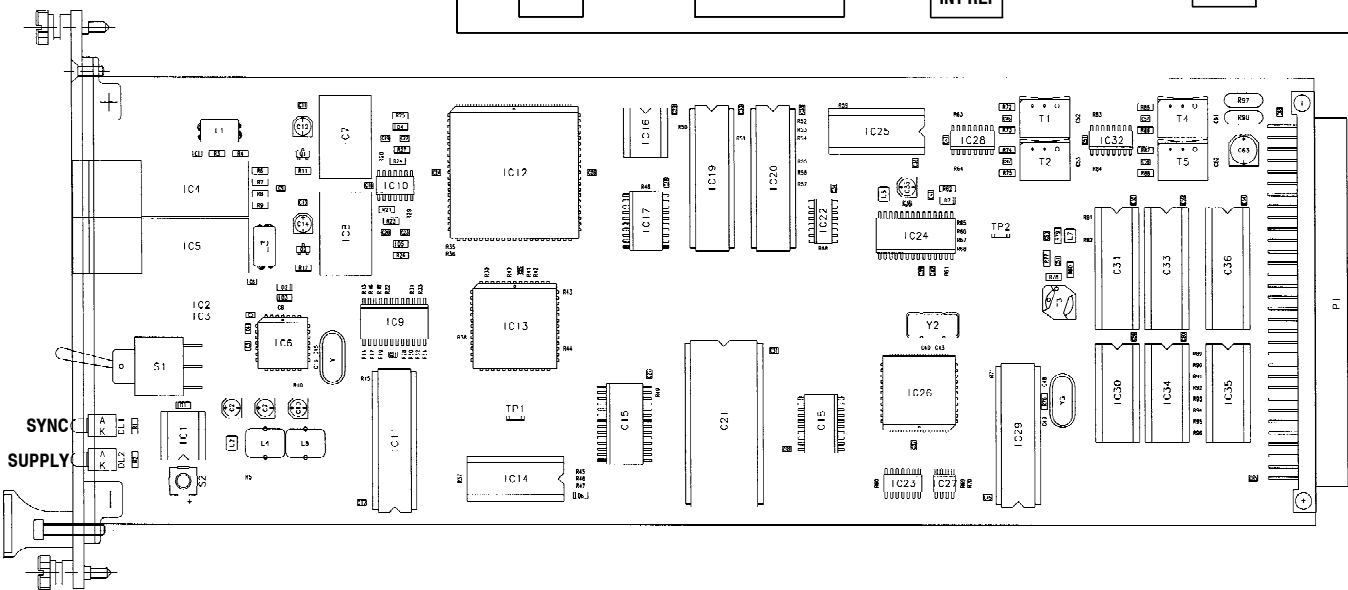
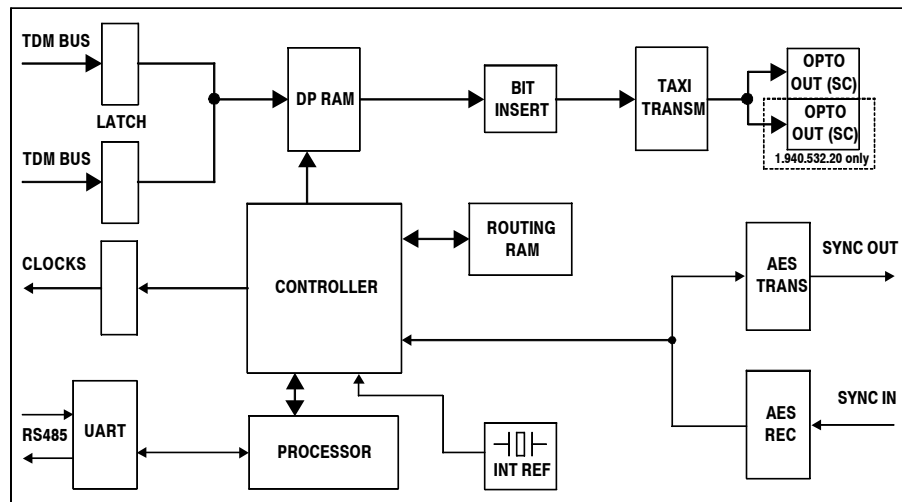
The “MADO” MADI output card serves as multiplexer in a D19m rack. The TDM bus data, written by analog or digital input cards to the bus, are read and output as a MADI signal on an SC optical connector. The channel allocation can be selected by the control software.

A second, optional optical transmitter can be installed in order to establish a redundant output (D19m MAD0 RED – order no. 1.940.532).

The card is synchronized by the sync input and distributes the clock signals required for the TDM bus. Four additional AES/EBU sync outputs are available. If the external sync signal is invalid, the internal generator is automatically activated and generates a sync signal. Since the frequency accuracy is  $\pm 1$  ppm and an AES/EBU signal is output as sync signal, this can be used for the synchronization of a studio.

The MADO cards can be controlled by RS485 from an external device. The frame address is set by a DIP switch on the backplane.

*The earlier version 1.940.530 is equipped with an ST connector instead of the SC connector (diagram at the end of this chapter).*



**LEDs:** *SYNC* Indicates “sync” status.  
*SUPPLY* Indicates “power on” status.

**Technical Data:**

AES/EBU sync input	Input impedance	110 Ω
	Input sensitivity	min. 200 mV
AES/EBU sync output (4x)	Output impedance	110 Ω
	Output level (into 110 Ω)	5V
Internal reference 44.1/48 kHz	Clock accuracy	±1 ppm
MADI output optical	Connector type	SC
	Wave length	1300nm
	Fiber cable type multimode	62.5/120 μm
	max. length for transmission	500 m
Current consumption 5V		max. 1 A
Operating temperature range		0... 40°C

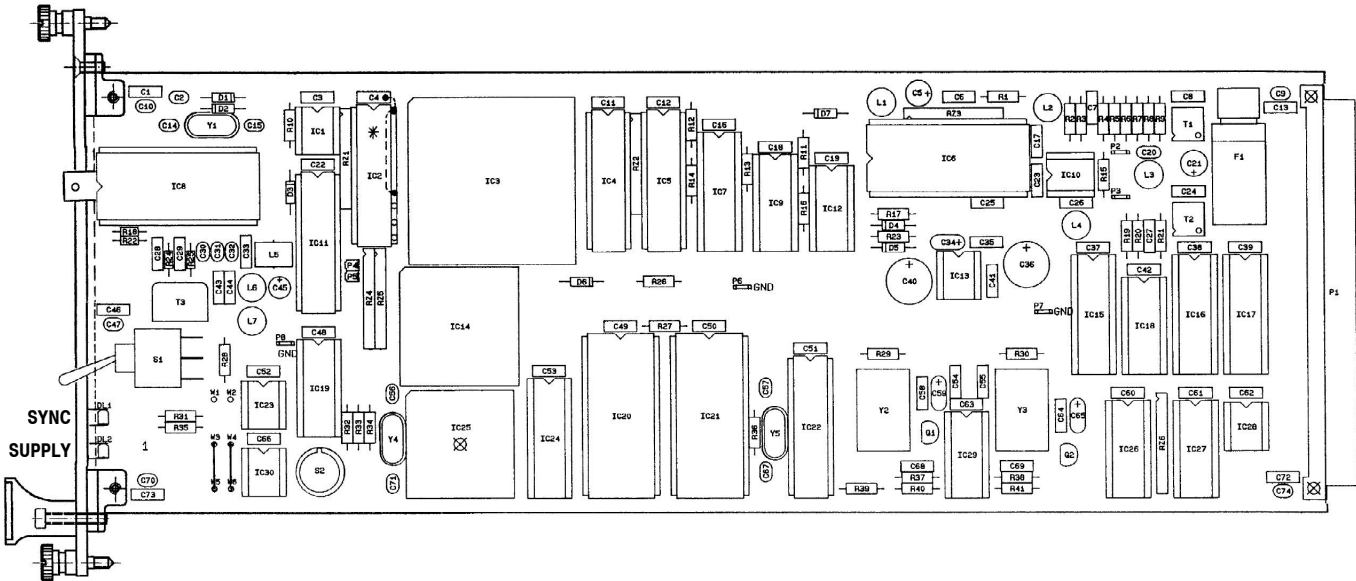
**Pin Assignment:**

96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	AESOUT1+	GND	AESOUT1-
7	AESOUT2+	GND	AESOUT2-
8	AESOUT3+	GND	AESOUT3-
9	AESOUT4+	GND	AESOUT4-
10	/D0		/D8
11	/D1		/D9
12	/D2		/D10
13	/D3		/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19			
20		CA0	
21		CA1	
22	TA	CA2	TB
23		CA3	
24	RA	CA4	RB
25		CA5	
26		CA6	
27		CA7	
28			
29			
30			
31			
32	MGND	MGND	MGND

MGND	Chassis
GND	Ground
SYNC	Sync Output TTL
AES/DSD BUS	Switchover standalone/TDM
AESSYNC	Sync Input
AESOUT	Sync Output
CA0 .. CA7	Frame address
/D0.../D15	Inverted TDM bus data
/FRAME, /CK128	Clocks TDM bus (input in slave mode)
TA, TB	RS485 Output
RA, RB	RS485 Input

Earlier Version 1.940.530:





## 2.4 TDIF I/O Cards

### 2.4.1 D19m TDIFI – Dual 8-Channel TDIF In

1.940.480/1.940.481



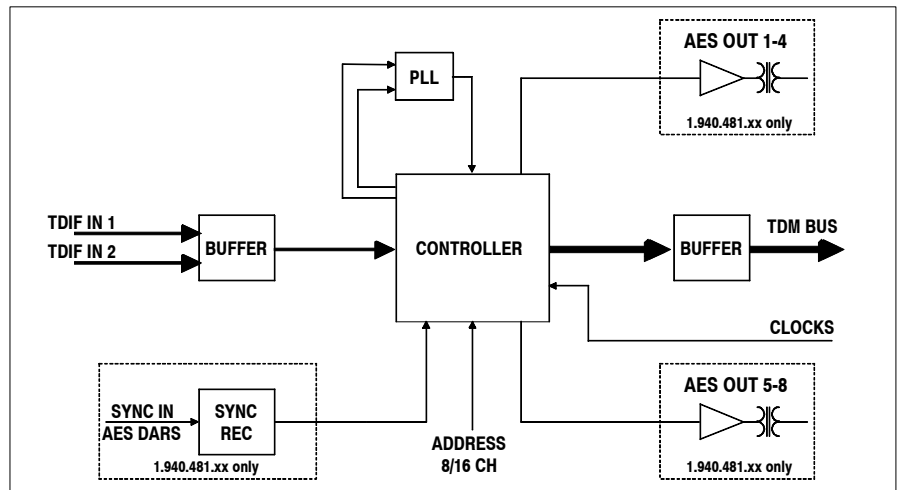
Two TDIF inputs are routed to the TDM bus, where they are read from a MADO card and can then be output through a MADI link.

The second version of this card (1.940.481) is equipped with additional AES/EBU outputs for standalone applications. For this purpose, also an AES/EBU receiver for synchronization, output transformers, and drivers are provided.

The input sampling frequency can be between 28 kHz and 55 kHz.

The TDM output occupies the addresses of 4 slots (16 signals). The addresses are set via DIP switches. In cases where only one TDIF input is needed, it is possible to use eight TDM signals only by setting a jumper (8/16CH) on the card.

**Sync:** The synchronization comes usually from the TDM bus. In standalone applications an AES/EBU sync input provides the synchronization.

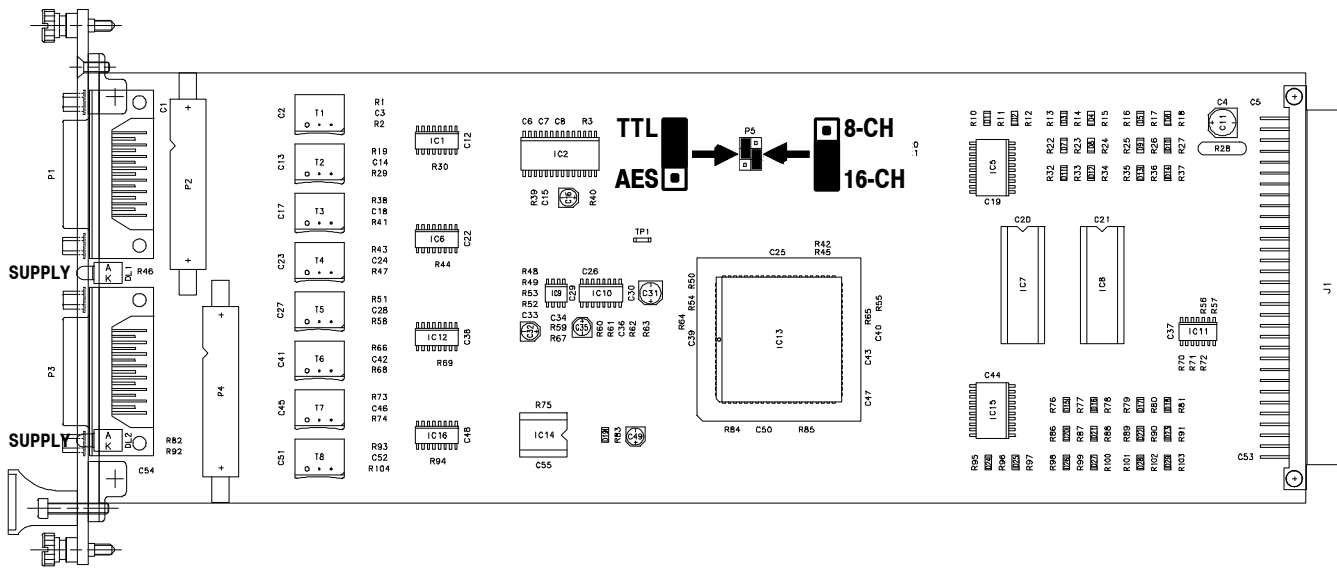


**Configuration:** On standard cards, the card address is given by the physical slot on the backplane itself; this means that the card in slot 0 occupies the channels 1 to 4, the second slot corresponds to channels 5 to 8, etc. Since the TDIF card provides 16 inputs instead of 4, the card addresses have to be configured via DIP switches (card addresses 0 to 12).



*Please be careful to correctly set the card addresses because of potential conflicts with other cards. Typically, the lower slots are used for standard 4-channel cards; the TDIF interfaces are moved to the higher addresses.*

Card address	CH no., single input used	CH no., both inputs used	DIP Switch			
			1	2	3	4
0	1...8	1...16	on	on	on	on
1	5...12	5...20	off	on	on	on
2	9...16	9...24	on	off	on	on
3	13...20	13...28	off	off	on	on
4	17...24	17...32	on	on	off	on
5	21...28	21...36	off	on	off	on
6	25...32	25...40	on	off	off	on
7	29...36	29...44	off	off	off	on
8	33...40	33...48	on	on	on	off
9	37...44	37...52	off	on	on	off
10	41...48	41...56	on	off	on	off
11	45...52	not allowed	off	off	on	off
12	49...56	not allowed	on	on	off	off



**LED:** *SUPPLY* Indicates “power on” status (*this LED is located in different positions for the two versions 1.940.480 and 1.940.481*).

**Jumpers:** *8-CH / 16-CH* Switchover between 8 or 16 channels to TDM bus.  
*TTL / AES* Sync selection – from TDM bus, or from AES/EBU sync input (*this jumper is available for version 1.940.481 only*).

**Technical Data:**

AES/EBU input (1.940.481 only)	Input impedance		110 Ω
	Input sensitivity		min. 200 mV
AES/EBU outputs (1.940.481 only)	Output impedance		110 Ω
	Output level (into 110 Ω)		5 V
TDIF input			according to TDIF specifications
Current consumption	5 V	1.940.480	max. 0.3 A
		1.940.481	max. 0.7 A
Input sampling frequency			28...55 kHz
Operating temperature range			0...40° C

**TDIF Interface PCB**

Both a TDIF input and a TDIF output card can be connected to one of the two 25-pin D-type sockets on the TDIF Interface PCB 1.940.632. In this way, the inputs and outputs of two 8-channel digital recorders (e.g. DA-88) may be connected with one single cable each.

For the connection to the backplane, two 16-pin flat cables are used. Furthermore, the TDIF Interface PCB connects to a BNC connector panel handling the sync signals.

**Note:** The TDIF interface is suitable for short distances only. Even with high-quality cable, a length of 5 m must not be exceeded.

**DA-88 Synchronization:**

When using, for example, a DA-88 unit, a word clock signal must be sent over a separate line, because the DA-88 cannot sync to the LRCK signal. For this purpose, the BNC Board 1.940.633 is available. It can be connected to the TDIF Interface Card 1.940.632.

**Note:** *The phase position of the word clock signal is very critical. No other word clock signal must be used in this application.*

**Pin Assignment:**

TDIF Interface (25-pin D-type female):

Pin	Signal	Pin	Signal
1	(DOUT 1/2)	14	(GND)
2	(DOUT 3/4)	15	(GND)
3	(DOUT 5/6)	16	(GND)
4	(DOUT 7/8)	17	(GND)
5	(LRCK OUT)	18	(EMPHASIS OUT)
6	(FS 1 OUT)	19	(FS 0 OUT)
7	-	20	FS 0 IN
8	FS 1 IN	21	EMPHASIS IN
9	LRCK IN	22	GND
10	DIN 7/8	23	GND
11	DIN 5/6	24	GND
12	DIN 3/4	25	GND
13	DIN 1/2		

**Pin Assignment:**

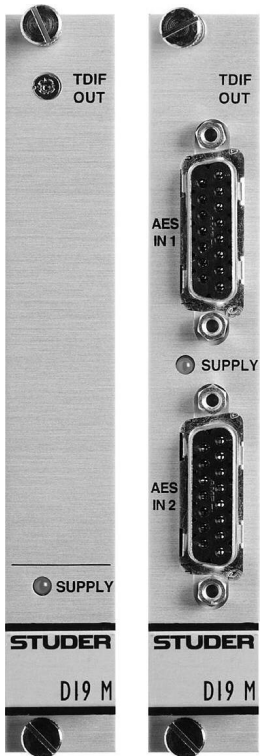
96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	/TD 0 IN	GND	/TD 2 IN
7	/TD 4 IN	GND	/TD 6 IN
8		GND	FS 2 0 IN
9	LRCK 0 IN	GND	/EMPH 0 IN
10	/D0		/D8
11	/D1		/D9
12	/D2		/D10
13	/D3		/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22	/TD 8 IN		/TD 10 IN
23	MGND	MGND	MGND
24	/TD 12 IN		/TD 14 IN
25	MGND	MGND	MGND
26			FS 2 1 IN
27	MGND	MGND	MGND
28	LRCK 1 IN		/EMPH 1 IN
29			
30			
31			
32	MGND	MGND	MGND

MGND	Chassis
GND	Ground
AES/DSD BUS	TDM bus active
/TD 0 ... 14	TDIF input data
/D0...D15	TDM bus data inverted
/FRAME, /CK128	Clocks TDM Bus

**2.4.2 D19m TDIFO – Dual 8-Channel TDIF Out**

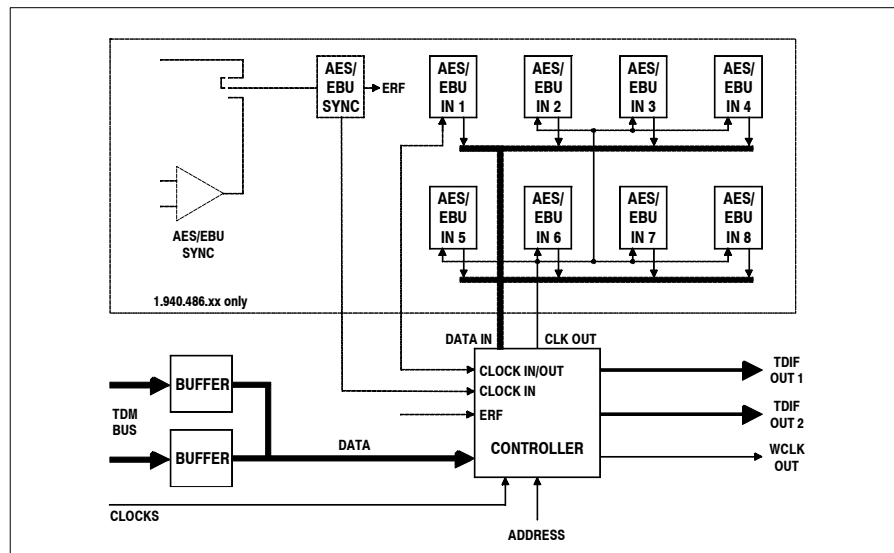
1.940.485/1.940.486



The TDIFO card converts the TDM bus signals to the TDIF format. 2 × 8 channels can be processed simultaneously, audio resolution is 24 bit. Emphasis information is taken from the first channel, because the TDIF format has a common emphasis information for all channels only. The card is synchronized with the frame and the CK128 clocks of the TDM bus.

The addressing must be done with four DIP switches on the backplane. For this card, it cannot be performed automatically because more than four audio channels are processed.

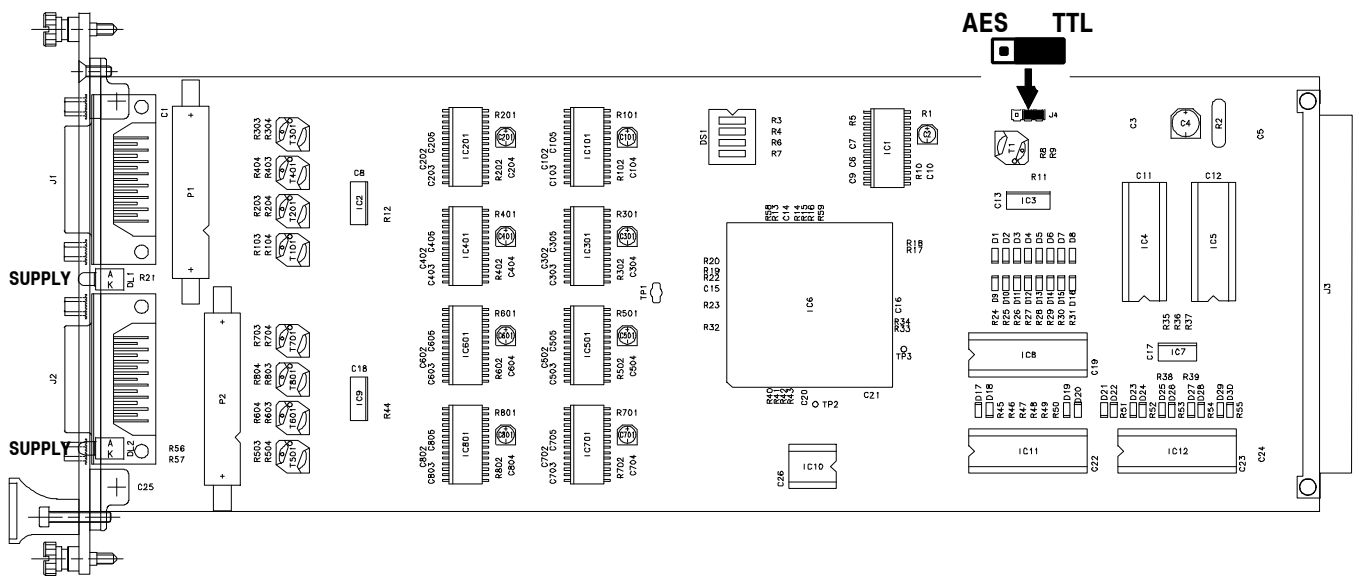
The second version of the TDIFO card (1.940.496) is designed for standalone mode. It is equipped with four additional AES/EBU receivers per TDIF output. A jumper on the backplane switches the ITDM signal that selects whether the card reads from the TDM bus or from the AES/EBU receivers. In standalone mode, a separate AES/EBU signal is used for synchronization of the card. The source of this sync signal is selected with a jumper, either from the TDM bus or from a separate input. If the sync signal should be missing, the synchronization is automatically taken from the first AES/EBU input.



**Configuration:**

Usually, the D19m cards are addressed just by plugging them into a slot of the D19m rack. The first card has address 0 (CH1...4), the second card has address 1 (CH5...8), etc. The TDIFO card, however, processes 16 mono channels, and thus requires a specific address setting.

DIP switch No.				Address
1	2	3	4	
on	on	on	on	1...16
off	on	on	on	5...20
on	off	on	on	9...24
off	off	on	on	13...28
on	on	off	on	17...32
off	on	off	on	21...36
on	off	off	on	25...40
off	off	off	on	29...44
on	on	on	off	33...48
off	on	on	off	37...52
on	off	on	off	41...56
off	off	on	off	45...60
on	on	off	off	49...64



**LED:** *SUPPLY* Indicates “power on” status (*this LED is located in different positions for the two versions 1.940.485 and 1.940.486.*)

**Jumper:** *AES / TTL* The standalone version 1.940.486 has a jumper, selecting the synchronization from the separate sync input (AES) or from the TDM bus (TTL).

**Technical Data:**

AES/EBU input (1.940.496 only)	Input impedance		110 Ω
	Input sensitivity		200 mV
TDIF output	according to TDIF specifications		
Current consumption	5 V	1.940.485	max. 0.25 A
		1.940.486	max. 0.35 A
Sampling frequency	28...55 kHz		
Operating temperature range	0...40° C		

**TDIF Interface PCB**

Both a TDIF input and a TDIF output card can be connected to one of the two 25-pin D-type sockets on the TDIF Interface PCB 1.940.632. In this way, the inputs and outputs of two 8-channel digital recorders (e.g. DA-88) may be connected with one single cable each.

For the connection to the backplane, two 16-pin flat cables are used. Furthermore, the TDIF Interface PCB connects to a BNC connector panel handling the sync signals.

**Note:** The TDIF interface is suitable for short distances only. Even with high-quality cable, a length of 5 m must not be exceeded.

**Pin Assignment:**

TDIF Interface (25-pin D-type socket):

Pin	Signal	Pin	Signal
1	DOUT 1/2	14	GND
2	DOUT 3/4	15	GND
3	DOUT 5/6	16	GND
4	DOUT 7/8	17	GND
5	LRCK OUT	18	EMPHASIS OUT
6	FS 1 OUT	19	FS 0 OUT
7	-	20	(FS 0 IN)
8	(FS 1 IN)	21	(EMPHASIS IN)
9	(LRCK IN)	22	(GND)
10	(DIN 7/8)	23	(GND)
11	(DIN 5/6)	24	(GND)
12	(DIN 3/4)	25	(GND)
13	(DIN 1/2)		

**Synchronization:**

When using, for example, a DA-88 unit, a word clock signal must be sent over a separate line, because the DA-88 cannot sync to the LRCK signal. For this purpose, the BNC Board 1.940.633 is available. It can be connected to the TDIF Interface Card 1.940.632.

**Note:** *The phase position of the word clock signal is very critical. No other word clock signal must be used in this application.*

**Pin Assignment:**

96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESS+	GND	AESS-
6	/TD0 OUT	GND	/TD2 OUT
7	/TD4 OUT	GND	/TD6 OUT
8	WSYNC OUT	GND	FS1 OUT
9	LRCK OUT	GND	/EMPH OUT
10	/D0		/D8
11	/D1		/D9
12	/D2		/D10
13	/D3		/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22	/TD8 OUT		/TD10 OUT
23	MGND	MGND	MGND
24	/TD12 OUT	MGND	/TD14 OUT
25	MGND	MGND	MGND
26	WSYNC OUT	MGND	FS2 OUT
27	MGND	MGND	MGND
28	LRCK OUT	MGND	/EMPH OUT
29	AGND	AGND	AGND
30			
31			
32	MGND	MGND	MGND

SYNC	AES/EBU SYNC TTL
AESS	AES/EBU SYNC balanced
/TD0 ... /TD14	TDIF data
WSYNC	Word clock for sync
/AES/DSD BUS	
/D0 ... /D15	TDM DATABUS

## 2.5 ADAT I/O Cards

### 2.5.1 D19m ADATI – Dual 8-Channel ADAT In

1.940.490/1.940.491



**Synchronization:**

Two optical ADAT inputs are routed to the TDM bus, where they are read from a MADO card and can then be output through a MADI link.

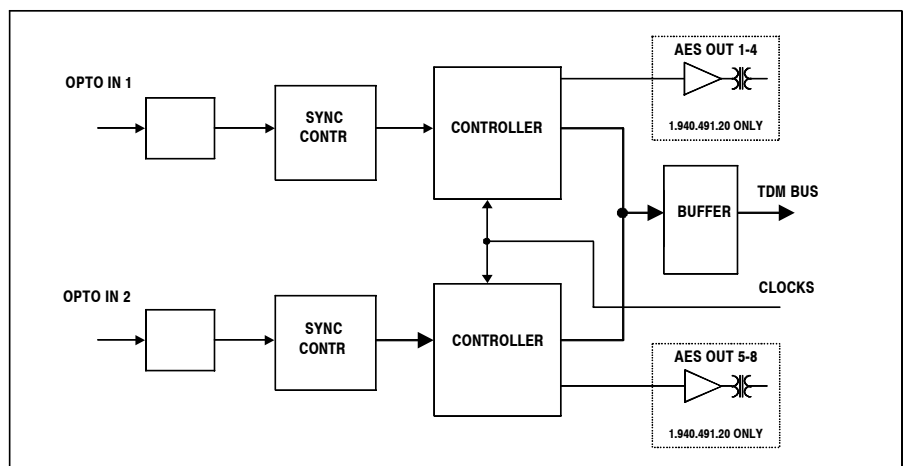
The card 1.940.491 is equipped with additional AES/EBU outputs for standalone applications. For this purpose, also an AES/EBU receiver for synchronization, output transformers, and drivers are provided.

The input sampling frequency can be between 25 kHz and 55 kHz.

The ADAT format does not contain channel status information, the C-bits are set to default (not indicated). Max. 24 bits of audio are transmitted.

The TDM output occupies the addresses of 4 slots (16 signals). The addresses are set via DIP switches. If only one optical input is needed, it is possible to use eight TDM signals only by setting a jumper (8/16CH).

The synchronization comes usually from the TDM bus. In standalone applications an AES/EBU sync input or the optical input provides the synchronization.



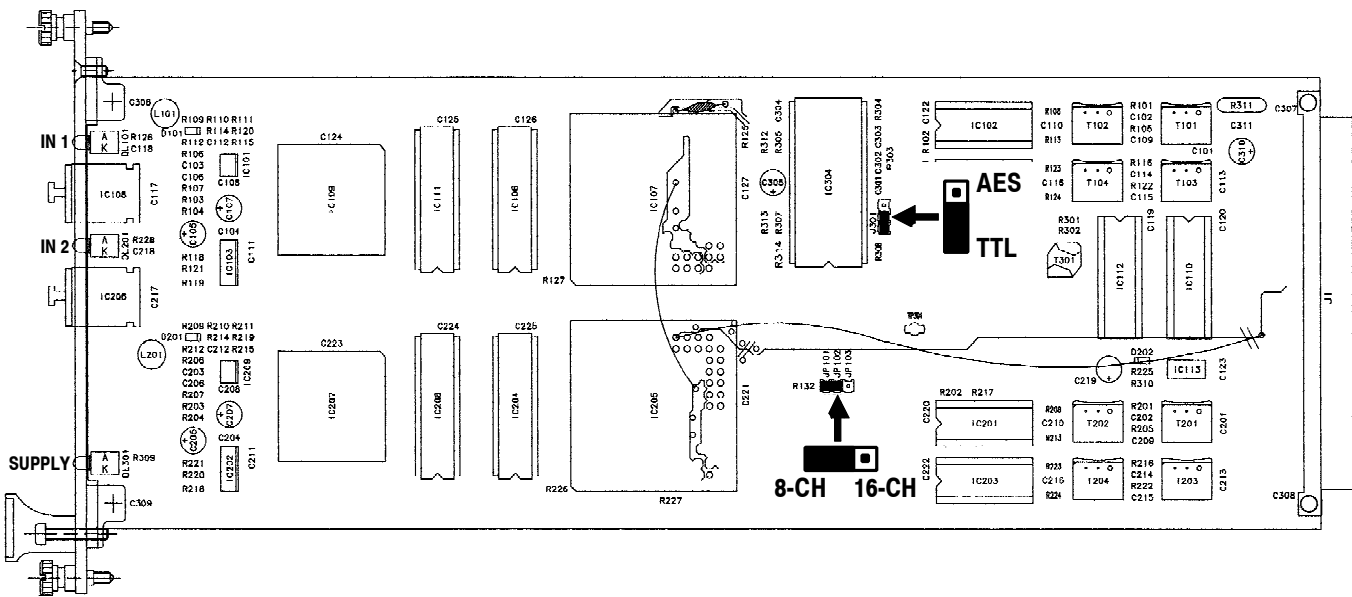
**Configuration:**

On standard cards, the card address is given by the physical slot on the backplane itself; this means that the card in slot 0 occupies the channels 1 to 4, the second slot corresponds to channels 5 to 8, etc. Since the ADAT card provides 16 inputs instead of 4, the card addresses have to be configured via DIP switches (card addresses 0 to 12).



*Please be careful to correctly set the card addresses because of potential conflicts with other cards. Typically, the lower slots are used for standard 4-channel cards; the ADAT interfaces are moved to the higher addresses.*

Card address	CH no., single input used	CH no., both inputs used	DIP Switch			
			1	2	3	4
0	1...8	1...16	on	on	on	on
1	5...12	5...20	off	on	on	on
2	9...16	9...24	on	off	on	on
3	13...20	13...28	off	off	on	on
4	17...24	17...32	on	on	off	on
5	21...28	21...36	off	on	off	on
6	25...32	25...40	on	off	off	on
7	29...36	29...44	off	off	off	on
8	33...40	33...48	on	on	on	off
9	37...44	37...52	off	on	on	off
10	41...48	41...56	on	off	on	off
11	45...52	not allowed	off	off	on	off
12	49...56	not allowed	on	on	off	off



**LEDs:** *IN 1/2* Lock status for each ADAT input.  
*SUPPLY* Indicates “power on” status.

**Jumpers:** *8-CH / 16-CH* Switchover between 8 or 16 channels to TDM bus.  
*AES / TTL* Synchronization from TDM Bus or from AES/EBU input.

**Technical Data:**

AES/EBU input (1.940.491 only)	Input impedance		110 Ω
	Input sensitivity		min. 200 mV
AES/EBU output (1.940.491 only)	Output impedance		110 Ω
	Output level (into 110 Ω)		5 V
Current consumption	5 V	1.940.490	max. 0.7 A
		1.940.491	max. 1.1 A
Input sampling frequency			28...55 kHz
Operating temperature range			0...40° C



**Pin Assignment:**

96-pin DIN 41612 female

Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESSYNC+	GND	AESSYNC-
6	AES1OUT+	GND	AES1OUT-
7	AES2OUT+	GND	AES2OUT-
8	AES3OUT+	GND	AES3OUT-
9	AES4OUT+	GND	AES4OUT-
10	/D0	/BA0	/D8
11	/D1	/BA1	/D9
12	/D2	/BA2	/D10
13	/D3	/BA3	/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22	AES5OUT+		AES5OUT-
23	MGND	MGND	MGND
24	AES6OUT+		AES6OUT-
25	MGND	MGND	MGND
26	AES7OUT+		AES7OUT-
27	MGND	MGND	MGND
28	AES8OUT+		AES8OUT-
29			
30			
31			
32	MGND	MGND	MGND

MGND	Chassis
GND	Ground
AES/DSD BUS	TDM Bus active
BA0 .. BA3	Card address
/D0.../D15	Inverted TDM bus data
/FRAME, /CK128	Clocks TDM Bus

**2.5.2 D19m ADATO – Dual 8-Channel ADAT Out**

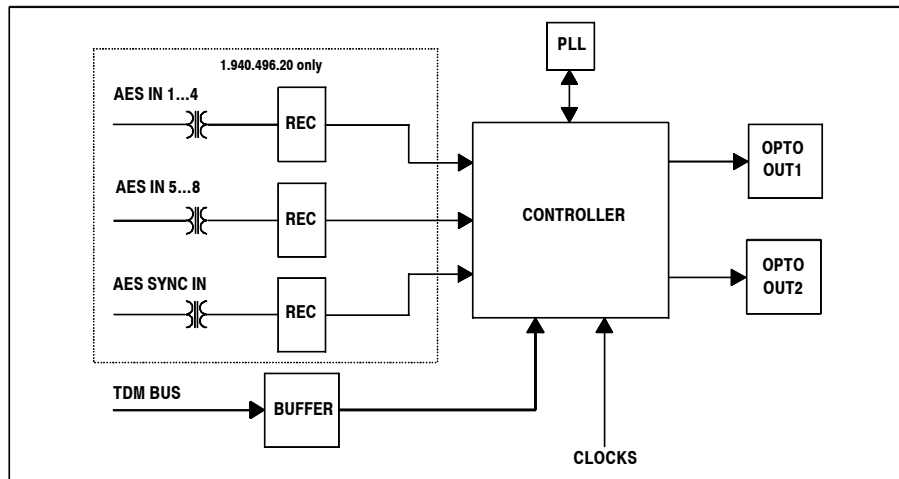
1.940.495/1.940.496



The ADATO card converts the TDM bus signals into the optical ADAT format. The card supports two 8-channel outputs for (plastic) optical fibre with a word length of up to 24 bits. The synchronization is taken from the TDM bus (CK128 clock). A PLL increases the clock rate to  $256 \times FS$ . The channel status bit is not supported by the ADAT format.

The addressing must be done with four DIP switches on the backplane. For this card, it cannot be performed automatically because more than four audio channels are processed.

The card can also be equipped with eight AES/EBU receivers and a separate sync input for standalone applications (order no. 1.940.496). The ITDM jumper on the backplane decides whether the sync signal is taken from the TDM bus or from the card itself. If it comes from the card itself, the sync is either taken from the separate sync input (as long as a valid signal is available) or from the first AES/EBU input.



**Configuration:** Usually, the D19m cards are addressed just by plugging them into a slot of the D19m rack. The first card has address 0 (CH1...4), the second card has address 1 (CH5...8), etc. The ADATO card, however, processes 16 mono channels, and thus requires a specific address setting.

DIP switch No.				Address
1	2	3	4	
on	on	on	on	1...16
off	on	on	on	5...20
on	off	on	on	9...24
off	off	on	on	13...28
on	on	off	on	17...32
off	on	off	on	21...36
on	off	off	on	25...40
off	off	off	on	29...44
on	on	on	off	33...48
off	on	on	off	37...52
on	off	on	off	41...56
off	off	on	off	45...60
on	on	off	off	49...64



**Pin Assignment:**

96-pin DIN 41612 female

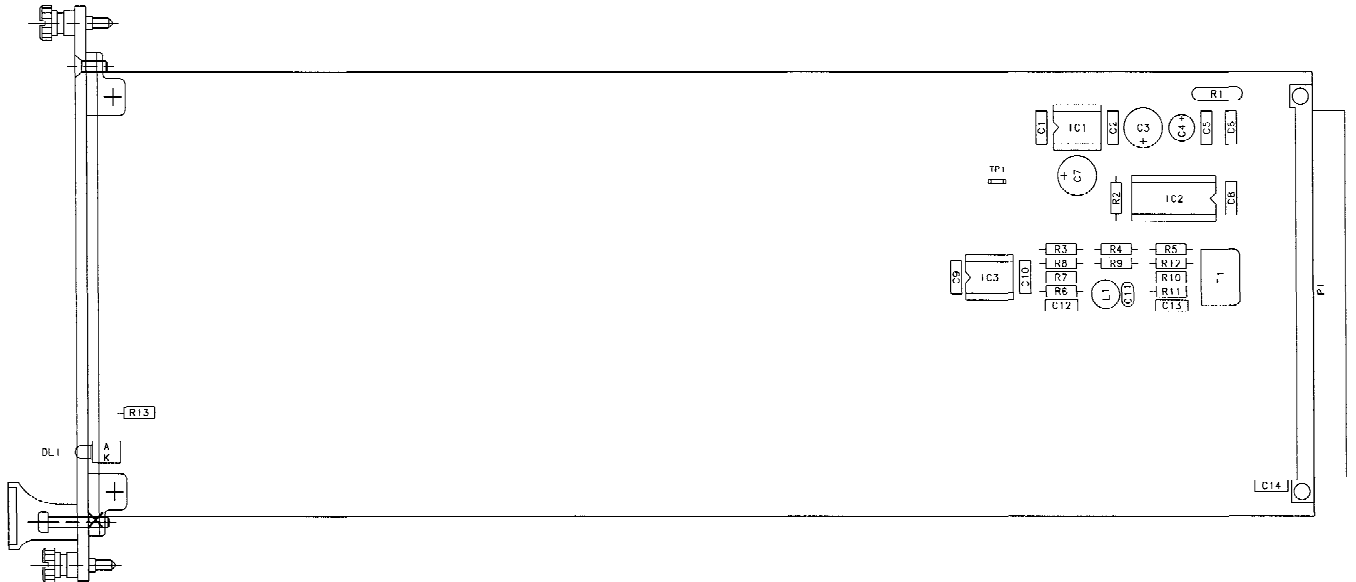
Pin	A	B	C
1	MGND	MGND	MGND
2	+5V	+5V	+5V
3	SYNC		
4	GND	GND	GND
5	AESS+	GND	AESS-
6	AES IN 1+	GND	AES IN 1-
7	AES IN 2+	GND	AES IN 2-
8	AES IN 3+	GND	AES IN 3-
9	AES IN 4+	GND	AES IN 4-
10	/D0		/D8
11	/D1		/D9
12	/D2		/D10
13	/D3		/D11
14	/D4	GND	/D12
15	/D5	/AES/DSD BUS	/D13
16	/D6	GND	/D14
17	/D7	GND	/D15
18	/FRAME	/CK128	
19	MGND	MGND	MGND
20			
21	MGND	MGND	MGND
22	AES IN 5+		AES IN 5-
23	MGND	MGND	MGND
24	AES IN 6+	MGND	AES IN 6-
25	MGND	MGND	MGND
26	AES IN 7+	MGND	AES IN 7-
27	MGND	MGND	MGND
28	AES IN 8+	MGND	AES IN 8-
29	AGND	AGND	AGND
30			
31			
32	MGND	MGND	MGND

SYNC	AES/EBU SYNC TTL
AESS	AES/EBU SYNC SYM
AES IN XX	AES/EBU inputs
AES/DSD BUS	Switchover standalone/TDM (Input in Slave Mode)
/D0.../D15	TDM DATABUS

## 2.6 Miscellaneous Cards

### 2.6.1 D19m Sync Receiver

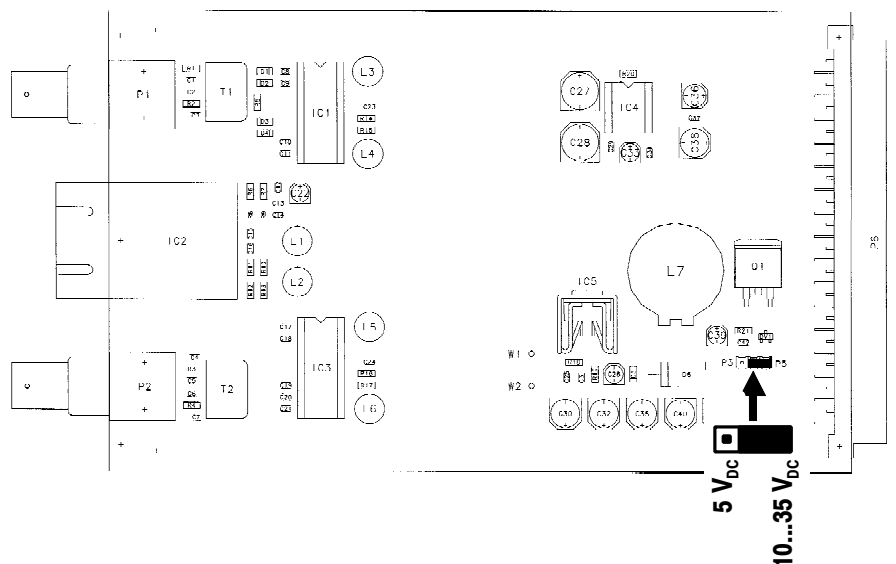
1.940.557



The sync receiver distributes an AES/EBU sync signal on the backplane and is required if several cards are used in standalone mode, without a MADI or a MADO card. This unit prevents that a separate sync signal must be wired for each card.

### 2.6.2 Optical/Coax Interface

1.940.558

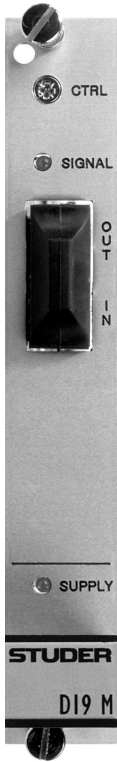


The Optical/Coax Interface is used for converting MADI signals from optical into electrical signals and vice versa. It is a Euro card unit normally used for standalone application, e.g. in a 1U high ASC rack. For integration into a system, additional information is required; please apply to Studer in such a case.

It can be powered either with 5 V<sub>DC</sub> or a with variable supply voltage of 10...35 V<sub>DC</sub>, depending on the jumper setting.

**2.6.3 RS422-to-Optical Converter**

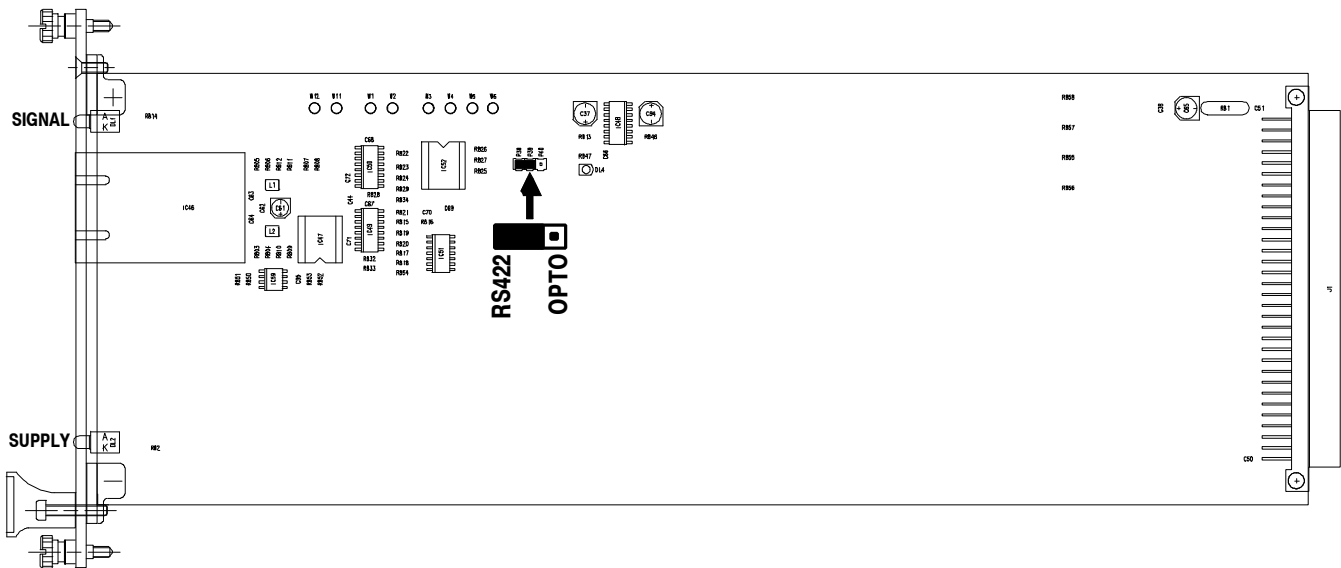
1.940.579



This assembly is a partially equipped version of the D19m RCC card 1.940.576. It is used for the conversion of a balanced RS422 signal to an optical signal and vice versa between the stallion box and the RCC card. It can be installed in any free slot of a D19m rack; operating voltage is 5 V. The front panel LED displays either the send or the receive signal (jumper-selectable). The RS422 signal is wired to the 96-pin DIN 41612 female connector. *Jumper diagram of the earlier version 1.940.577 at the end of this chapter.*

**Pin assignments:**

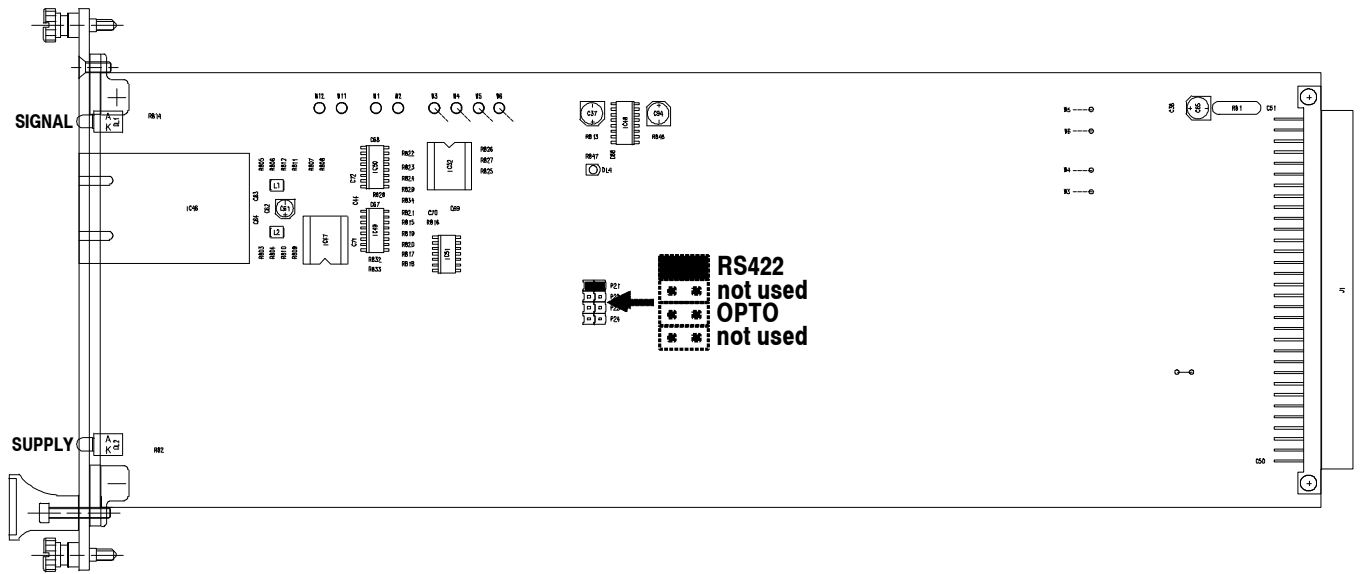
Signal	Pin on 96-pin DIN 41612 connector	Pin on flat cable connector on backplane
RA	7c	5
RB	7a	6
TA	6a	1
TB	6c	2



**LED:** *SUPPLY* Indicates “power on” status.  
*SIGNAL* Indicates the RS422 (send) or the OPTO (receive) signal, depending on the jumper setting.

**Jumper:** *RS422 / OPTO* In position “RS422”, the SIGNAL LED indicates the send signal; in position “OPTO”, it indicates the receive signal.

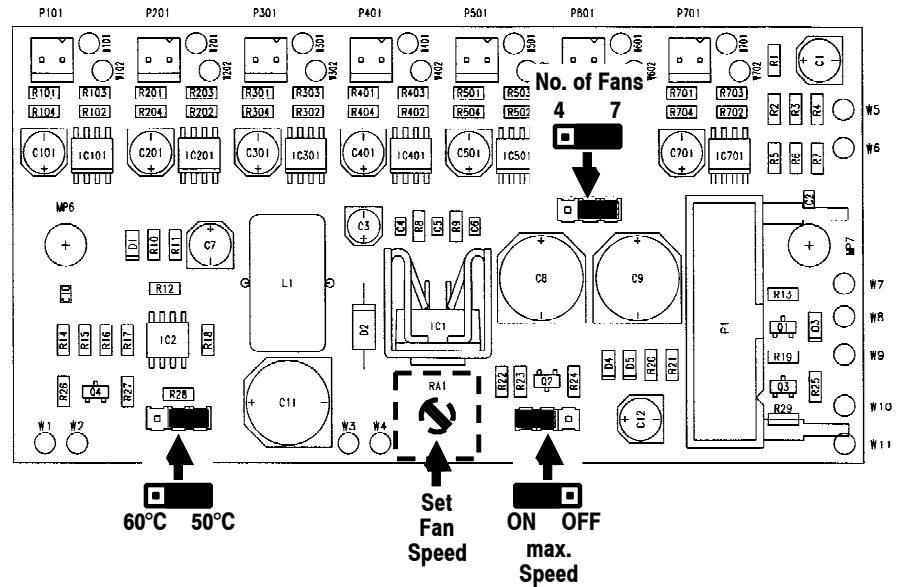
**Earlier Version 1.940.577:**



**2.6.4 Fan Module**

1.940.597

The Fan Module can be equipped with four or seven fan units. It contains the Fan Regulation Board 1.940.596. On this board, each fan unit is monitored, their speed can be adjusted, and if one of the fans should fail or be blocked, the alarm output and an optional LED are activated. If temperature has to be monitored, too, an optional NTC can be connected; if the temperature exceeds a threshold (50 or 60° C, jumper-selectable), the alarm output is activated, too.



**Jumpers/Settings:**

- RA1* To set the normal fan speed.
- No. of Fans* This jumper must be set according to the number of used fans (4 or 7).
- max. Speed* ON: If the selected temperature threshold is exceeded, the fans are switched to full speed (prerequisite: the optional NTC is connected).
- 60°C / 50°C* Selection of the threshold temperature.

**Pin Assignment:**

15-pin D-type

Pin	Signal	Pin	Signal
1	+15 V	2	n.c.
3	GND	4	n.c.
5	Alarm Relay +	6	n.c.
7	GND	8	n.c.
9	GND	10	n.c.
11	NTC	12	n.c.
13	GND	14	n.c.
15	Alarm LED +		

**Alarm LED:** An optional alarm LED can be connected between pin15 and one of the GND pins; a internal series resistor is provided. Also refer to the "Higher Supply Voltages" paragraph below.

**Alarm Relay:** The alarm relay is connected between the Alarm Relay + output and one of the GND pins. The output supplies 15 V; the output current must be matched to the relay coil with an appropriate series resistor. Max. output current is 100 mA. Also refer to the "Higher Supply Voltages" paragraph below.



**Temperature Monitoring:** For temperature monitoring, an NTC (57.99.0801) can be connected between pin11 and one of the GND pins. The NTC has to have the following specs:

Nominal resistance: 330 k $\Omega$ , @ 50° C: 100 k $\Omega$ , @ 60° C: 65 k $\Omega$ .

**Supply:** The usual supply voltage is 15 V. In a MUX or DEMUX rack, usually the negative supply rail is less loaded, so it can be sensible to connect the Fan Module to the negative supply rail as follows: Pin1 (+15 V) to supply GND, and one of the GND pins (3, 7, 9, or 13) to the -15 V supply.

**Higher Supply Voltages:** Supply voltages up to 30 V may be used.



*However, the “max. fan” jumper must always be set to OFF in such a case; otherwise, the fans would get too high a full-speed operating voltage at over-temperature conditions. The alarm relay and the alarm LED series resistor, too, must then be matched to the corresponding, higher operating voltage.*

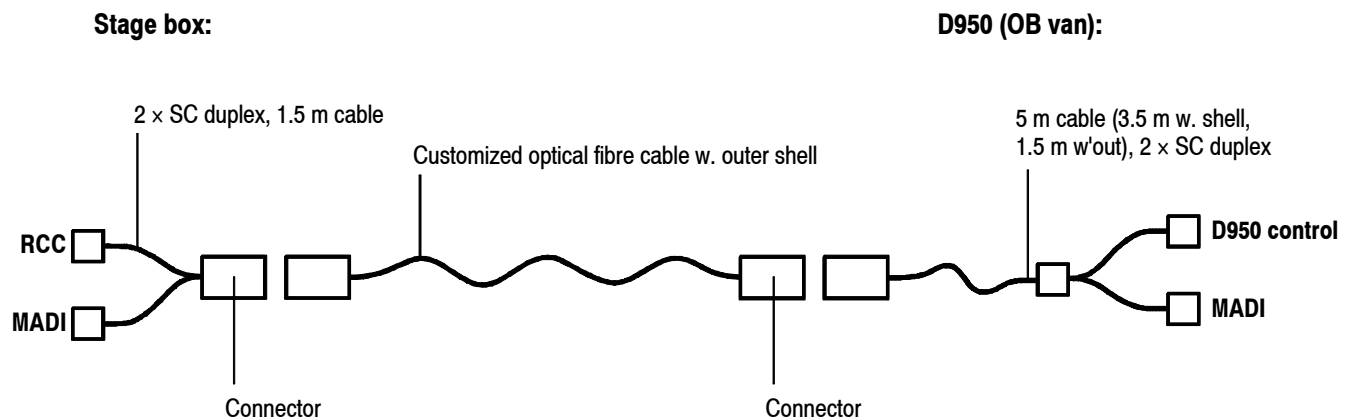
### **3 STAGEBOX APPLICATION FOR D950 MIXING SYSTEM**

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Some points have to be considered for a stagebox setup with the mixing console D950:

- The D950 is always the star point if multiple stageboxes are used; the Stageboxes *cannot* be connected in series, because the control signals cannot be transferred from one Remote Controller Card (RCC) to another, and the control signals for two cards cannot be merged.
- A frame can hold input and output cards (mixed arrangement); in such a case, the ratio of inputs to outputs is defined in the MADDO software (EPROM).
- The connection to the D950 can be done in two ways. Standard is to use four optical fibre cables for MADI and control signals (MADI in/out, control receive/transmit). The other way is to use four separate copper cables or a combination of both for the four signals. The control signals are standard RS232/RS422 or MIDI connections. This also gives the possibility to connect the system to another mixing console, provided the correct software protocols are implemented.
- Cooling is an important point to be carefully considered in designing a stagebox. A fan is absolutely necessary as soon as the system holds more than 5...6 Mic/Line and A/D pairs.
- It is possible to combine D19m Mic/Line cards with D19 MicADs in a D950 system. However, in such a combination separate control lines are required for the two systems.

### 3.1 Example: Stage Box for OB-Van with Optical Fibre Cables



Customized optical fibre cable units, consisting of:

LEMO series 4K connectors on both ends:

- for 4 type F2 ceramic optical fibre contacts
- with anti-kink bush, black, type FGG.4K.03C.CLZ.800A, and 4 type F2, FFS.F2.BB2.LCE30 contacts.

Cable type:

- M.051.04.A.9, roll on/roll off, camera cable
- 4 x 62.5/125, approx. 6.6 mm dia.
- Cable length can be customized.

In addition, on both the stage box and the D950 ends, a customized cable is required.

**D950** Side 1 (rear panel):

- LEMO panel socket with strain-relieve, Type PKG.4K.03C.CLZ.800A

Side 2 (MADI card, Control card):

- 2 x SC-Duplex, cable type LM.051.04.A.9, cable length 5.0 m, 1.5 m of which without outer shell

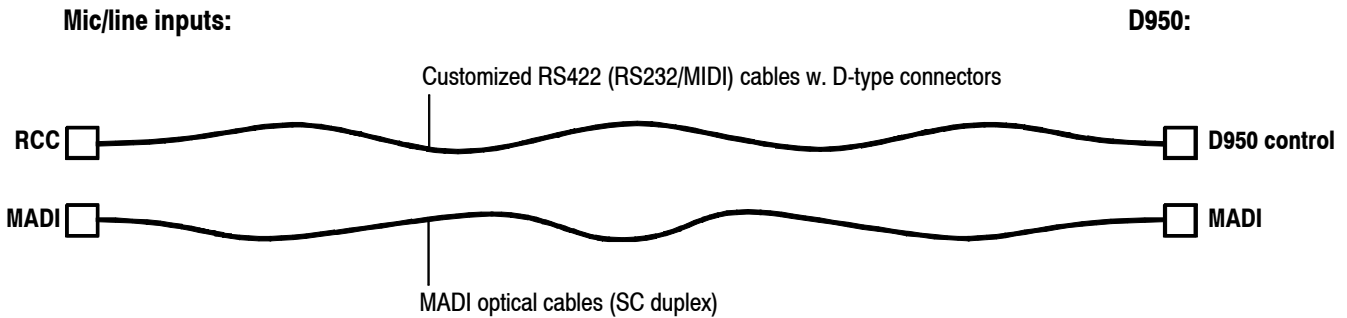
**Stagebox** as above, but with following cable type: Single lines from LM.051.04.A.9, length 1.5 m.

The connecting card on the D950 is identical with the RCC (same card), but is inserted in two different ways:

**Standard** The connecting card is inserted into a D19m frame, which is in most cases available in the main D950 rack. The D19m frame is used for mechanical hold and power supply. From there, a serial cable goes to the Stallion box, and optical cables to the stagebox.

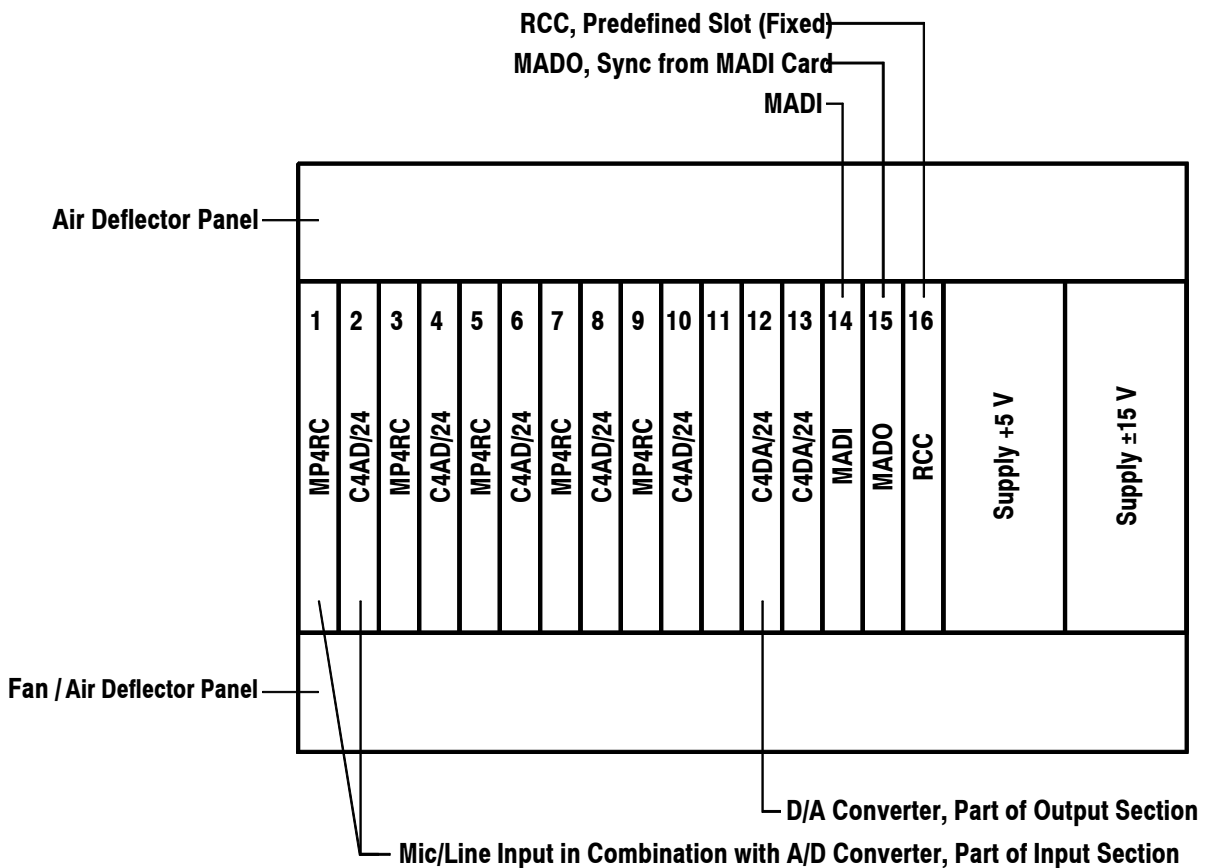
**Alternative** The connecting card is installed into a separate box with its own power supply and connectors.

### 3.2 Example: Mic/Line Inputs for Stationary Application



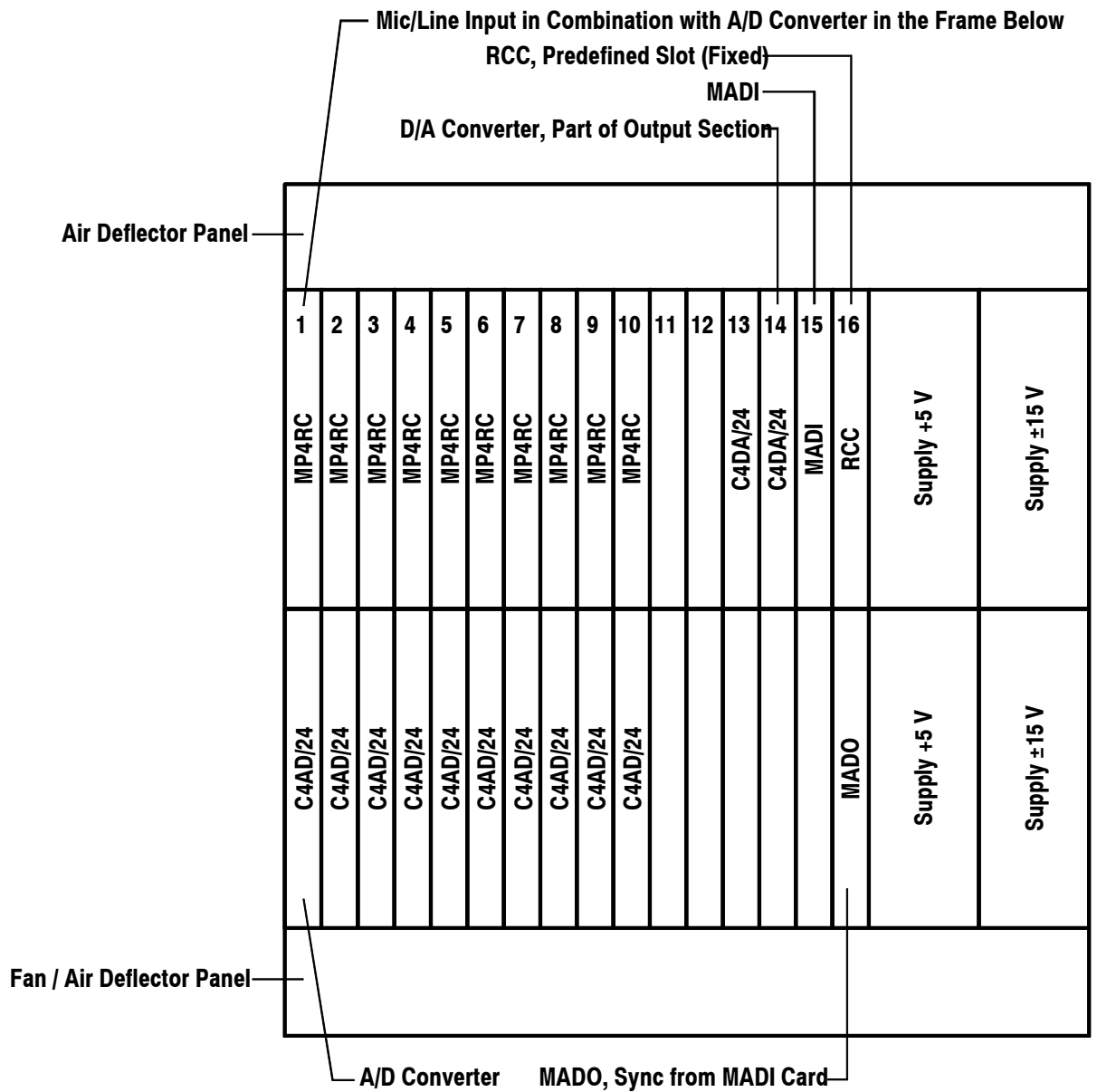
### 3.3 Typical Stagebox Configurations

#### 3.3.1 Single Rack with Mic/Line Inputs and Line Outputs (min. height 5 units)



**Note:** The size of the input and output sections is set in the MADO software.  
*Alternate possibility:* If no output cards are installed within the system, it can be used as a standard MUX frame for Mic/Line inputs.

**3.3.2 Double Rack with Mic/Line Inputs and Line Outputs** (min. height 8 units)



**Note:** The size of the input and output sections is set in the MADO software.  
*Alternate Possibility:* If no output cards are installed within the system, it can be used as a standard MUX frame for Mic/Line inputs.

## 4 RCC/MP4RC – MIDI SOFTWARE PROTOCOLS

STUDER D19m STAGE BOX (MP4RC) MIDI Implementation Date: 14.01.99  
 I. MIDI Implementation Chart Version: Preliminary

Function	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1 1 - 16	1 1 - 16	Memorized
Mode Default Messages Altered		Mode 3	
Note Number True Voice	x	x	
Velocity Note ON Note OFF	x x	x x	
After Key's Touch Channel's	x x	x x	
Pitch Bender	x	x	
Control Change		16 - 19 24 - 27 67 68 - 71 72 - 75 76 - 79 80 - 81 85 - 86 91 - 92* 93 - 94* 120	MIC Sensit. Ch.1-4 LINE Sensit.Ch.1-4 SOFT CLIP ON/OFF MIC/LINE Selector Phantom Power HiPass Filter MIC STEREO LINK LINE STEREO LINK Relay 1-8 Pattern Opto Coupl.1-8 Pat. Gain Test Ch. 1-4 * only valid on MIDI Channel 16
Program Change True#	x	x	
System Exclusive	o	o	
System :Song Pos :Song Sel Common :Tune	x x x	x x x	
System :Clock Real Time:Commands	x x	x x	
Aux :Local ON/OFF Mes- :All Notes OFF sages:Active Sense :Reset	x x x x	x x x o	

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO  
 Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO

o: Yes  
 x: No

STUDER D19 STAGE BOX (MP4RC) MIDI Implementation

II. Recognized MIDI Messages

1.0 Control Change

Status	1011nnnn	(Bn) n = MIDI channel number-1	Note 1
Controller no.	0ccccccc		
Controller val.	0vvvvvvv		
c = 16	MIC Sensit.Ch.1	v = 20	+00 dBu dig. fullscale
		v = 21	-01 dBu " "
		. . . .	. . . . " "
		. . . .	. . . . " "
		v = 39	-19 dBu " "
		v = 40	-20 dBu " "
		v = 41	-21 dBu " "
		. . . .	. . . . " "
		. . . .	. . . . " "
		v = 79	-59 dBu " "
		v = 80 - 127	-60 dBu " "
c = 17	MIC Sensit.Ch.2	v = 20 - 127	+00 dBu .. -60 dBu
c = 18	MIC Sensit.Ch.3	v = 20 - 127	+00 dBu .. -60 dBu
c = 19	MIC Sensit.Ch.4	v = 20 - 127	+00 dBu .. -60 dBu
c = 24	LINE Sensi.Ch.1	v = 0	+24 dBu dig. fullscale
		v = 1	+23 dBu " "
		. . . .	. . . . " "
		. . . .	. . . . " "
		v = 23	+ 1 dBu " "
		v = 24	+ 0 dBu " "
		v = 25	- 1 dBu " "
		. . . .	. . . . " "
		. . . .	. . . . " "
		v = 34 - 127	-10 dBu " "
c = 25	LINE Sensi.Ch.2	v = 0 - 127	+24 dBu .. -10 dBu
c = 26	LINE Sensi.Ch.3	v = 0 - 127	+24 dBu .. -10 dBu
c = 27	LINE Sensi.Ch.4	v = 0 - 127	+24 dBu .. -10 dBu
c = 67	SOFT CLIPPER	v = 0	Soft Clip OFF Note 2
		v = 1 - 127	Soft Clip ON
c = 68	MIC/LINE Ch.1	v = 0	Input Selector MIC
		v = 1 - 127	Input Selector LINE
c = 69	MIC/LINE Ch.2	v = 0 - 127	Input Selector MIC/LINE
c = 70	MIC/LINE Ch.3	v = 0 - 127	Input Selector MIC/LINE
c = 71	MIC/LINE Ch.4	v = 0 - 127	Input Selector MIC/LINE
c = 72	Phantom P. Ch.1	v = 0	Phantom Power OFF
		v = 1 - 127	Phantom Power ON
c = 73	Phantom P. Ch.2	v = 0 - 127	Phantom Power ON/OFF
c = 74	Phantom P. Ch.3	v = 0 - 127	Phantom Power ON/OFF
c = 75	Phantom P. Ch.4	v = 0 - 127	Phantom Power ON/OFF
c = 76	HiPass Flt.Ch.1	v = 0	HiPass Filter OFF
		v = 1 - 127	HiPass Filter ON
c = 77	HiPass Flt.Ch.2	v = 0 - 127	HiPass Filter ON/OFF
c = 78	HiPass Flt.Ch.3	v = 0 - 127	HiPass Filter ON/OFF
c = 79	HiPass Flt.Ch.4	v = 0 - 127	HiPass Filter ON/OFF
c = 80	STEREO MIC 1/2	v = 0	Independent MIC 1/2
		v = 1 - 127	STEREO MIC 1/2 Note 5
c = 81	STEREO MIC 3/4	v = 0 - 127	STEREO MIC 3/4

c = 85	STEREO LINE 1/2	v = 0	Independent LINE 1/2
		v = 1 - 127	STEREO LINE 1/2 Note 5
c = 86	STEREO LINE 3/4	v = 0 - 127	STEREO LINE 3/4
c = 91	REL.1-4 Pattern	v = 0000xxx0	Relay 1 OFF
		v = 0000xxx1	Relay 1 ON
		v = 0000xx0x	Relay 2 OFF
		v = 0000xx1x	Relay 2 ON
		v = 0000x0xx	Relay 3 OFF
		v = 0000x1xx	Relay 3 ON
		v = 00000xxx	Relay 4 OFF
		v = 00001xxx	Relay 4 ON
c = 92	REL.5-8 Pattern	v = 0000yyyy	Relay 5-8 ON/OFF
c = 93	OPTO 1-4 Req.	v = 0	OPTO 1-4 Request without sending Update on next Change
		v = 1	OPTO 1-4 Request with sending Update on next Change
c = 94	OPTO 5-8 Req.	v = 0 - 1	OPTO 5-8 Request
c = 120	GAIN TEST	v = 0	Gain test OFF Note 3
		v = 1	Gain Test on Ch. 1
		v = 2	Gain Test on Ch. 2
		v = 3	Gain Test on Ch. 3
		v = 4	Gain Test on Ch. 4
c = 121	SYSTEM RESET	v = 0	Set Default val. Note 4

- Note 1: Preamp related Parameters on MIDI ch. 1 - 15  
Relay res. Opto 1-8 Pattern (c = 91,92 resp. 93,94) only on MIDI ch. 16
- Note 2: Soft Clip ON/OFF common for all 4 Preamp channels
- Note 3: Gain Test set to OFF on any other Control Change message
- Note 4: Individual MP4RC System Reset if recognized on MIDI ch. 1 - 15  
Global D19 Stagebox Reset (all MP4RCs) if recognized on MIDI ch.16
- Note 5: If STEREO MIC or LINE LINK is active, all channel related parameters on ch.1&2 resp. on ch.3&4 are controlled in parallel from ch.1 resp. ch.3 except for the Sensitivity parameters. If STEREO MIC LINK is ON and STEREO LINE LINK is OFF all channel related parameters including MIC Sensitivity but excluding LINE Sensitivity are linked and vice versa. Leaving the STEREO LINK Mode all channel settings on ch.2 resp. ch.4 must be restored to the state before the STEREO LINK was active.



Examples to Note 5:

1. Suppose STEREO MIC & LINE LINK 1/2 is OFF

	Channel 1	Channel 2
MIC Sens:	25	35
LINE Sens:	5	10
MIC/LINE Sel:	MIC	LINE
Phantom P:	ON	OFF
HiPass Flt.:	OFF	ON

2. STEREO MIC LINK 1/2 OFF->ON; STEREO LINE LINK remains OFF

	Channel 1	Channel 2
MIC Sens:	25	25
LINE Sens:	5	10
MIC/LINE Sel:	MIC	MIC
Phantom P:	ON	ON
HiPass Flt.:	OFF	OFF

3. MIC Sens Ch.1 25->30, Ch.2 35->40; LINE Sens. Ch.1 5->8, Ch.2 10-15;  
MIC/LINE Ch.1 MIC->LINE, Ch.2 LINE->MIC

	Channel 1	Channel 2
MIC Sens:	30	30
LINE Sens:	8	15
MIC/LINE Sel:	LINE	LINE
Phantom P:	ON	ON
HiPass Flt.:	OFF	OFF

4. STEREO MIC LINK 1/2 ON->OFF; STEREO LINE LINK OFF->ON

	Channel 1	Channel 2
MIC Sens:	30	40
LINE Sens:	8	8
MIC/LINE Sel:	LINE	LINE
Phantom P:	ON	ON
HiPass Flt.:	OFF	OFF

5. STEREO MIC LINK 1/2 remains OFF; STEREO LINE LINK ON->OFF

	Channel 1	Channel 2
MIC Sens:	30	40
LINE Sens:	8	15
MIC/LINE Sel:	LINE	MIC
Phantom P:	ON	OFF
HiPass Flt.:	OFF	ON

## 2.0 System Exclusive

No device-specific System Exclusive messages implemented

Status	11110000	F0	System Exclusive
Manufacturer ID		00 00 11	STUDER ID
Product ID		02	D19 (MP4RC) STAGE BOX ID
Device ID	0000nnnn		n = MIDI channel no-1
Command ID	0ccccccc		see below
Data	0ddddddd		see below
	.....		
	.....		
	0ddddddd		
checksum	0ccccccc		1-complement (data)
Status	11110111	F7	End of Sys. Exclusive

## 3.0 Universal System Exclusive Non-real-time Inquiry Message

Status		F0 7E 0n(or 7F)	Universal Sysex Non-real time header n = MIDI channel no-1 (7F: response anyway)
General Info	00000110	06	Sub ID # 1
Device Inquiry	00000001	01	Sub ID # 2
Status	11110111	F7	End of Sys. Exclusive

## III. Transmitted MIDI Messages

## 1.0 Control Change

Status	1011nnnn	(Bn) n = MIDI channel number-1	Note 1
Controller no.	0ccccccc		
Controller val.	0vvvvvvv		
c = 93	OPTO Cpl.1-4 P.	v = 0000xxx0	Opto Coupler 1 inactive
		v = 0000xxx1	Opto Coupler 1 energized
		v = 0000xx0x	Opto Coupler 2 inactive
		v = 0000xx1x	Opto Coupler 2 energized
		v = 0000x0xx	Opto Coupler 3 inactive
		v = 0000x1xx	Opto Coupler 3 energized
		v = 00000xxx	Opto Coupler 4 inactive
		v = 00001xxx	Opto Coupler 4 energized
c = 94	OPTO Cpl.5-8 P.	v = 0000yyyy	Opto Coupler 5-8 inactive/energized

Note 1: Opto Coupler 1-8 Pattern (c = 93,94) only on MIDI ch. 16

2.0 System Exclusive

no device-specific System Exclusive messages implemented

Status	11110000	F0	System Exclusive
Manufactor ID		00 00 11	STUDER ID
Product ID		02	D19 (MP4RC) STAGE BOX ID
Device ID	0000nnnn		n = MIDI channel no-1
Status ID	0sssssss		see below
Data	0ddddddd		see below
	.....		
	.....		
	0ddddddd		
checksum	0ccccccc		1-complement (data)
Status	11110111	F7	End of Sys. Exclusive

3.0 Universal System Exclusive Non-real-time Device ID Message

Status		F0 7E 0n	Universal Sysex Non-real time header n = MIDI channel no-1
General Info	00000110	06	Sub ID # 1
Device ID msg	00000010	02	Sub ID # 2
Manufactor ID		00 00 11	STUDER ID
Dev. Fam code		00 00	D19 Serie
Fam. Member code		00 02	(MP4RC) STAGE BOX
Power ON state		0000000p	Power ON state: 0: 2.and further Inq Req. after Power ON 1: first Inq. Req. after Power ON (only valid on RCC resp. MIDI channel 16)
Softw. Version		0aaaaaaaa ..... ..... 0zzzzzzz	Software Version (20 byte ASCII String)
Status	11110111	F7	End of Sys. Exclusive

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**CIRCUIT DIAGRAMS: D19m FRAMES**

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**3U Frames**

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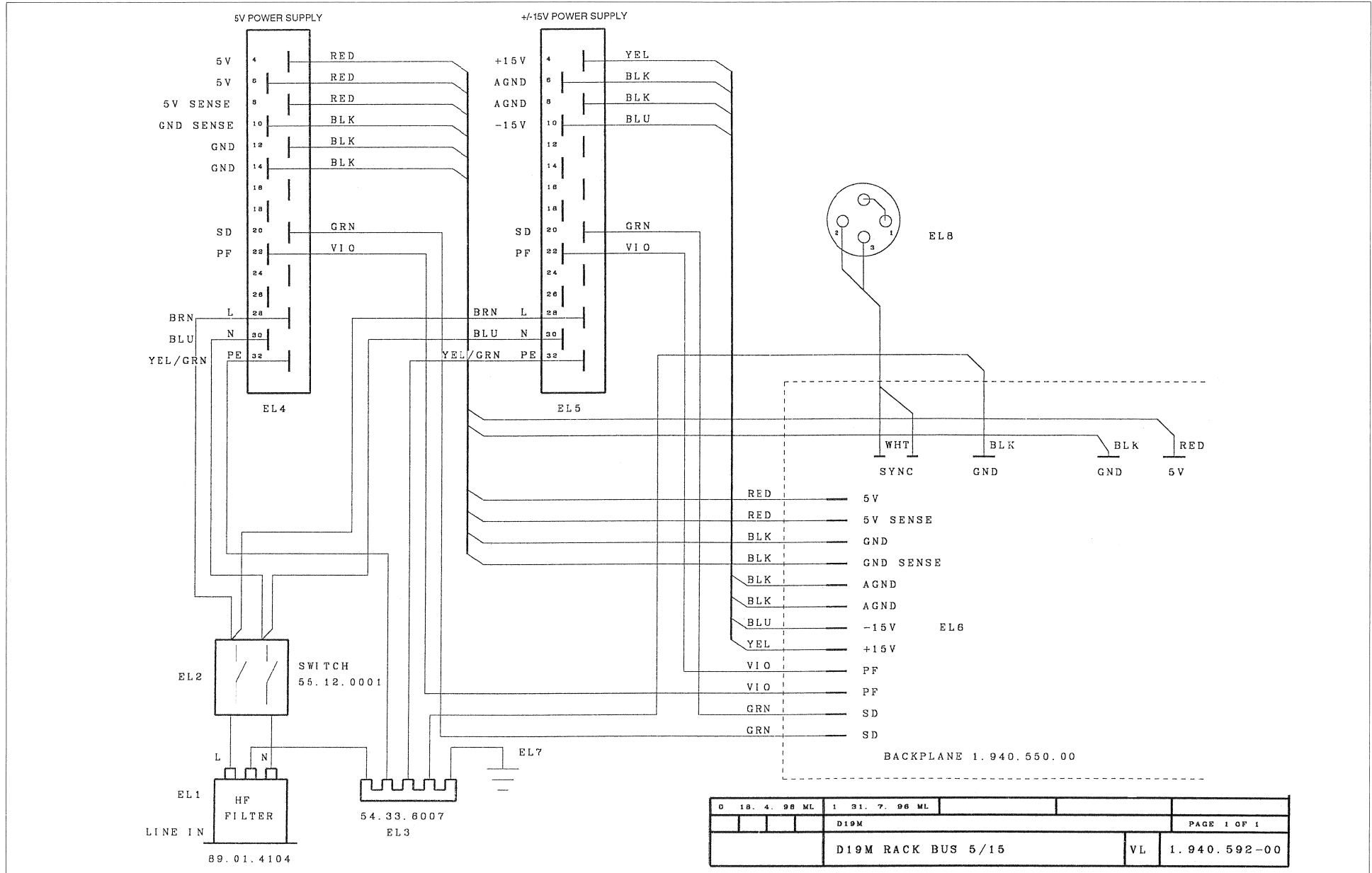
D19m Rack Bus 5/15 .....	1.940.592
Back Plane ( <i>cannot be used with RCC and MP4RC cards</i> ). .....	1.940.550
Back Plane .....	1.940.551
Power Supply 5 V/16 A.....	1.940.606
Power Supply $\pm 15$ V/3.5 A.....	1.940.607
Supply Status Board.....	1.940.589
Supply Status Board.....	1.940.593
Power Distributor $\pm 15$ V + Diode .....	1.940.623
Power Distributor 5/24 V + Diode .....	1.940.624
Supply Board .....	1.940.410
Supply Board, Redundant Output.....	1.940.411
Supply Board, Redundant Input .....	1.940.412
Control Connection.....	1.940.630
D19m Sync Receiver .....	1.940.557
Optical/Coax Interface.....	1.940.558
RS422-to-Optical Converter .....	1.940.577
RS422-to-Optical Converter .....	1.940.579
Fan Regulation .....	1.940.596

**1U Frame**

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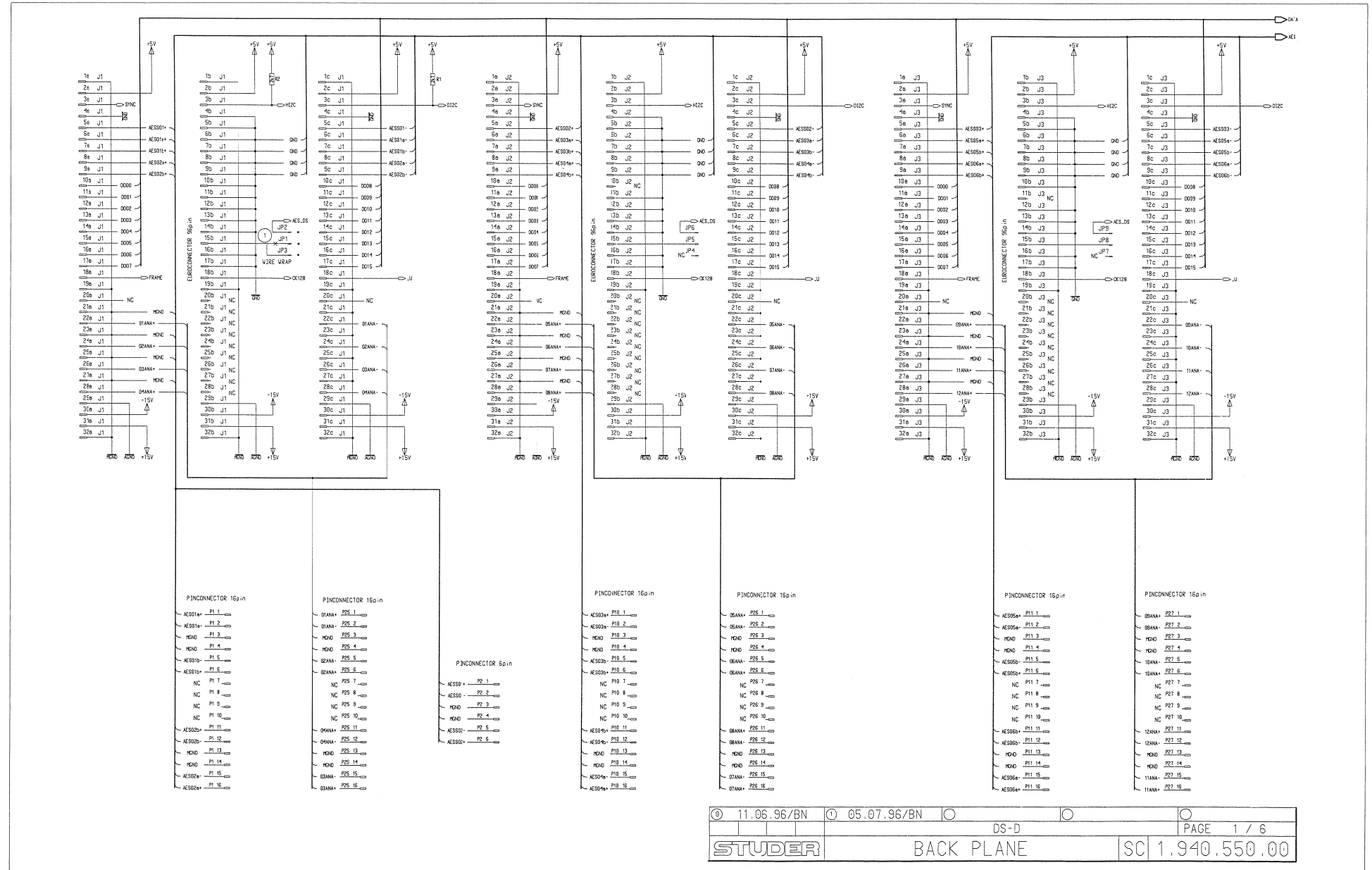
Back Plane .....	1.940.553
Supply Board .....	1.940.578

D19M Rack Bus 5/15 1.940.592.00

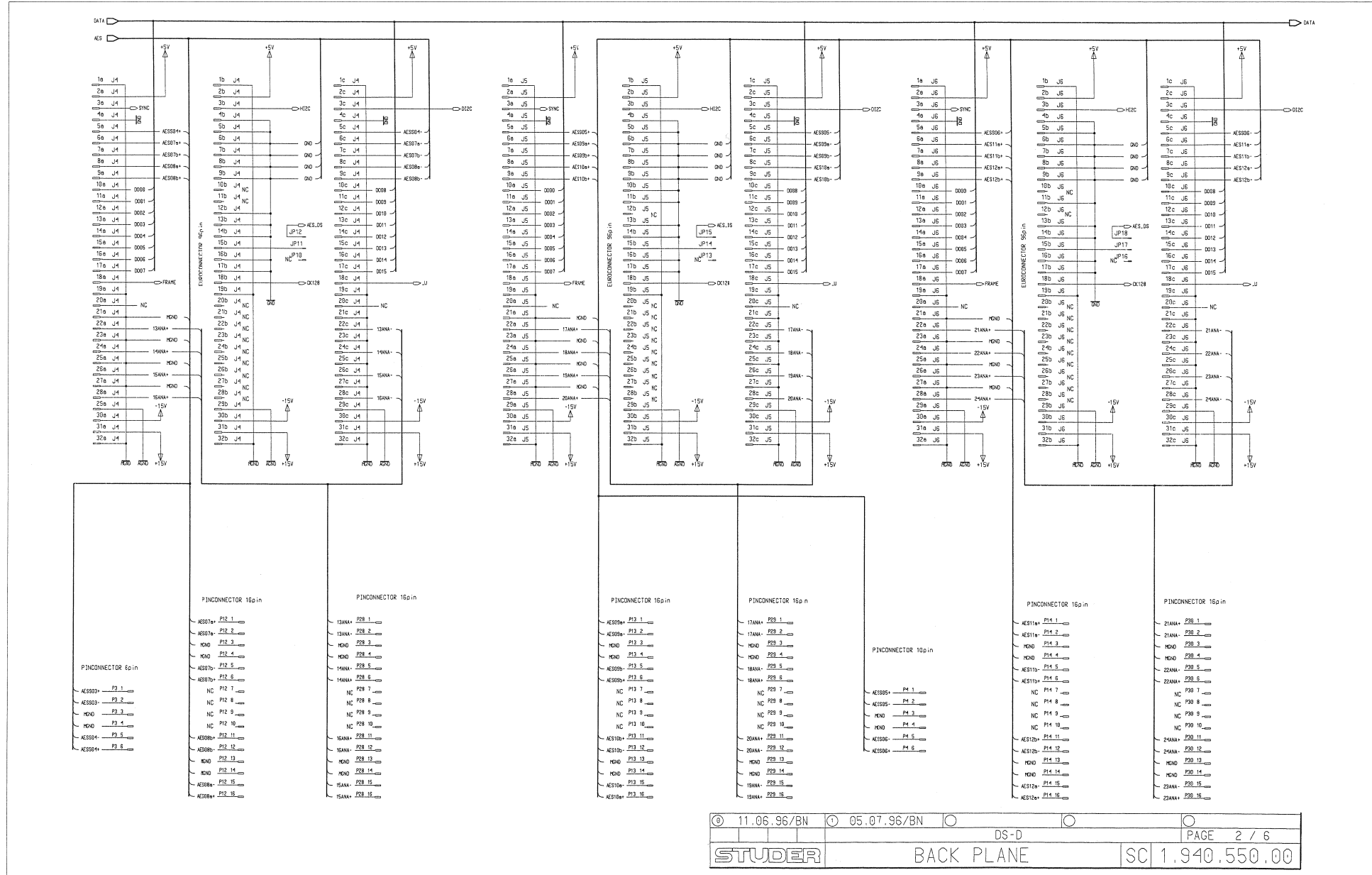


0	18.4.98 ML	1	31.7.98 ML		
D19M			PAGE 1 OF 1		
D19M RACK BUS 5/15				VL	1.940.592-00

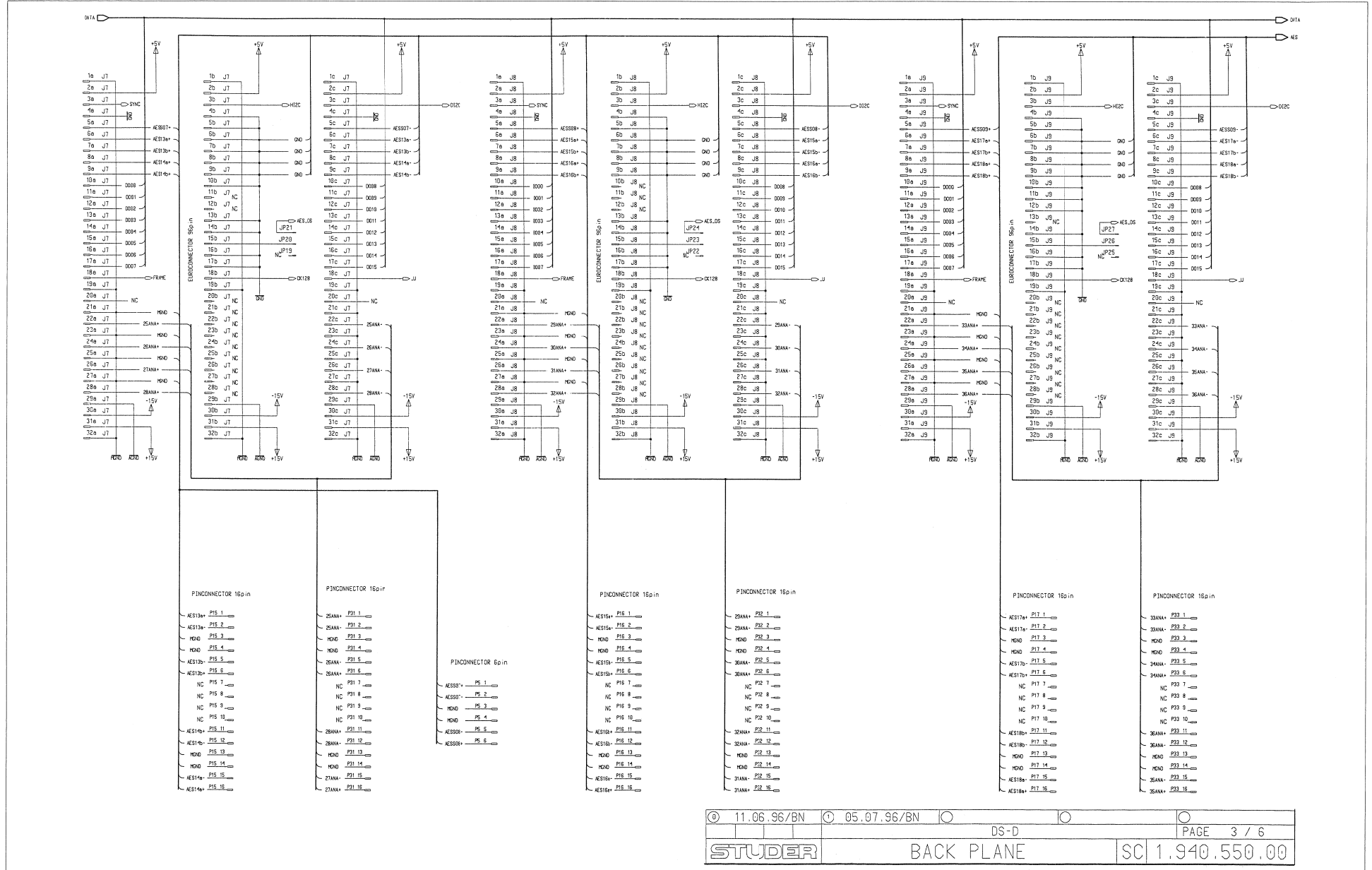
Back Plane 1.940.550.00



Back Plane 1.940.550.00

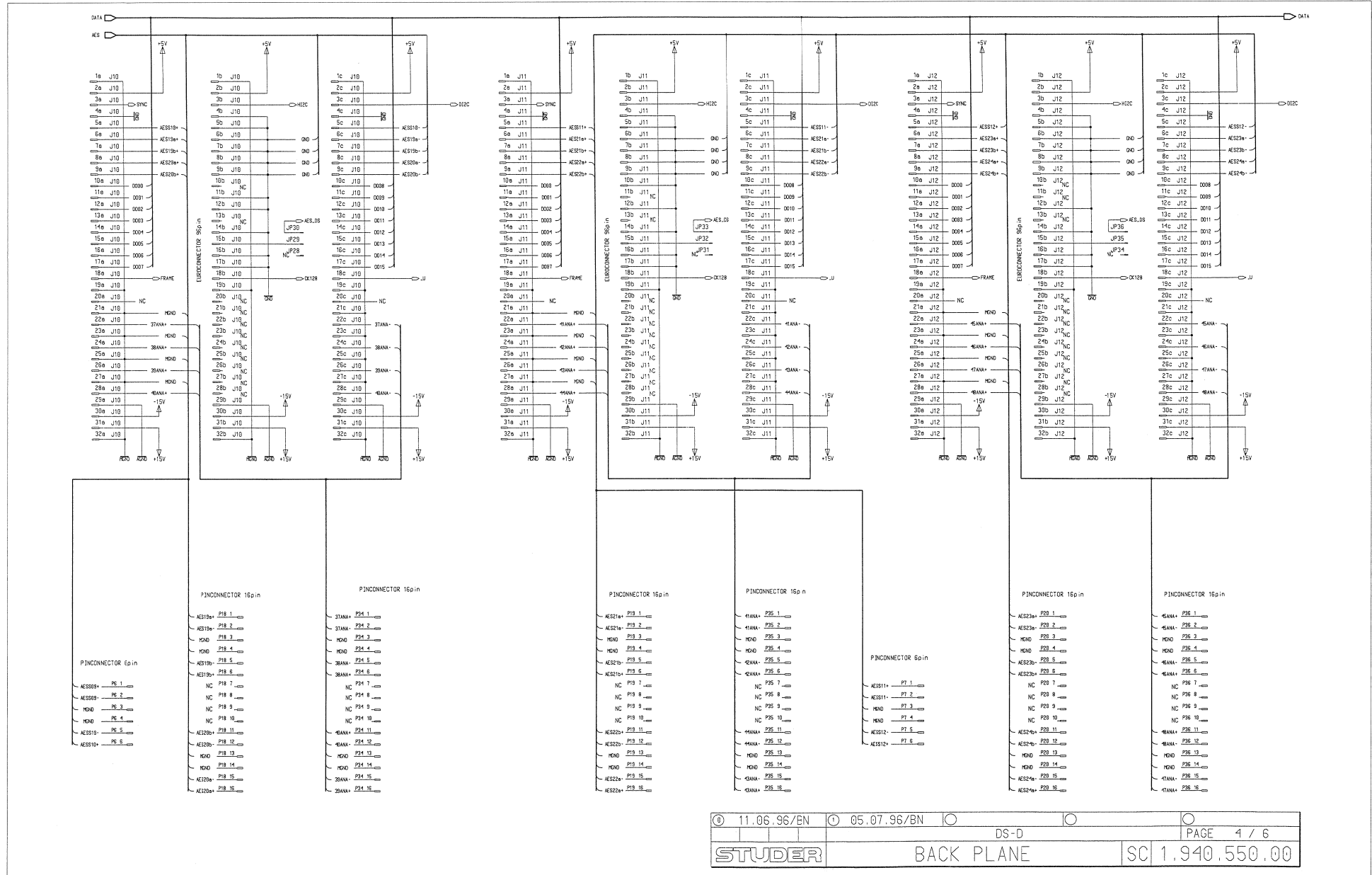


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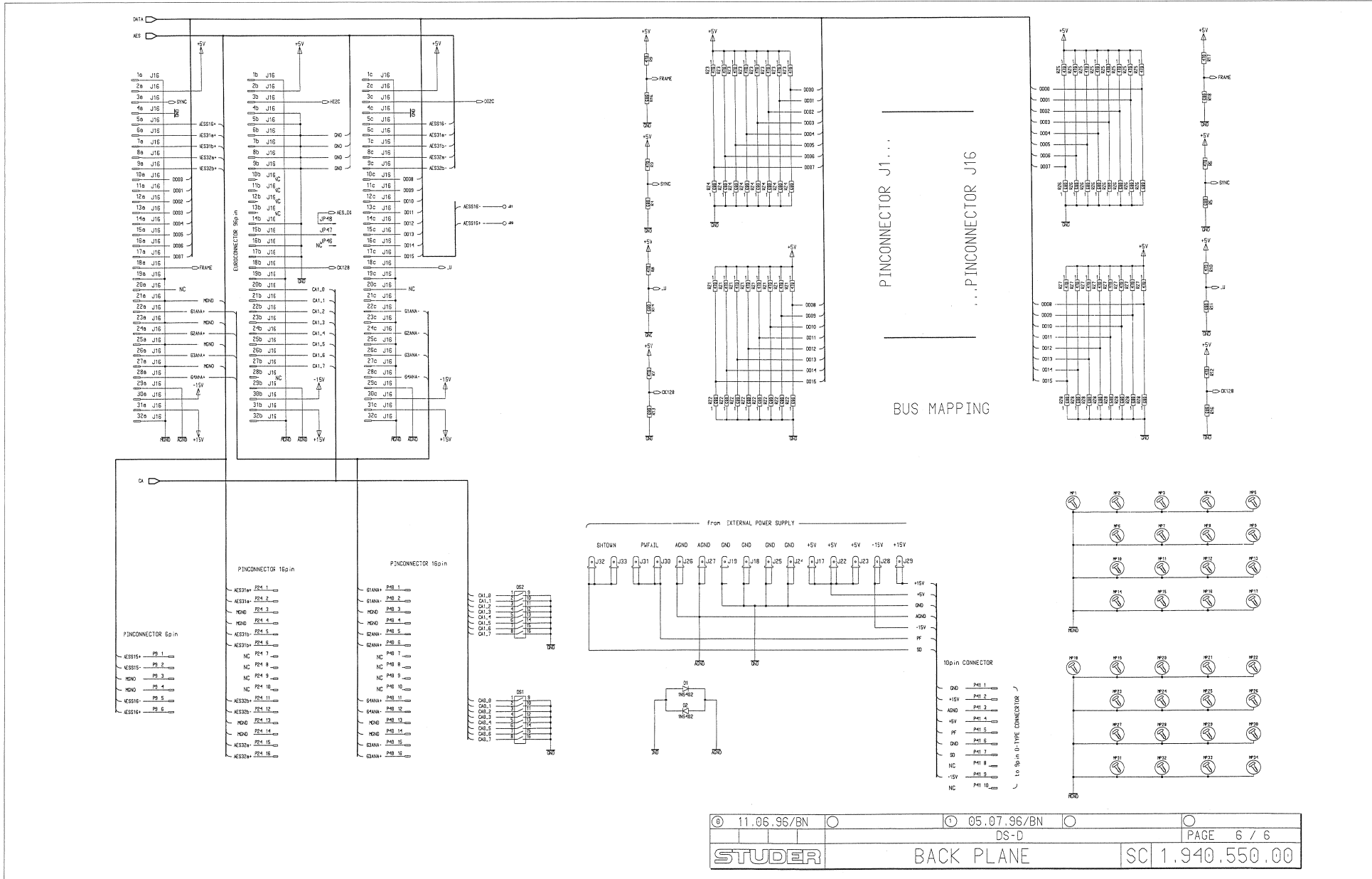


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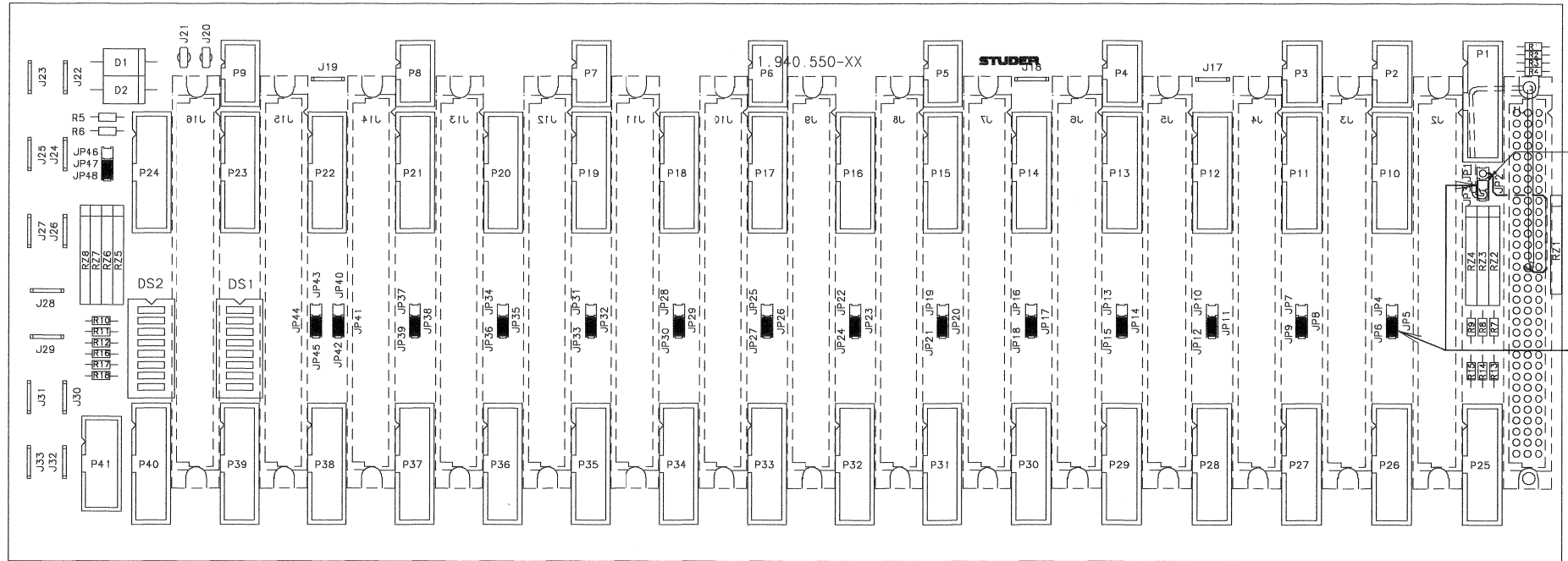




Back Plane 1.940.550.00



Back Plane 1.940.550.00



MP3...MP18 on JP1...JP48 fitted

Cut PC-track

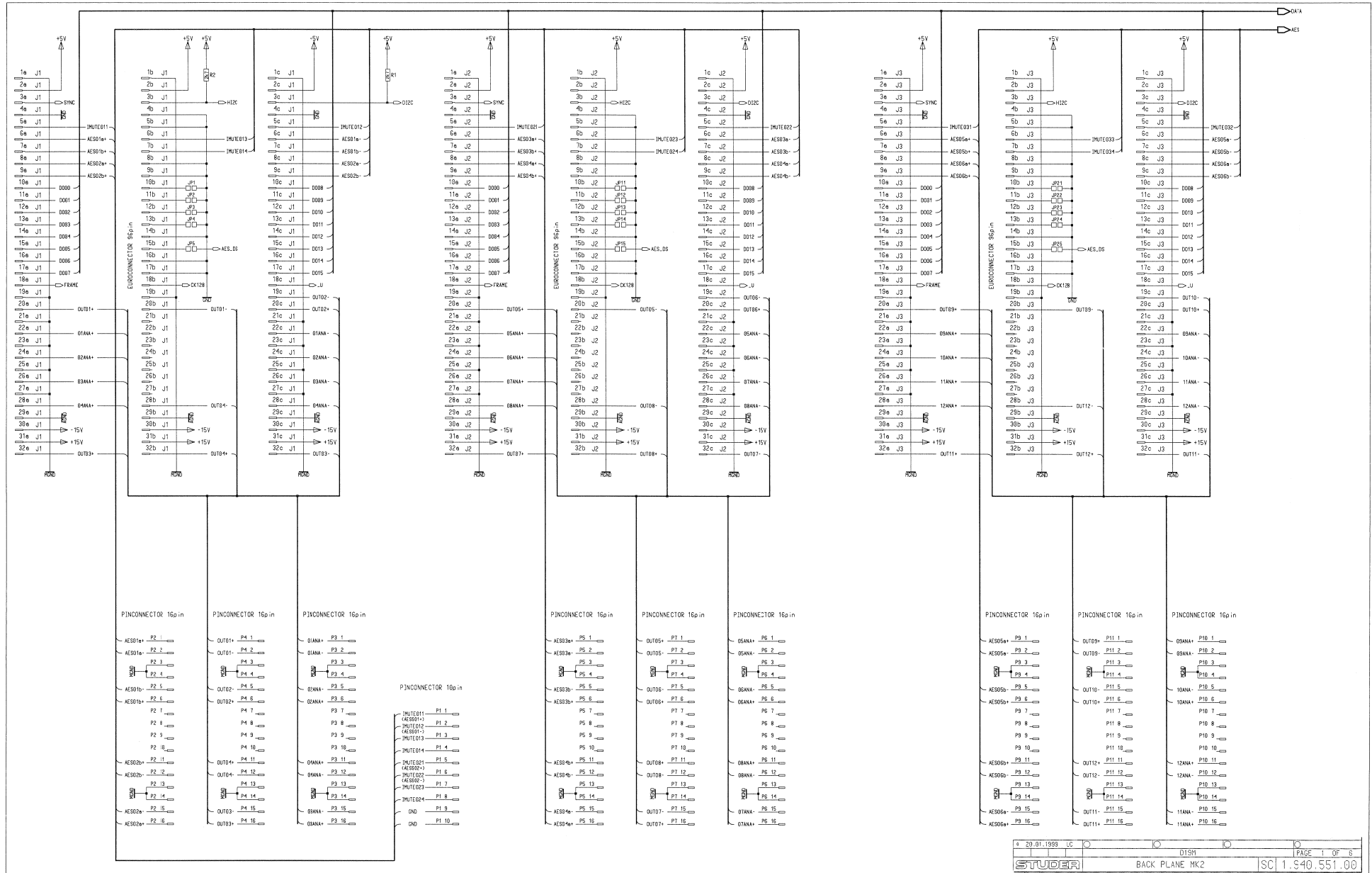
MP 1

Author	...	...	...	...	...	...	...	...	...
Checked	...	...	...	...	...	...	...	...	...
Released	05.07.96	BN	...	...	...	...	...	...	...
Version	11.06.96	BN	...	...	...	...	...	...	...
Copy to:	...	...	...	...	...	...	...	...	...
Copy to:	...	...	...	...	...	...	...	...	...

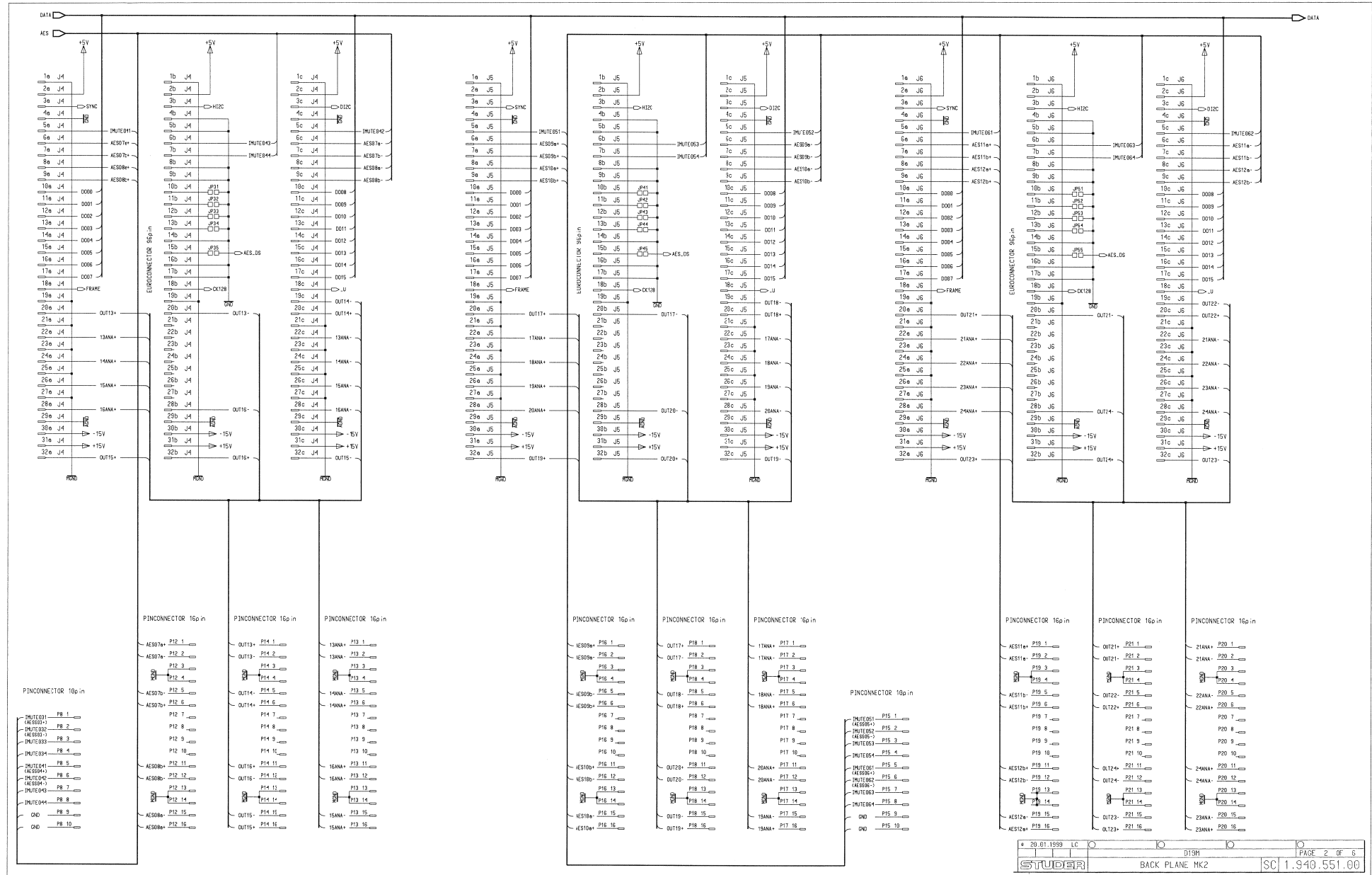
Back Plane 1.940.550.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	
0	D 1	50.04.0507		1N5402	D 1 N 5402,	0	JP 42	54.01.0020	1-P	P STIFT	Ø3*Ø3, H=5,8/3,4	0	R 13	57.10.1661		680R	MF, 1%, 0204	
0	D 2	50.04.0507		1N5402	D 1 N 5402,	0	JP 43	54.01.0020	1-P	P STIFT	Ø3*Ø3, H=5,8/3,4	0	R 14	57.10.1661		680R	MF, 1%, 0204	
0	DS 1	55.01.0168		Ø*a	SZ ,Ø*a, DIL	0	JP 44	54.01.0020	1-P	P STIFT	Ø3*Ø3, H=5,8/3,4	0	R 15	57.10.1661		680R	MF, 1%, 0204	
0	DS 2	55.01.0168		Ø*a	SZ ,Ø*a, DIL	0	JP 45	54.01.0020	1-P	P STIFT	Ø3*Ø3, H=5,8/3,4	0	R 16	57.10.1661		680R	MF, 1%, 0204	
0	JP 46	54.01.0020				0	JP 46	54.01.0020	1-P	P STIFT	Ø3*Ø3, H=5,8/3,4	0	R 17	57.10.1471		470R	MF, 1%, 0204	
0	JP 47	54.01.0020				0	JP 47	54.01.0020	1-P	P STIFT	Ø3*Ø3, H=5,8/3,4	0	R 18	57.10.1661		680R	MF, 1%, 0204	
0	JP 48	54.01.0020				0	JP 48	54.01.0020	1-P	P STIFT	Ø3*Ø3, H=5,8/3,4	0	RZ 1	57.88.4471	470.	RZ 8 * 470 ,	2%, SIP 9	
0	J 1	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 1	1.940.550.11			BACK PLANE PCB	0	RZ 2	57.88.4681	680.	RZ 8 * 680 ,	2%, SIP 9	
0	J 2	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 2	1.940.550.04			NR. ETIKETTE 5 * 20	0	RZ 3	57.88.4471	470.	RZ 8 * 470 ,	2%, SIP 9	
0	J 3	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 3	54.01.0021		Jumper	0.63 * 0.63mm	0	RZ 4	57.88.4681	680.	RZ 8 * 680 ,	2%, SIP 9	
0	J 4	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 4	54.01.0021		Jumper	0.63 * 0.63mm	0	RZ 5	57.88.4471	470.	RZ 8 * 470 ,	2%, SIP 9	
0	J 5	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 5	54.01.0021		Jumper	0.63 * 0.63mm	0	RZ 6	57.88.4681	680.	RZ 8 * 680 ,	2%, SIP 9	
0	J 6	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 6	54.01.0021		Jumper	0.63 * 0.63mm	0	RZ 7	57.88.4471	470.	RZ 8 * 470 ,	2%, SIP 9	
0	J 7	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 7	54.01.0021		Jumper	0.63 * 0.63mm	0	RZ 8	57.88.4681	680.	RZ 8 * 680 ,	2%, SIP 9	
0	J 8	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 8	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 9	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 9	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 10	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 10	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 11	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 11	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 12	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 12	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 13	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 13	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 14	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 14	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 15	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 15	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 16	1.940.550.01			MESSERLEISTE 96 pol DIN 41612	0	MP 16	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 17	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	MP 17	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 18	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	MP 18	54.01.0021		Jumper	0.63 * 0.63mm							
0	J 19	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	1	P 1	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	J 20	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	P 2	not used		6p	1/20" Au, gerade, ohne Verrieg							
0	J 21	54.02.0335		1p	Flatopin, 2.8*0.8mm	0	P 3	not used		6p	1/20" Au, gerade, ohne Verrieg							
0	J 22	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	P 4	not used		6p	1/20" Au, gerade, ohne Verrieg							
0	J 23	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	P 5	not used		6p	1/20" Au, gerade, ohne Verrieg							
0	J 24	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	P 6	not used		6p	1/20" Au, gerade, ohne Verrieg							
0	J 25	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	P 7	not used		6p	1/20" Au, gerade, ohne Verrieg							
0	J 26	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	P 8	not used		6p	1/20" Au, gerade, ohne Verrieg							
0	J 27	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	0	P 9	not used		6p	1/20" Au, gerade, ohne Verrieg							
0	J 28	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	1	P 10	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	J 29	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	1	P 11	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	J 30	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	1	P 12	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	J 31	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	1	P 13	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	J 32	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	1	P 14	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	J 33	54.02.0335		1p	P FLACH, 6.3*0.8, GERADE	1	P 15	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 1	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 16	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 2	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 17	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 3	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 18	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 4	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 19	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 5	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 20	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 6	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 21	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 7	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 22	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 8	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 23	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 9	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 24	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 10	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 25	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 11	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 26	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 12	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 27	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 13	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 28	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 14	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 29	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 15	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 30	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 16	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 31	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 17	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 32	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 18	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 33	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 19	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 34	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 20	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 35	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 21	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 36	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 22	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 37	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 23	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 38	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 24	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 39	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 25	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 40	54.4.2142		16p	1/20" Au, gerade, o Verr, 4mm							
0	JP 26	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	1	P 41	54.4.2141		10p	1/20" Au, gerade, o Verr, 4mm							
0	JP 27	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	0	R 1	57.10.1272		2k7	MF, 1%, 0204							
0	JP 28	54.01.0020		1-P	P STIFT Ø3*Ø3, H=5,8/3,4	0	R 2	57.10.1272		2k7	MF, 1%, 0204							

Back Plane MK2 1.940.551.00



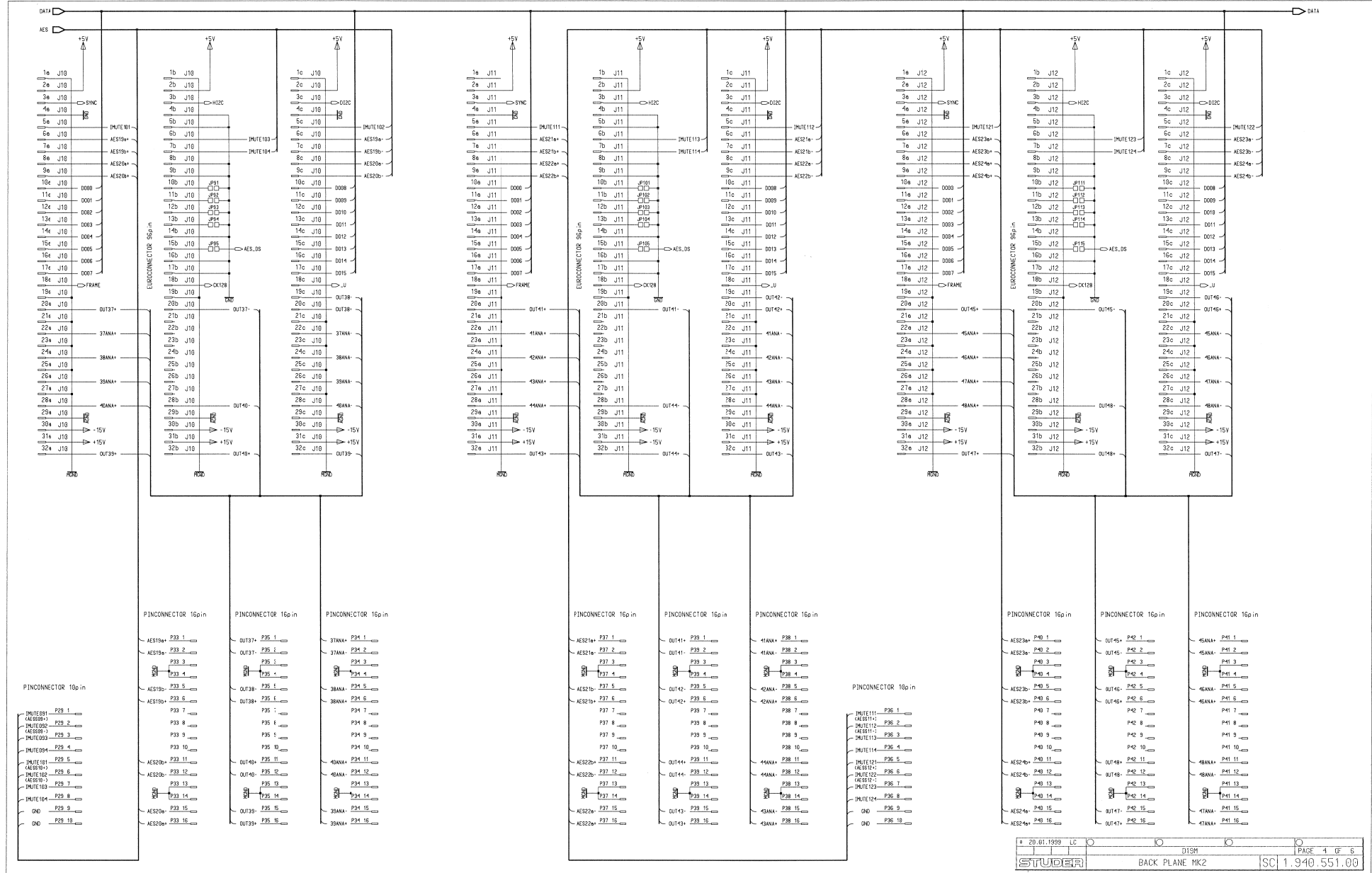
Back Plane MK2 1.940.551.00



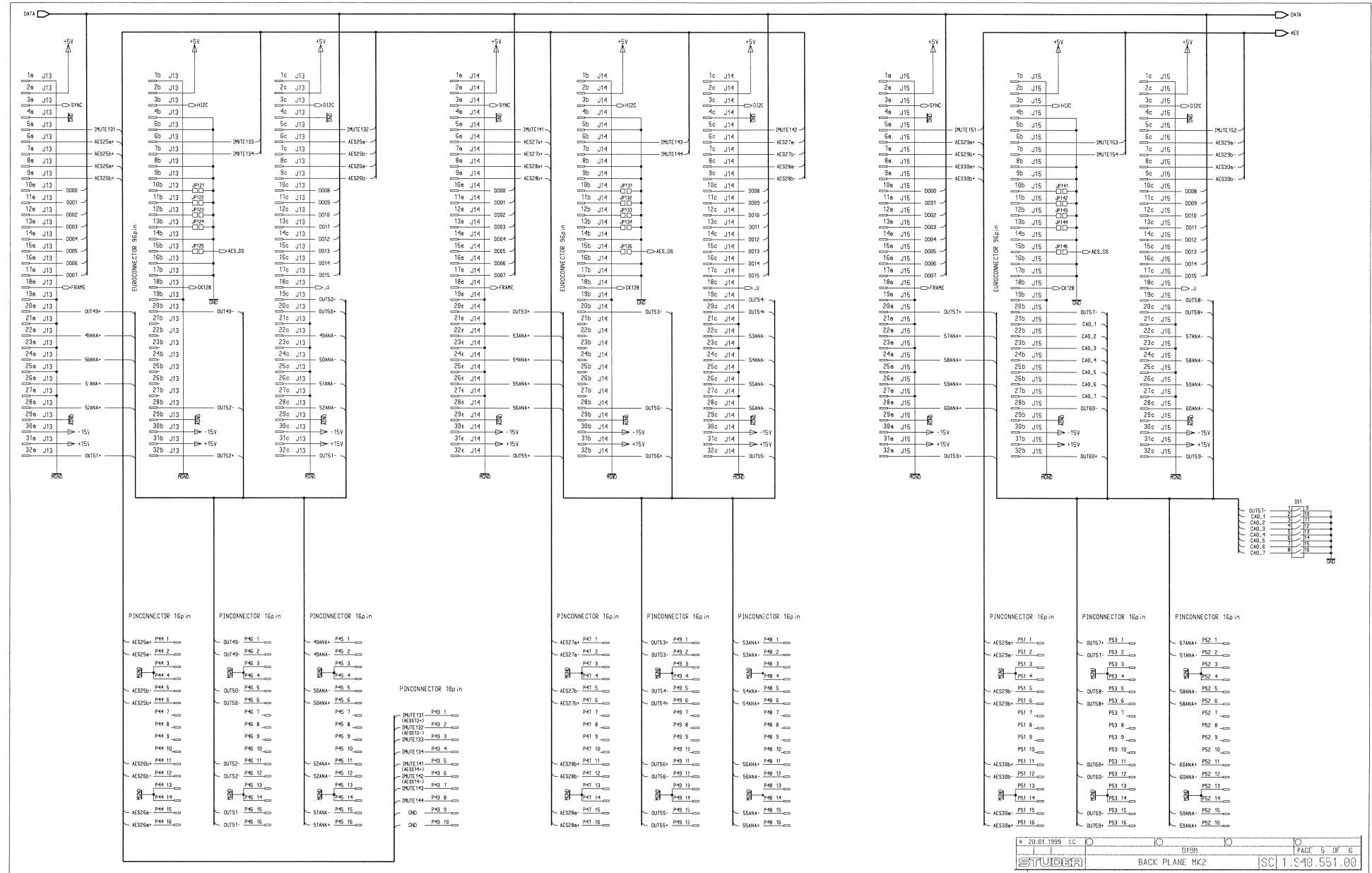




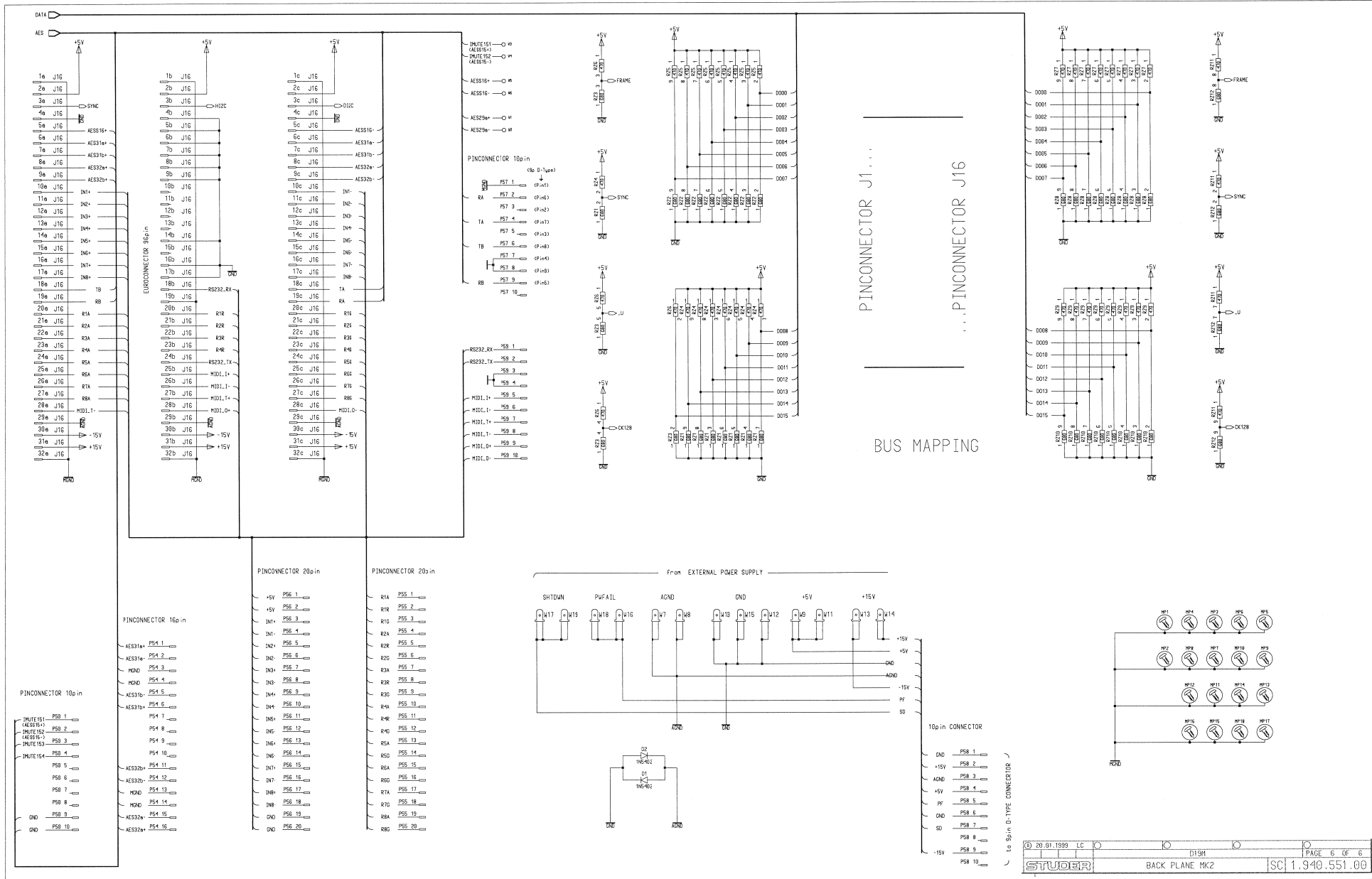
Back Plane MK2 1.940.551.00



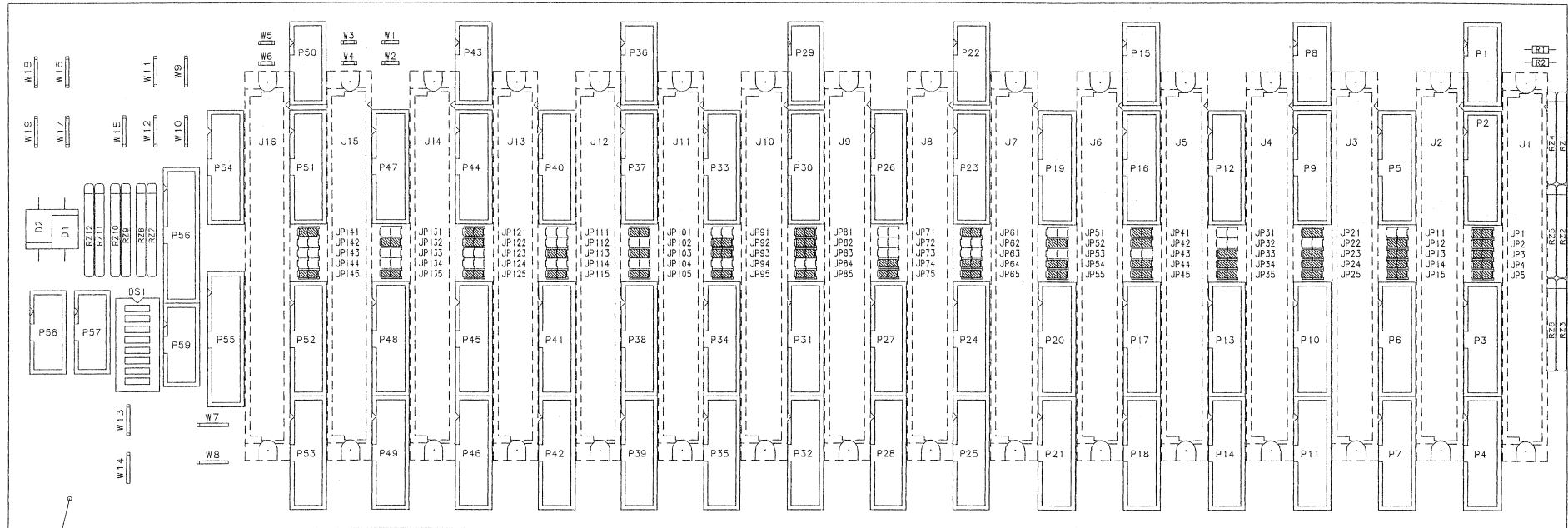
Back Plane MK2 1.940.551.00



Back Plane MK2 1.940.551.00



Back Plane MK2 1.940.551.00



MP1

Revision	03.02.1999	LC							
Date									
Drawn									
Checked									
Approved									



**POWER SUPPLY UNITS**

**General** For the power supply of the D19m frames, standard 19" units with power factor correction are used, equipped with a Studer front panel (earlier version: see next page).

Studer Part No.	Description
1.940.606.00	Power Supply 5 V/16 A
1.940.607.00	Power Supply $\pm 15$ V/3.5 A

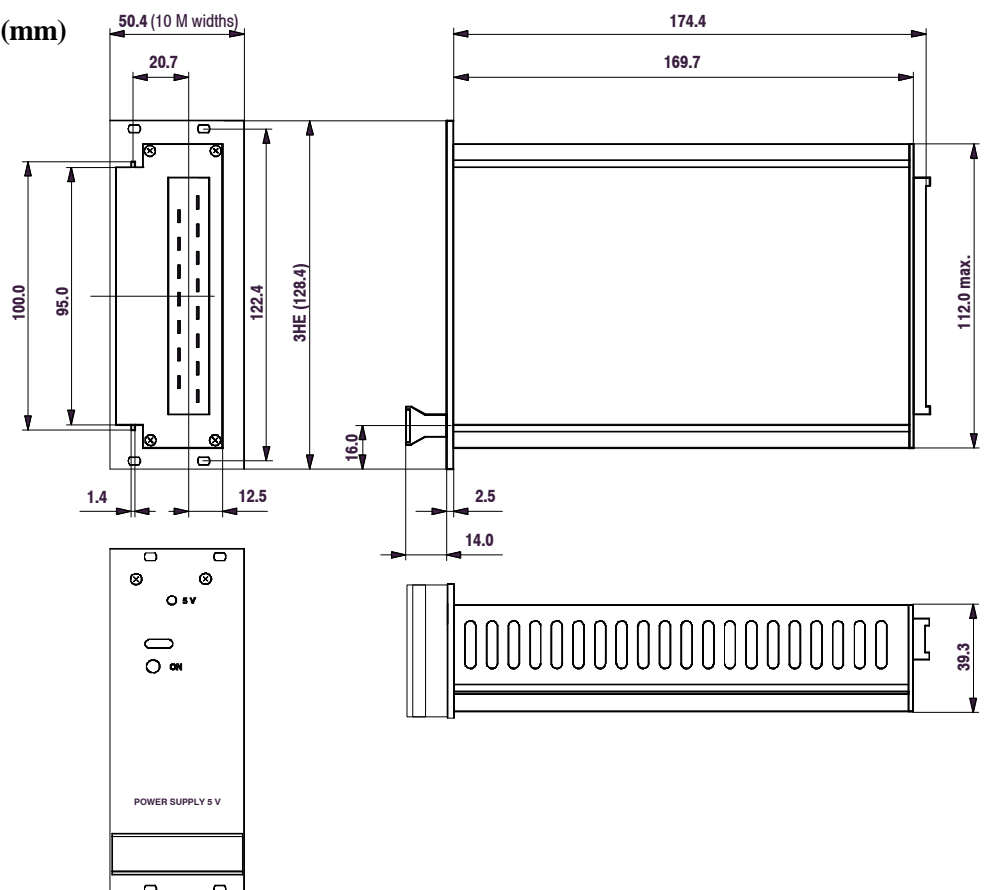


**Important** As the power supply units are safety-relevant parts, they may be serviced only by authorized personnel using original spare parts. For replacement or repair, contact your nearest Studer representative.

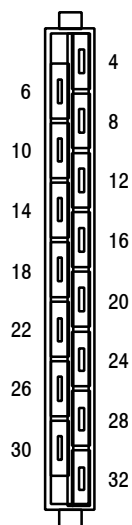
**Specifications**

- Mains Voltage** 88...264 V
- Mains Frequency** 45...65 Hz
- Efficiency** > 77%
- Output Power** 100 W total
- Output(s)** Short-circuit protected, main output(s) overload protected (110%)
- Power Down (Logic Inhibit)** Control input, 4...15 V<sub>DC</sub>, max. 15 mA, active high
- Power Fail** Output, open collector, active high (max. 30 V/1 mA)

**Dimensions (mm)**



## Pin Assignment



Pin	Single Output (1.940.606.00)	Dual Output (1.940.607.00)
4	+5 V	n.c.
6	GND	n.c.
8	Sense GND	n.c.
10	Sense +	n.c.
12	+5 V	+15 V
14	GND	GND
16	n.c.	GND
18	n.c.	-15 V
20	Logic inhibit	Logic inhibit
22	Common	Common
24	Power fail	Power fail
26	n.c.	n.c.
28	AC live	AC live
30	AC neutral	AC neutral
32	AC Protective Earth	AC Protective Earth

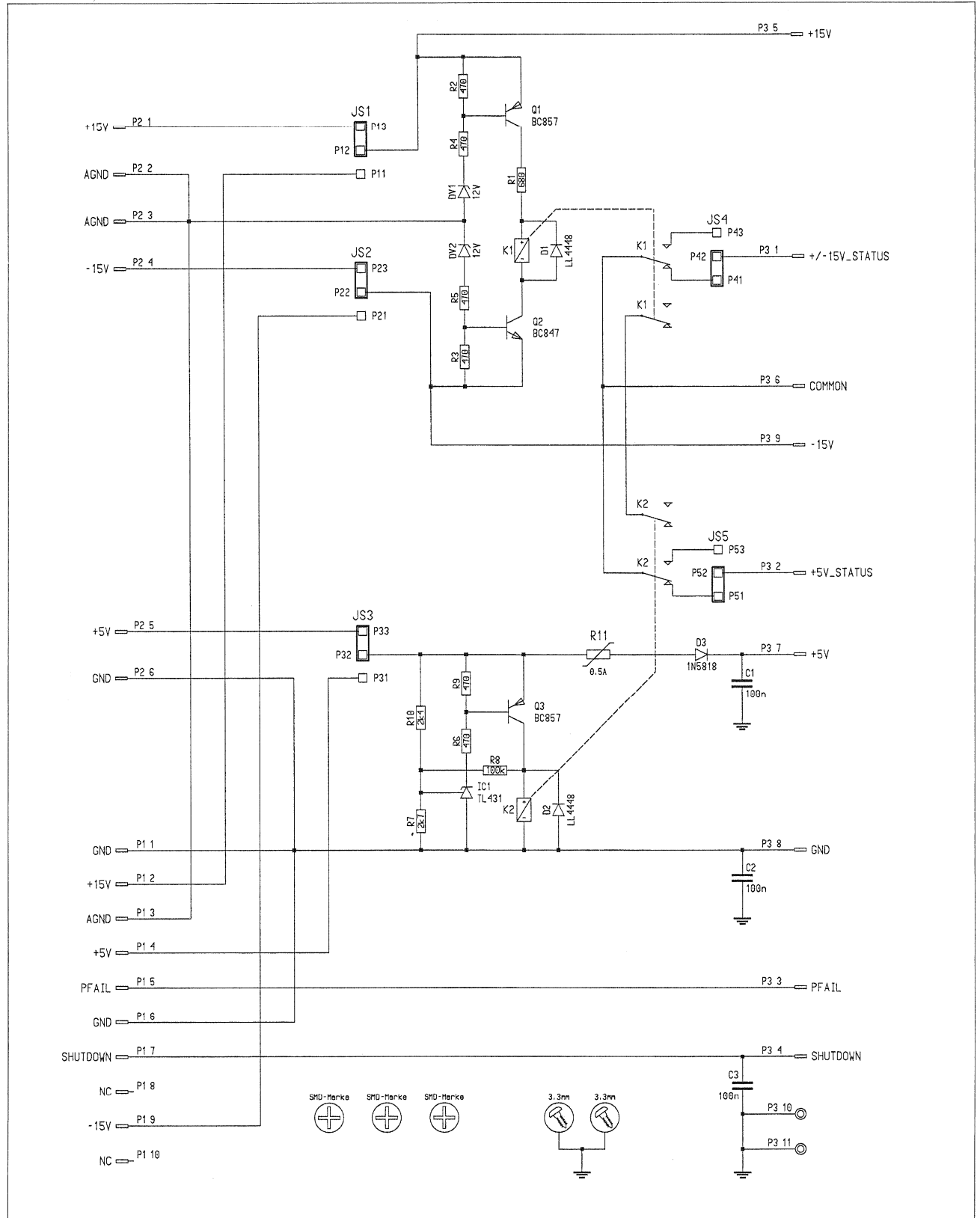
## Connections

**Current Version:** The current versions of the 3U frames use one *power supply unit* 1.940.606 (+5 V) and 1.940.607 ( $\pm 15$  V) each, together with one of the *Supply Boards* 1.940.410 (single frame), 1.940.411 (frame with redundant supply output), or 1.940.412 (frame with redundant supply input).

**Earlier Version:** In earlier versions of the 3U frames, one *power supply unit* 1.940.601 (+5 V) and 1.940.602 ( $\pm 15$  V) each was used. For connection, a *Supply Status Board* (1.940.589 or 1.940.593) was used, together with one *Power Distributor +5/24 V w. Diode PCB* (1.940.624), and one *Power Distributor  $\pm 15$  V w. Diode PCB* (1.940.623).



Supply Status Board I.940.589.00

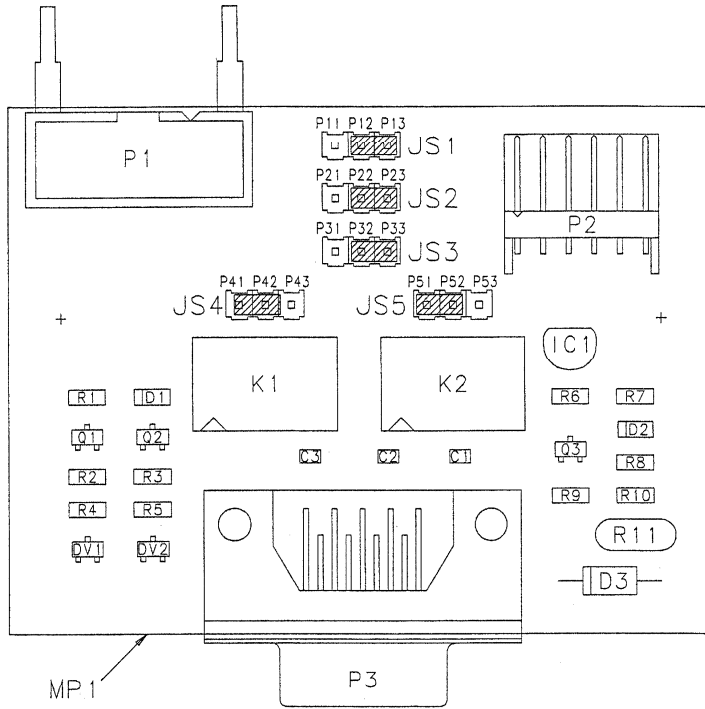


0	07.10.1999	ZT	○	○	○	○
						PAGE 1 OF 1
STUDER		SUPPLY STATUS BOARD			SC	1.940.589.00





Supply Status Board 1.940.589.00



Modification					③
Aenderung					②
Edition	07.10.1999	ZT			①
Ausgabe	Date	Viso	Checked	Seen	Index
	Datum	Bez.	Gepr.	Gez.	
Copy to:					
Kopie fuer:					
Number:	1.940.589.00				
Number:					

Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 2	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 3	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	D 1	50.60.8001		4448	200mA 75V 4ns SOD 80
0	D 2	50.60.8001		4448	200mA 75V 4ns SOD 80
0	D 3	50.04.0512		1N5818	D 1N 5818, 1N 5819,
0	DV 1	50.60.9019		12V	5%, 0.2W, SOT 23
0	DV 2	50.60.9019		12V	5%, 0.2W, SOT 23
0	IC 1	50.10.0106		TL431	Shunt regulator
0	JS 1	54.01.0021		Jumper	0.63 * 0.63mm
0	JS 2	54.01.0021		Jumper	0.63 * 0.63mm
0	JS 3	54.01.0021		Jumper	0.63 * 0.63mm
0	JS 4	54.01.0021		Jumper	0.63 * 0.63mm
0	JS 5	54.01.0021		Jumper	0.63 * 0.63mm
0	K 1	56.04.0197		2u	24V 125V 2A Ag/Au
0	K 2	56.04.0198		2u	5V 125V 2A Ag/Au
0	MP 1	1.940.589.11	mp		SUPPLY STATUS PCB
0	MP 2	1.940.589.10	mp		Nr.-Etikette 5 * 20
0	MP 3	43.01.0108	mp	Label	ESE-WARNSCHILD
0	P 1	54.14.2101		10p	P STECKER 10 P,AU,VR,GERADE
0	P 2	54.12.0726		6p	Stecker winkel PCB
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	P 11	54.01.0020		1p	Pin 0.63*0.63
0	P 12	54.01.0020		1p	Pin 0.63*0.63
0	P 13	54.01.0020		1p	Pin 0.63*0.63
0	P 21	54.01.0020		1p	Pin 0.63*0.63
0	P 22	54.01.0020		1p	Pin 0.63*0.63
0	P 23	54.01.0020		1p	Pin 0.63*0.63
0	P 31	54.01.0020		1p	Pin 0.63*0.63
0	P 32	54.01.0020		1p	Pin 0.63*0.63
0	P 33	54.01.0020		1p	Pin 0.63*0.63
0	P 41	54.01.0020		1p	Pin 0.63*0.63
0	P 42	54.01.0020		1p	Pin 0.63*0.63
0	P 43	54.01.0020		1p	Pin 0.63*0.63
0	P 51	54.01.0020		1p	Pin 0.63*0.63
0	P 52	54.01.0020		1p	Pin 0.63*0.63
0	P 53	54.01.0020		1p	Pin 0.63*0.63
0	Q 1	50.60.1001		BC857B	PNP 45V 100mA SOT 23
0	Q 2	50.60.0001		BC847B	NPN 45V 100mA SOT 23
0	Q 3	50.60.1001		BC857B	PNP 45V 100mA SOT 23
0	R 1	57.60.1681		680R	MF, 1%, 0204, E24

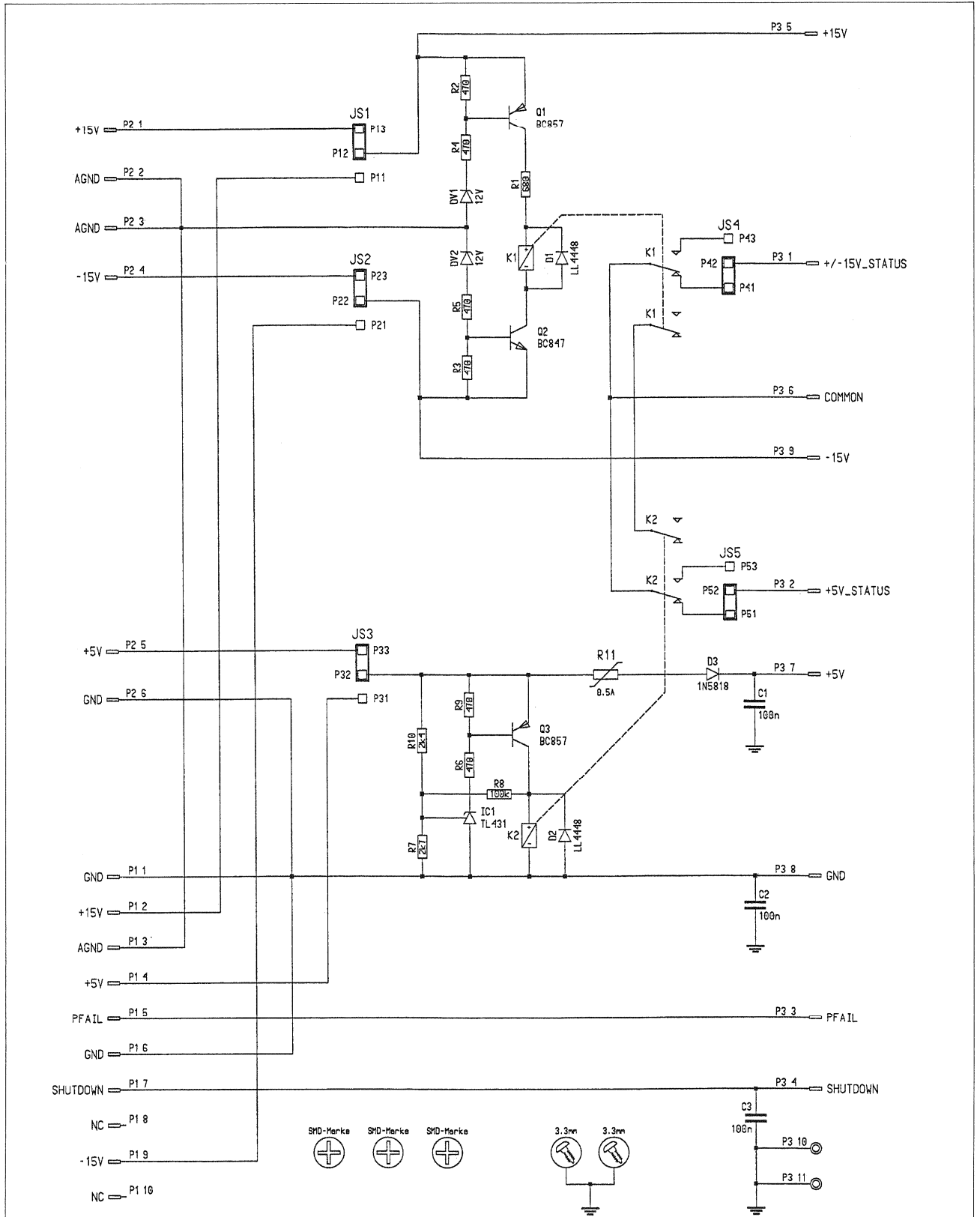
Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 2	57.60.1471		470R	MF, 1%, 0204, E24
0	R 3	57.60.1471		470R	MF, 1%, 0204, E24
0	R 4	57.60.1471		470R	MF, 1%, 0204, E24
0	R 5	57.60.1471		470R	MF, 1%, 0204, E24
0	R 6	57.60.1471		470R	MF, 1%, 0204, E24
0	R 7	57.60.1272		2K7	MF, 1%, 0204, E24
0	R 8	57.60.1104		100K	MF, 1%, 0204, E24
0	R 9	57.60.1471		470R	MF, 1%, 0204, E24
0	R 10	57.60.1242		2K4	MF, 1%, 0204, E24
0	R 11	57.92.7013		0.5A	PTC 60V

End of List

Comments



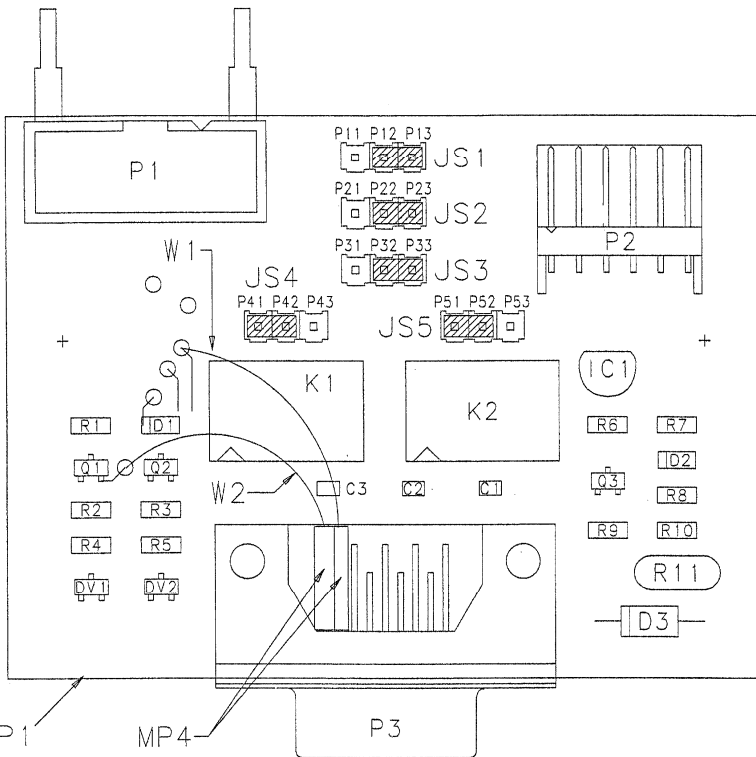
Supply Status Board 1.940.593.00



0	27.03.1998	GP	①	07.10.99	ZT	○	○	○
								PAGE 1 OF 1
STUDER		SUPPLY STATUS BOARD				SC		1.940.593.00



Supply Status Board I.940.593.00



Modification					③
Änderung					②
07.10.1999	ZT	/	/	/	①
27.03.1998	GP	/	/	/	①
Date	Visa	Checked	Seen	Index	
Datum	Gez.	Gepr.	Gepr.		
Copy for:					
Kopie fuer:					
Number:	1.940.593.00				
Number:					

Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 2	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 3	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	D 1	50.60.8001		4448	200mA 75V 4ns SOD 80
0	D 2	50.60.8001		4448	200mA 75V 4ns SOD 80
0	D 3	50.04.0512		1N5818	D 1N 5818, 1N 5819,
0	DV 1	50.60.9019		12V	5%, 0.2W, SOT 23
0	DV 2	50.60.9019		12V	5%, 0.2W, SOT 23
0	IC 1	50.10.0106		TL431	Shunt regulator
0	JS 1	54.01.0021		Jumper	0.63 * 0.63mm
0	JS 2	54.01.0021		Jumper	0.63 * 0.63mm
0	JS 3	54.01.0021		Jumper	0.63 * 0.63mm
0	JS 4	54.01.0021		Jumper	0.63 * 0.63mm
0	JS 5	54.01.0021		Jumper	0.63 * 0.63mm
0	K 1	56.04.0197		2u	24V 125V 2A Ag/Au
0	K 2	56.04.0198		2u	5V 125V 2A Ag/Au
0	MP 1	1.940.593.11		mp	SUPPLY STATUS PCB
0	MP 2	1.940.593.04		mp	Nr.-Etikette 5 * 20
0	MP 3	43.01.0108		mp	ESE-WARNSCHILD
1	MP 4	1.010.107.65		2 pcs	Schrumpf-Schlauch bl
1	MP 5	43.10.0110		A	Revisions-Etikette 5mm h/blau
0	P 1	54.14.2101		10p	P STECKER 10 P.AU.VR.GERADE
0	P 2	54.12.0726		6p	Stecker winkel PCB
0	P 3	54.13.0071		9p	D-Sub, PCB, Winkel
0	P 11	54.01.0020		1p	Pin 0.63*0.63
0	P 12	54.01.0020		1p	Pin 0.63*0.63
0	P 13	54.01.0020		1p	Pin 0.63*0.63
0	P 21	54.01.0020		1p	Pin 0.63*0.63
0	P 22	54.01.0020		1p	Pin 0.63*0.63
0	P 23	54.01.0020		1p	Pin 0.63*0.63
0	P 31	54.01.0020		1p	Pin 0.63*0.63
0	P 32	54.01.0020		1p	Pin 0.63*0.63
0	P 33	54.01.0020		1p	Pin 0.63*0.63
0	P 41	54.01.0020		1p	Pin 0.63*0.63
0	P 42	54.01.0020		1p	Pin 0.63*0.63
0	P 43	54.01.0020		1p	Pin 0.63*0.63
0	P 51	54.01.0020		1p	Pin 0.63*0.63
0	P 52	54.01.0020		1p	Pin 0.63*0.63
0	P 53	54.01.0020		1p	Pin 0.63*0.63
0	Q 1	50.60.1001		BC857B	PNP 45V 100mA SOT 23
0	Q 2	50.60.0001		BC847B	NPN 45V 100mA SOT 23
0	Q 3	50.60.1001		BC857B	PNP 45V 100mA SOT 23

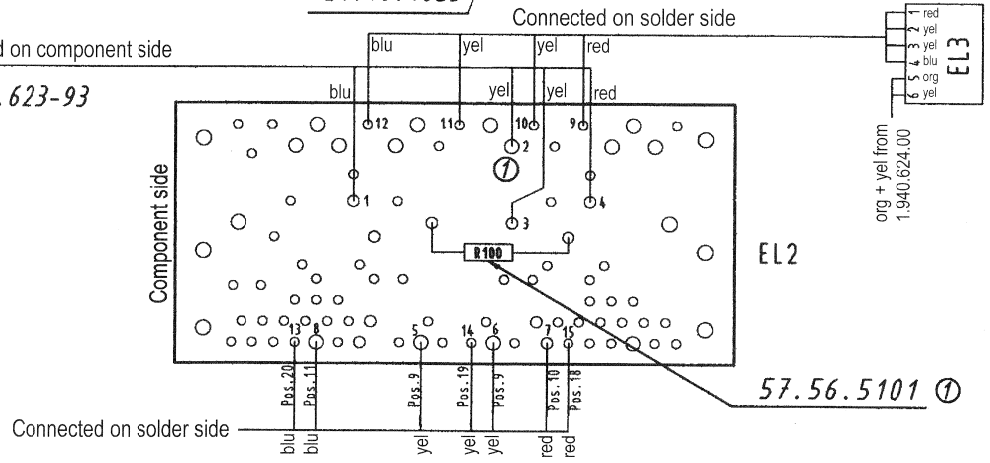
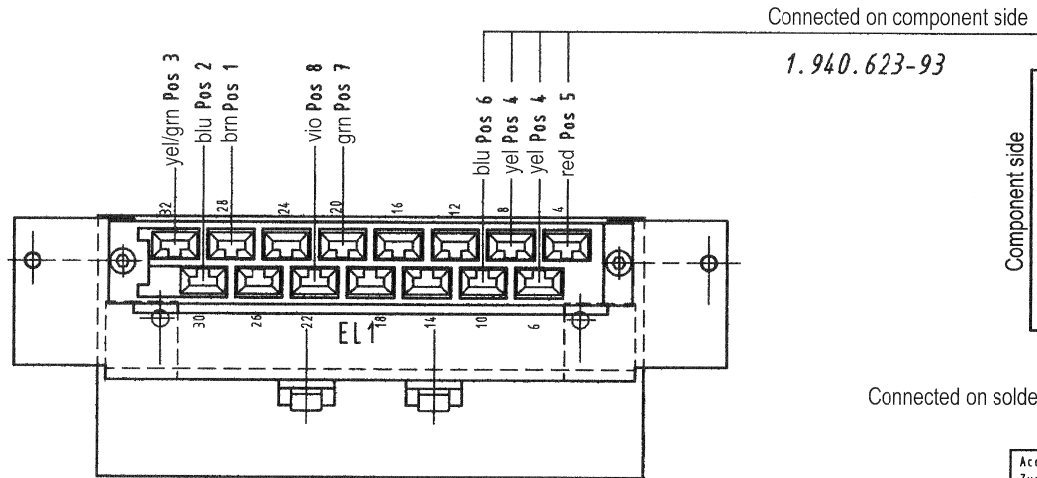
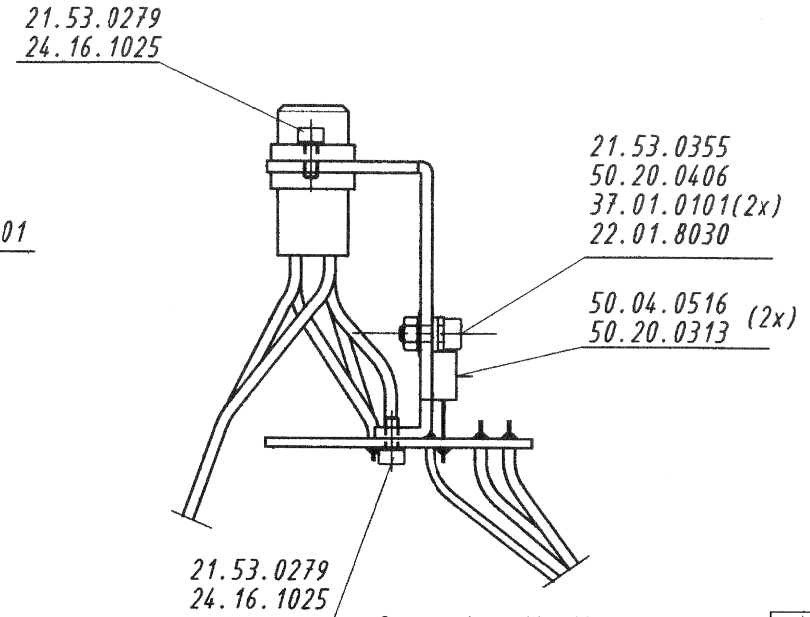
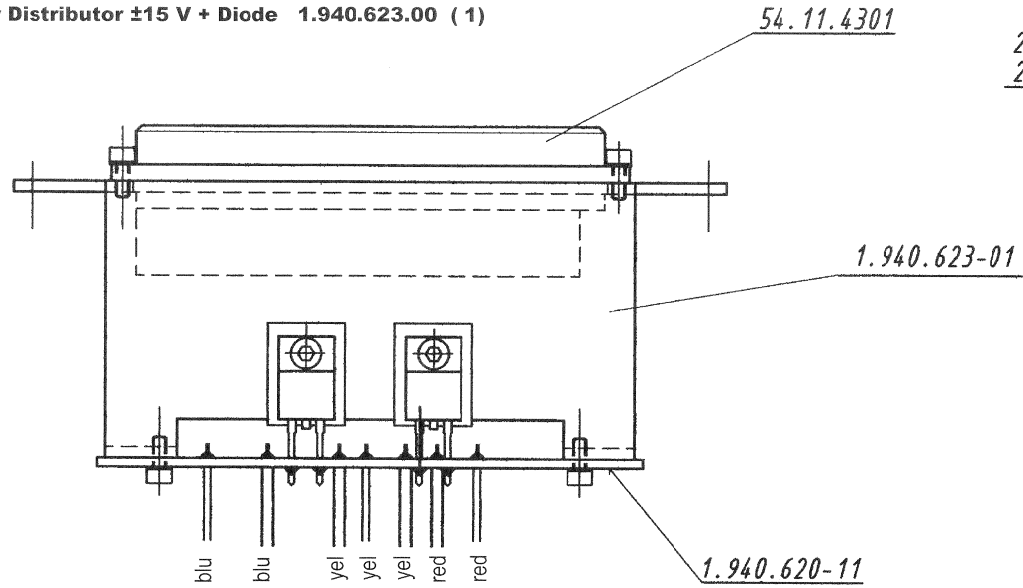
Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 1	57.60.1681		680R	MF, 1%, 0204, E24
0	R 2	57.60.1471		470R	MF, 1%, 0204, E24
0	R 3	57.60.1471		470R	MF, 1%, 0204, E24
0	R 4	57.60.1471		470R	MF, 1%, 0204, E24
0	R 5	57.60.1471		470R	MF, 1%, 0204, E24
0	R 6	57.60.1471		470R	MF, 1%, 0204, E24
0	R 7	57.60.1272		2K7	MF, 1%, 0204, E24
0	R 8	57.60.1104		100K	MF, 1%, 0204, E24
0	R 9	57.60.1471		470R	MF, 1%, 0204, E24
0	R 10	57.60.1242		2K4	MF, 1%, 0204, E24
0	R 11	57.92.7013		0.5A	PTC 60V
1	W 1	1.169.200.70			LITZE SW 70MM
1	W 2	1.169.200.70			LITZE SW 70MM

End of List

Comments

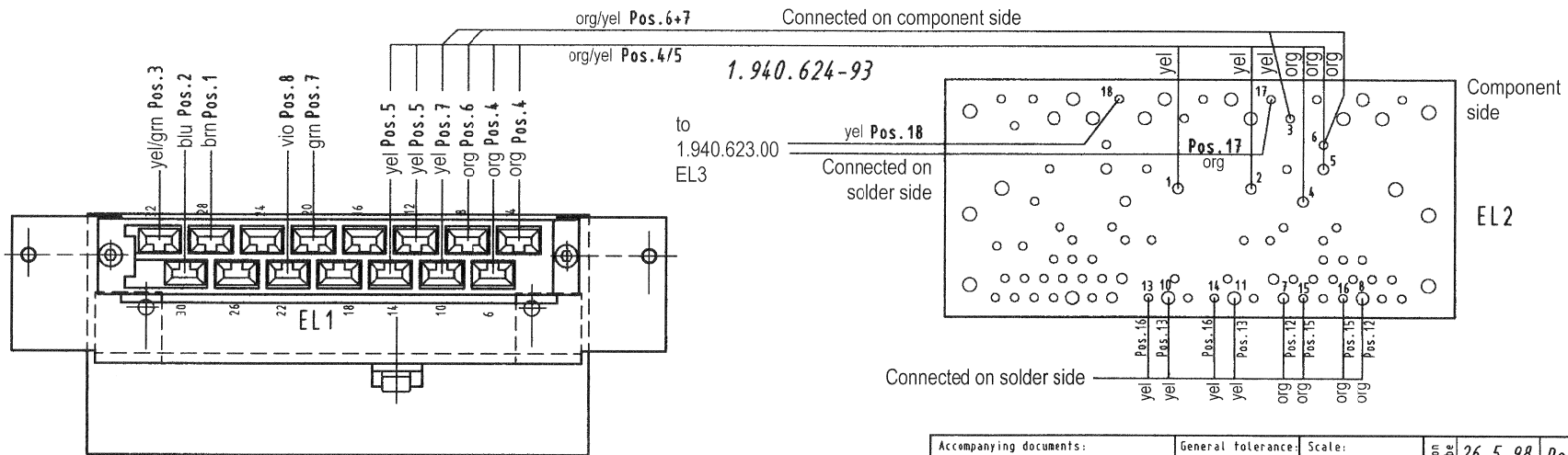
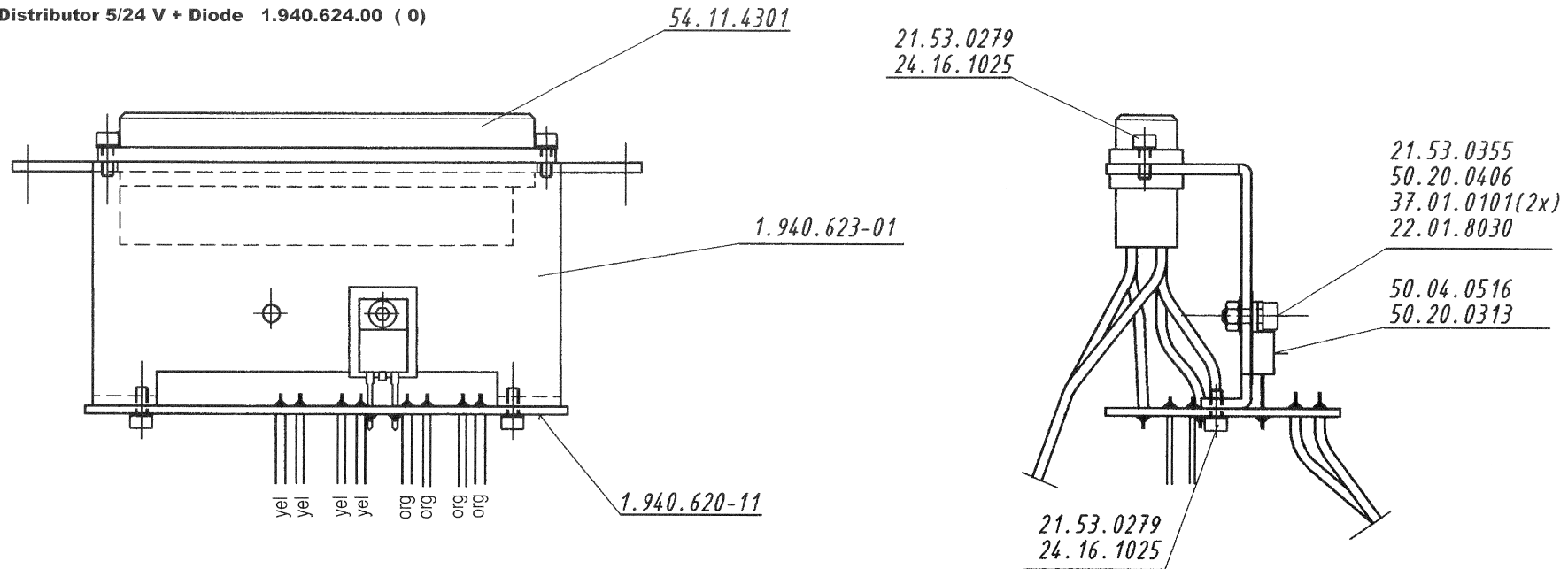
(Idx1) Additional: MP4,MP5,W1,W2

Power Distributor ±15 V + Diode 1.940.623.00 (1)



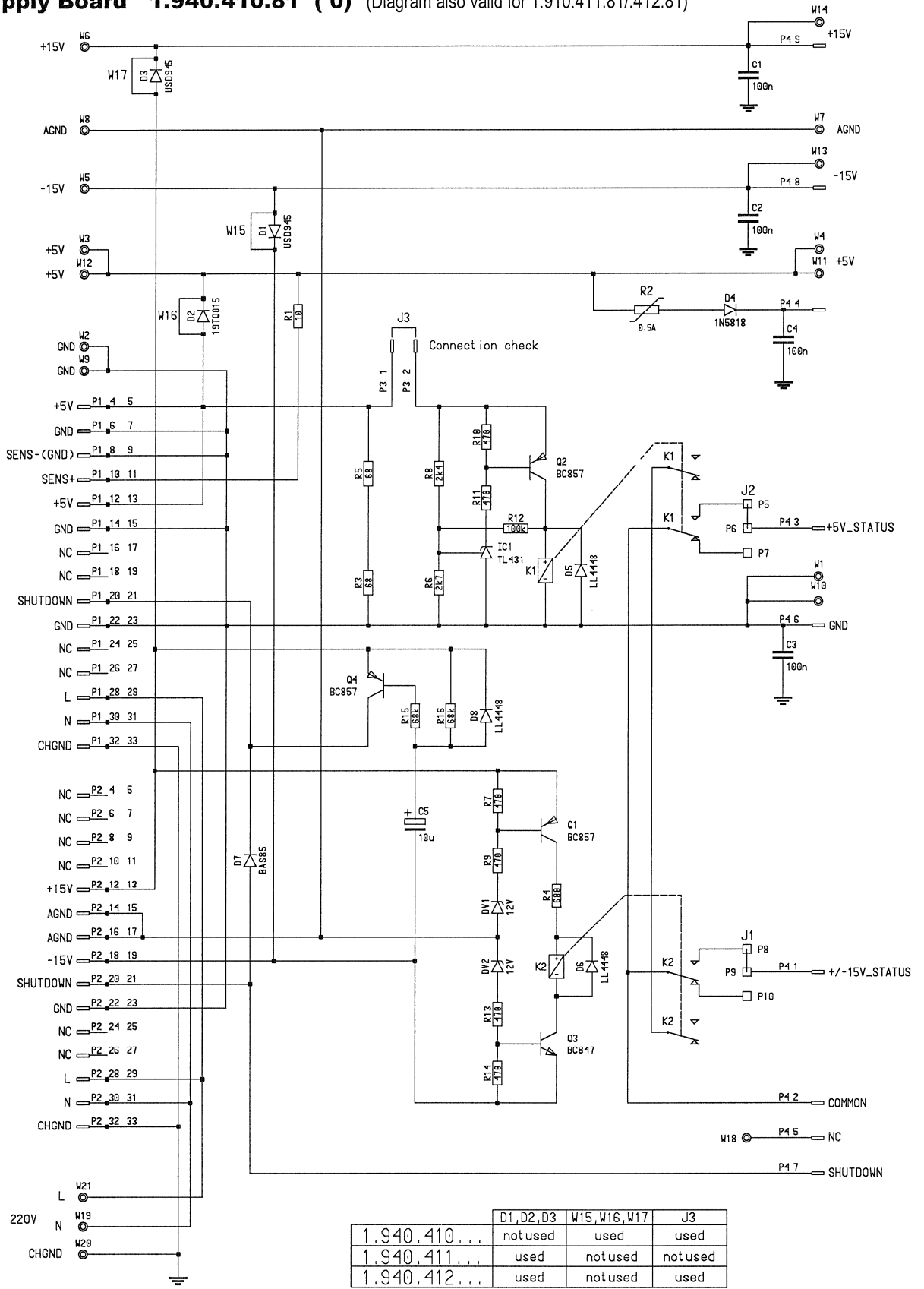
Accompanying documents: Zugehörige Unterlagen:	General tolerance: Freimasstoleranz:	Scale: Massstab:	Edition Ausgabe	04.01.00	hm	HM	HM	①
Substitute for: Ersatz für:	Replaced by: Ersetzt durch:	Copy to: Kopie für:	Date Datum	Visa Gez.	Checked Gepr.	Seen Ges.	Index	
<b>STUDER</b> REGENSDORF			Description: Benennung: <i>Power Distr. ±15V+Diode</i>		Number: Number: <i>1.940.623-00</i>			

**Power Distributor 5/24 V + Diode 1.940.624.00 ( 0 )**



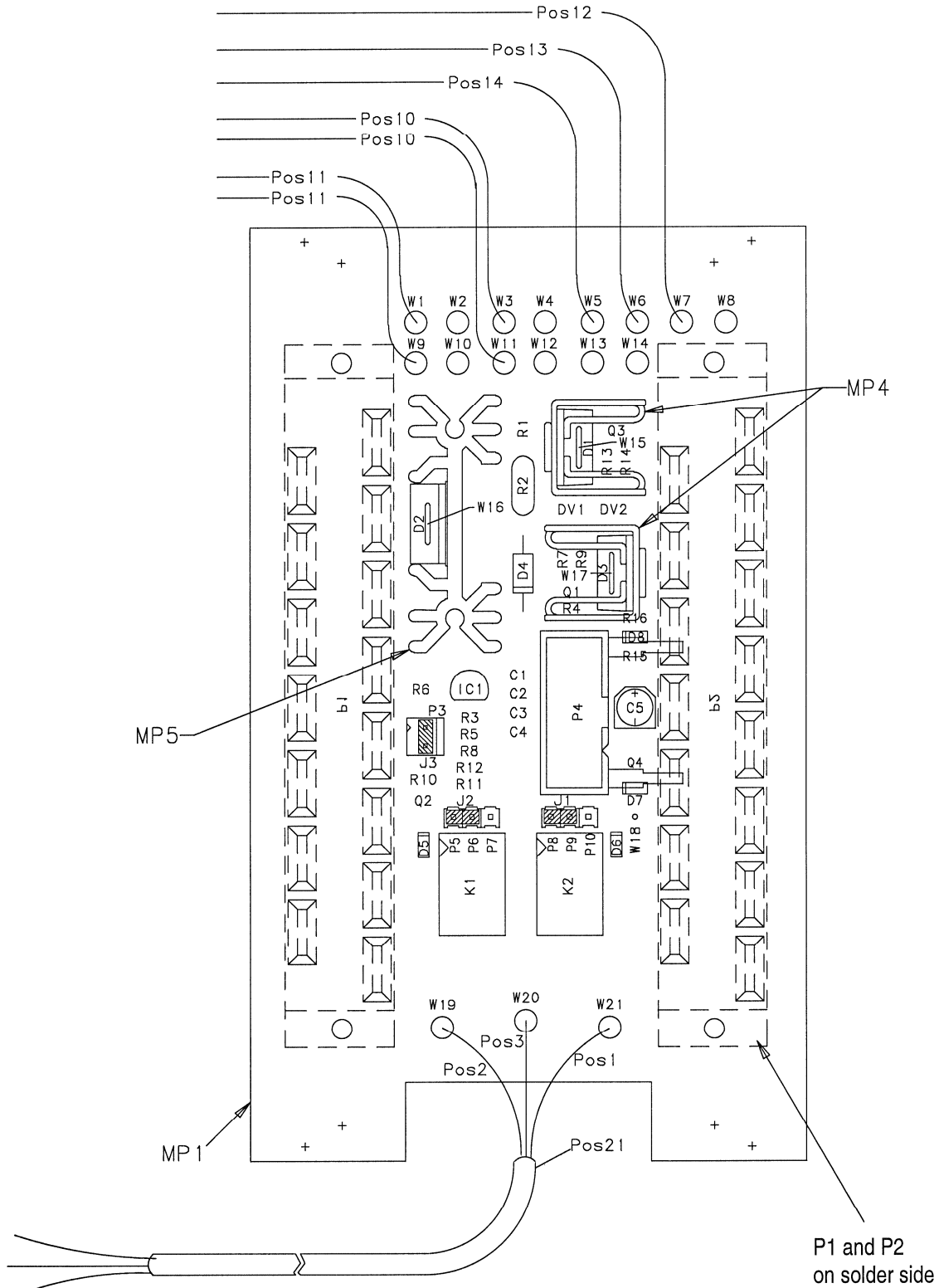
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Substitute for: Ersatz für:	Replaced by: Ersetzt durch:	Copy to: Kopie für:	Date Datum		Visa Gez.	Checked Gepr.	Seen Ges.	Index
<b>STUDER</b> REGENSDORF			Description: Benennung: <i>Power.Distr.5/24V +Diode</i>			Number: Nummer: <i>1.940.624-00</i>		

**Supply Board 1.940.410.81 ( 0 )** (Diagram also valid for 1.910.411.81/412.81)



	D1,D2,D3	W15,W16,W17	J3
1.940.410...	not used	used	used
1.940.411...	used	not used	not used
1.940.412...	used	not used	used

**Supply Board 1.940.410.81 ( 1 )**



Accompanying documents: Zugehörige Unterlagen: PL, LL	General tolerance: Freimasstoleranz:	Scale: Massstab:	Edition Ausgabe	15.04.2002	PZ	HM	RL	①
Substitute for: Ersatz fuer:			Date Datum	15.04.2002	Visa Gez.	Checked Gepr.	Seen Ges.	Index
Description: Benennung: <b>STUDER</b> REGENSDORF			SUPPLY BOARD, ESE			Page: Seite: 1 / 1		
			Number: Number:	1.940.410.81				

**Supply Board 1.940.410.81 ( 1)**

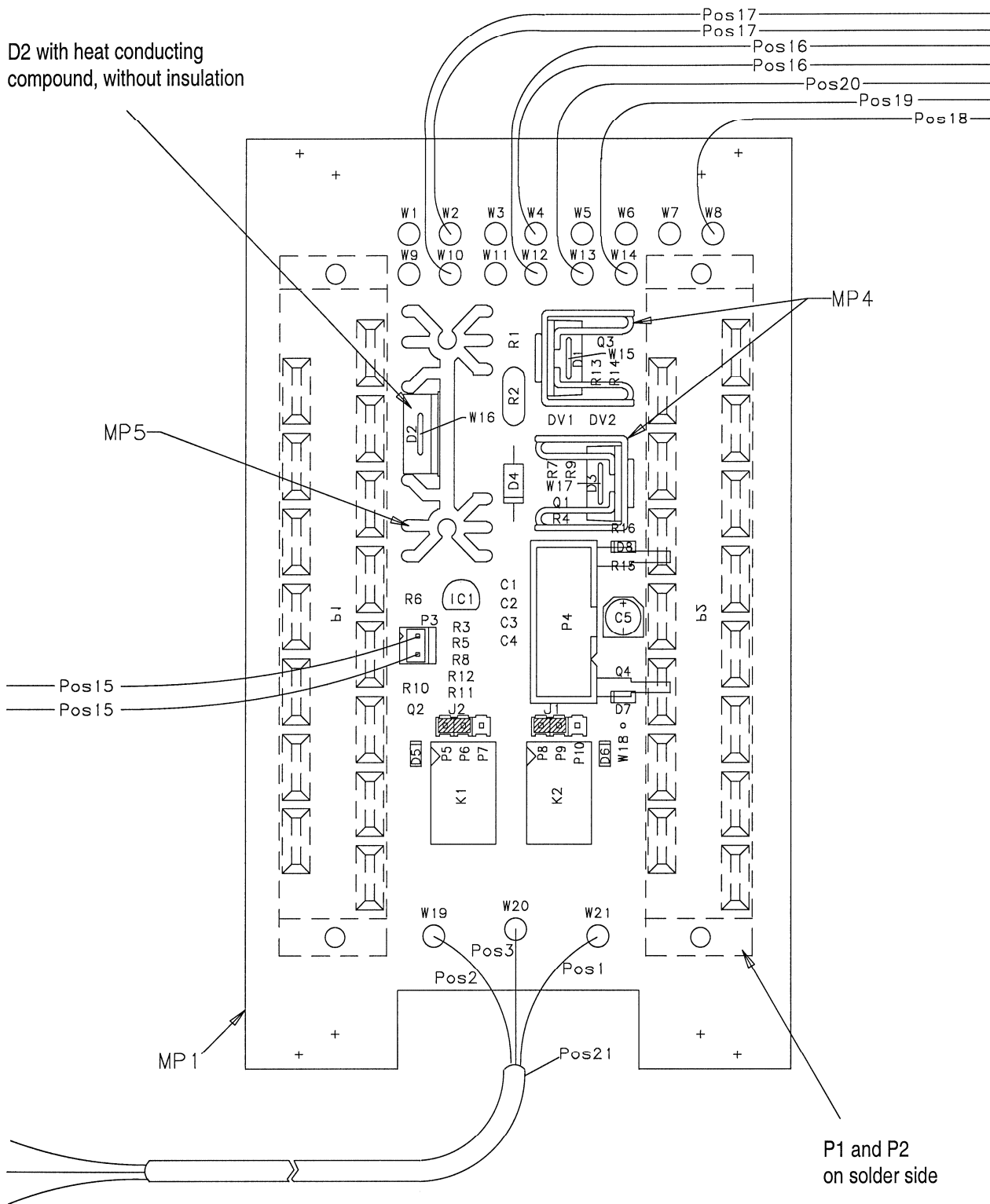
Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.3337	1 pce 100n	CER 50V, 10%, X7R, 0805
0	C 2	59.60.3337	1 pce 100n	CER 50V, 10%, X7R, 0805
0	C 3	59.60.3337	1 pce 100n	CER 50V, 10%, X7R, 0805
0	C 4	59.60.3337	1 pce 100n	CER 50V, 10%, X7R, 0805
0	C 5	59.68.0109	1 pce 10u	EL 35V, 5.0*5.7
0	D 1		not used 1 pce USD945	Schottky Rect 16A, 45V
0	D 2		not used 1 pce 19TQ015	19A 15V Schottky, TO 220
0	D 3		not used 1 pce USD945	Schottky Rect 16A, 45V
0	D 4	50.04.0512	1 pce 1N5818	D 1N 5818, 1N 5819,
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	50.60.8101	1 pce BAS85	200mA 30V Schottky SOD 80
0	D 8	50.60.8001	1 pce 4448	200mA 75V 4ns SOD 80
0	DV 1	50.60.9019	1 pce 12V	5%, 0.2W, SOT 23
0	DV 2	50.60.9019	1 pce 12V	5%, 0.2W, SOT 23
0	IC 1	50.10.0108	1 pce TL431	Shunt regulator
0	J 1	54.01.0021	1 pce Jumper	0.63*0.63mm, Au
0	J 2	54.01.0021	1 pce Jumper	0.63*0.63mm, Au
0	J 3	54.01.0021	1 pce Jumper	0.63*0.63mm, Au
0	K 1	56.04.0198	1 pce 2*u	5V 125V 2A Ag/Au
0	K 2	56.04.0197	1 pce 2*u	24V 125V 2A Ag/Au
0	LL 1	1.940.410.93	1 pce	LL Supply Board
1	MP 1	1.940.410.12	1 pce	Supply Board PCB
0	MP 2	1.940.410.10	1 pce	Nr. Etikette
0	MP 3	43.01.0108	1 pce Label	ESE-WARNSCHILD
0	MP 4		not used 2 pcs	Kühlkörper, TO 220, vertikal
0	MP 5		not used 1 pce	Kühlkörper, TO 220, vertikal
0	P 1	54.11.4307	1 pce 15p	EU-H, Action pin
0	P 2	54.11.4307	1 pce 15p	EU-H, Action pin
0	P 3	54.12.0702	1 pce 2p	Stecker gerade PCB
0	P 4	54.14.2101	1 pce 10p	1/20" Au, gerade, Verrieg
0	P 5	54.01.0020	1 pce 1p	Pin, 1reihig, gerade
0	P 6	54.01.0020	1 pce 1p	Pin, 1reihig, gerade
0	P 7	54.01.0020	1 pce 1p	Pin, 1reihig, gerade
0	P 8	54.01.0020	1 pce 1p	Pin, 1reihig, gerade
0	P 9	54.01.0020	1 pce 1p	Pin, 1reihig, gerade
0	P 10	54.01.0020	1 pce 1p	Pin, 1reihig, gerade
0	Q 1	50.60.1001	1 pce BC857B	PNP 45V 100mA SOT 23
0	Q 2	50.60.1001	1 pce BC857B	PNP 45V 100mA SOT 23
0	Q 3	50.60.0001	1 pce BC847B	NPN 45V 100mA SOT 23
0	Q 4	50.60.1001	1 pce BC857B	PNP 45V 100mA SOT 23
0	R 1	57.60.1100	1 pce 10R	MF, 1%, 0204, E24
0	R 2	57.92.7013	1 pce 0.5A	PTC 60V
0	R 3	57.60.1680	1 pce 68R	MF, 1%, 0204, E24
0	R 4	57.60.1681	1 pce 680R	MF, 1%, 0204, E24
0	R 5	57.60.1680	1 pce 68R	MF, 1%, 0204, E24
0	R 6	57.60.1272	1 pce 2K7	MF, 1%, 0204, E24
0	R 7	57.60.1471	1 pce 470R	MF, 1%, 0204, E24
0	R 8	57.60.1242	1 pce 2k4	MF, 1%, 0204, E24
0	R 9	57.60.1471	1 pce 470R	MF, 1%, 0204, E24
0	R 10	57.60.1471	1 pce 470R	MF, 1%, 0204, E24
0	R 11	57.60.1471	1 pce 470R	MF, 1%, 0204, E24
0	R 12	57.60.1104	1 pce 100k	MF, 1%, 0204, E24
0	R 13	57.60.1471	1 pce 470R	MF, 1%, 0204, E24
0	R 14	57.60.1471	1 pce 470R	MF, 1%, 0204, E24
0	R 15	57.60.1683	1 pce 68k	MF, 1%, 0204, E24
0	R 16	57.60.1683	1 pce 68k	MF, 1%, 0204, E24
0	W 15	1.010.321.64	1 pce Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6
0	W 16	1.010.321.64	1 pce Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6
0	W 17	1.010.321.64	1 pce Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6

End of List

[81] Supply-snooper added as add-on: D8, C5, Q4, R15, R16,  
 (01) PCB redesign to eliminate add-on



**Supply Board, Redundant Output 1.940.411.81 ( 1 )**



Accompanying documents: Zugehörige Unterlagen: PL, LL		General tolerance: Freimasstoleranz:		Scale: Masstab:		Edition Ausgabe: 15.04.2002		PZ		HM		RL		①	
Substitute for: Ersatz fuer:						Date Datum		Visa Gez.		Checked Gepr.		Seen Ges.		Index	
Page: Seite:						1 / 1									
<b>STUDER</b> REGENSDORF		Description: Benennung: SUPPLY BOARD REDUNDANT OUTPUT, ESE				Number: Nummer:		1.940.411.81							

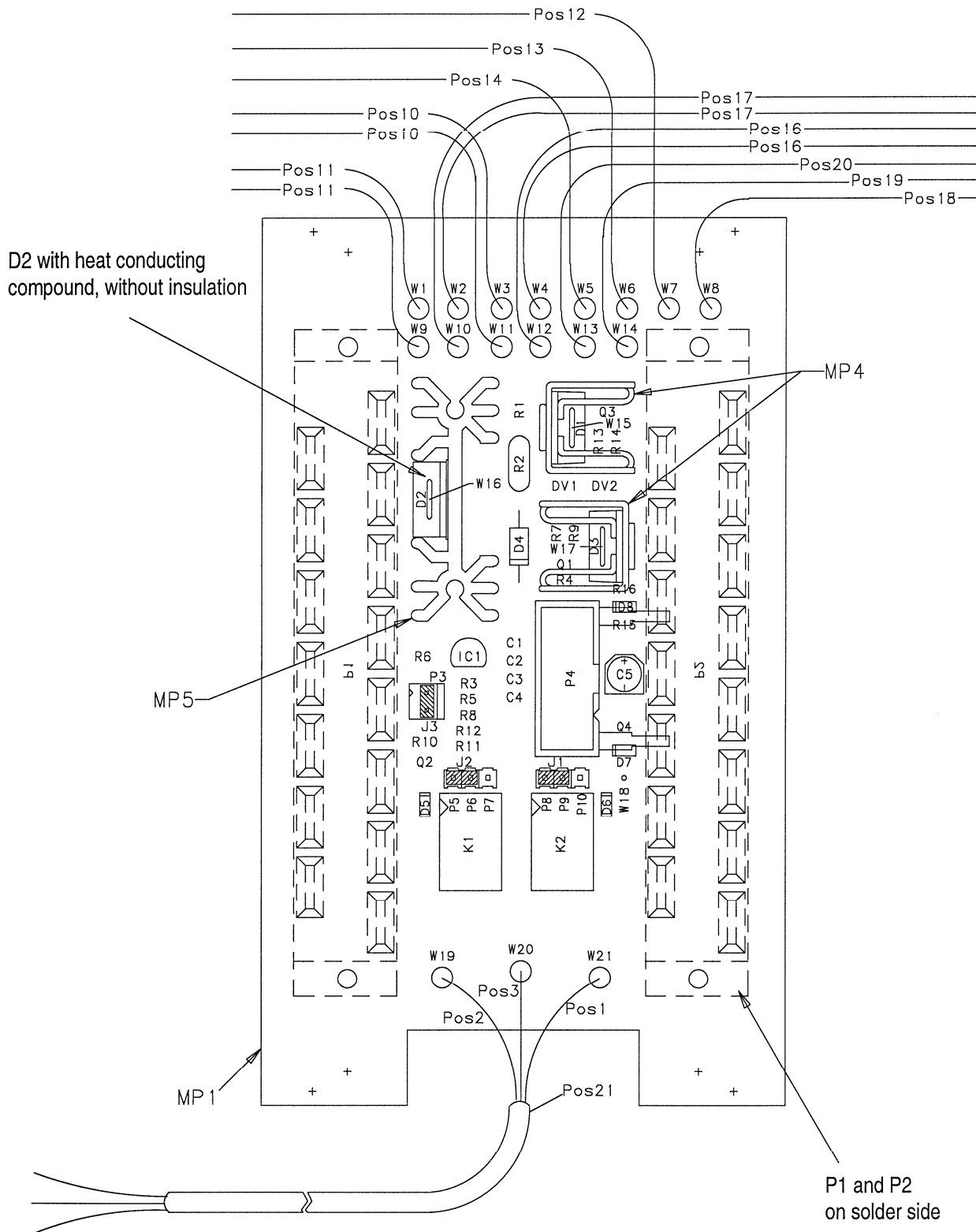
**Supply Board, Redundant Output 1.940.411.81 ( 1)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	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	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805				
0	C 4	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805				
0	C 5	59.68.0109	1 pce	10u	EL 35V, 5.0*5.7				
0	D 1	50.04.0516	1 pce	USD945	Schottky Rect 16A, 45V				
0	D 2	50.04.0529	1 pce	19TQ015	19A 15V Schottky, TO 220				
0	D 3	50.04.0516	1 pce	USD945	Schottky Rect 16A, 45V				
0	D 4	50.04.0512	1 pce	1N5818	D 1N 5818, 1N 5819,				
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	50.60.8101	1 pce	BAS85	200mA 30V Schottky SOD 80				
0	D 8	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80				
0	DV 1	50.60.9019	1 pce	12V	5%, 0.2W, SOT 23				
0	DV 2	50.60.9019	1 pce	12V	5%, 0.2W, SOT 23				
0	IC 1	50.10.0106	1 pce	TL431	Shunt regulator				
0	J 1	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au				
0	J 2	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au				
0	K 1	56.04.0198	1 pce	2*u	5V 125V 2A Ag/Au				
0	K 2	56.04.0197	1 pce	2*u	24V 125V 2A Ag/Au				
0	LL 1	1.940.411.93			LL Supply Board red Output				
1	MP 1	1.940.410.12	1 pce		Supply Board PCB				
0	MP 2	1.940.411.10	1 pce		Nr. Etikette				
0	MP 3	43.01.0108	1 pce	Label	ESE-WARNSCHILD				
0	MP 4	50.20.3011	2 pcs		Kühlkörper, TO 220, vertikal				
0	MP 5	50.20.3012	1 pce		Kühlkörper, TO 220, vertikal				
0	P 1	54.11.4307	1 pce	15p	EU-H, Action pin				
0	P 2	54.11.4307	1 pce	15p	EU-H, Action pin				
0	P 3	54.12.0702	1 pce	2p	Stecker gerade PCB				
0	P 4	54.14.2101	1 pce	10p	1/20" Au, gerade, Verrieg				
0	P 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 6	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 7	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 8	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 9	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 10	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	Q 1	50.60.1001	1 pce	BC857B	PNP 45V 100mA SOT 23				
0	Q 2	50.60.1001	1 pce	BC857B	PNP 45V 100mA SOT 23				
0	Q 3	50.60.0001	1 pce	BC847B	NPN 45V 100mA SOT 23				
0	Q 4	50.60.1001	1 pce	BC857B	PNP 45V 100mA SOT 23				
0	R 1	57.60.1100	1 pce	10R	MF, 1%, 0204, E24				
0	R 2	57.92.7013	1 pce	0.5A	PTC 60V				
0	R 3	57.60.1680	1 pce	68R	MF, 1%, 0204, E24				
0	R 4	57.60.1681	1 pce	680R	MF, 1%, 0204, E24				
0	R 5	57.60.1680	1 pce	68R	MF, 1%, 0204, E24				
0	R 6	57.60.1272	1 pce	2k7	MF, 1%, 0204, E24				
0	R 7	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 8	57.60.1242	1 pce	2k4	MF, 1%, 0204, E24				
0	R 9	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 10	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 11	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 12	57.60.1104	1 pce	100k	MF, 1%, 0204, E24				
0	R 13	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 14	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 15	57.60.1683	1 pce	68k	MF, 1%, 0204, E24				
0	R 16	57.60.1683	1 pce	68k	MF, 1%, 0204, E24				
0	W 15	not used	1 pce	Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6				
0	W 16	not used	1 pce	Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6				
0	W 17	not used	1 pce	Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6				

End of List

[81] Supply-snoober added as add-on: D8, C5, Q4, R15, R16,  
 (01) PCB redesign to eliminate add-on

**Supply Board, Redundant Input 1.940.412.81 ( 1 )**



Accompanying documents: Zugehörige Unterlagen: PL, LL	General tolerance: Freimasstoleranz:	Scale: Maßstab:	Edition Ausgabe	15.04.2002	PZ	HM	RL	①
Substitute for: Ersatz fuer:			Date Datum	15.04.2002	Visa Gez.	Checked Gepr.	Seen Ges.	Index
STUDER REGENSDORF			Page: Seite:			1 / 1		
Description: Benennung:			Number: Nummer:			1.940.412.81		
SUPPLY BOARD REDUNDANT INPUT, ESE								

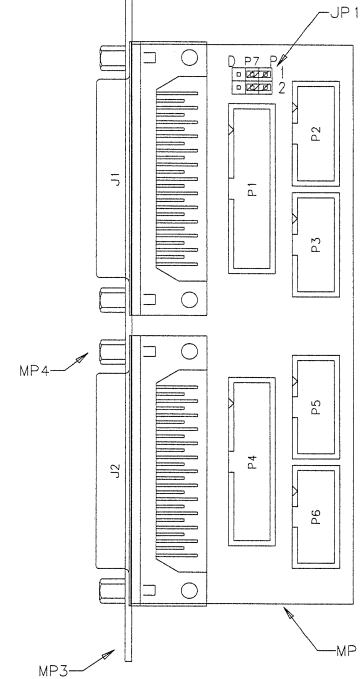
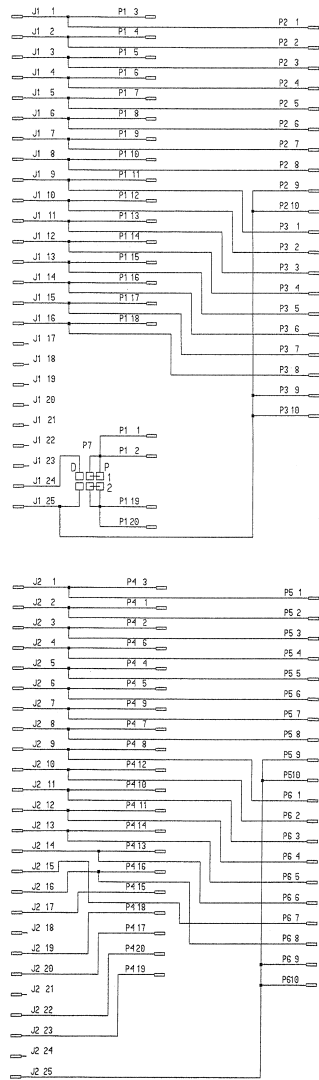
**Supply Board, Redundant Input 1.940.412.81 ( 1)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	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	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805				
0	C 4	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805				
0	C 5	59.68.0109	1 pce	10u	EL 35V, 5.0*5.7				
0	D 1	50.04.0516	1 pce	USD945	Schottky Rect 16A 45V				
0	D 2	50.04.0529	1 pce	19TQ015	19A 15V Schottky, TO 220				
0	D 3	50.04.0516	1 pce	USD945	Schottky Rect 16A, 45V				
0	D 4	50.04.0512	1 pce	1N5818	D 1N 5818, 1N 5819,				
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	50.60.8101	1 pce	BAS85	200mA 30V Schottky SOD 80				
0	D 8	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80				
0	DV 1	50.60.9019	1 pce	12V	5%, 0.2W, SOT 23				
0	DV 2	50.60.9019	1 pce	12V	5%, 0.2W, SOT 23				
0	IC 1	50.10.0106	1 pce	TL431	Shunt regulator				
0	J 1	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au				
0	J 2	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au				
0	J 3	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au				
0	K 1	56.04.0198	1 pce	2*u	5V 125V 2A Ag/Au				
0	K 2	56.04.0197	1 pce	2*u	24V 125V 2A Ag/Au				
0	LL 1	1.940.412.93	1 pce		LL Supply Board red Input				
1	MP 1	1.940.410.12	1 pce		Supply Board PCB				
0	MP 2	1.940.412.10	1 pce		Nr. Etiketle				
0	MP 3	43.01.0108	1 pce	Label	ESE-WARNSCHILD				
0	MP 4	50.20.3011	2 pcs		Kühlkörper, TO 220, vertikal				
0	MP 5	50.20.3012	1 pce		Kühlkörper, TO 220, vertikal				
0	P 1	54.11.4307	1 pce	15p	EU-H, Action pin				
0	P 2	54.11.4307	1 pce	15p	EU-H, Action pin				
0	P 3	54.12.0702	1 pce	2p	Stecker gerade PCB				
0	P 4	54.14.2101	1 pce	10p	1/20" Au, gerade, Verrieg				
0	P 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 6	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 7	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 8	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 9	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	P 10	54.01.0020	1 pce	1p	Pin, 1reihig, gerade				
0	Q 1	50.60.1001	1 pce	BC857B	PNP 45V 100mA SOT 23				
0	Q 2	50.60.1001	1 pce	BC857B	PNP 45V 100mA SOT 23				
0	Q 3	50.60.0001	1 pce	BC847B	NPN 45V 100mA SOT 23				
0	Q 4	50.60.1001	1 pce	BC857B	PNP 45V 100mA SOT 23				
0	R 1	57.60.1100	1 pce	10R	MF, 1%, 0204, E24				
0	R 2	57.92.7013	1 pce	0.5A	PTC 60V				
0	R 3	57.60.1680	1 pce	68R	MF, 1%, 0204, E24				
0	R 4	57.60.1681	1 pce	680R	MF, 1%, 0204, E24				
0	R 5	57.60.1680	1 pce	68R	MF, 1%, 0204, E24				
0	R 6	57.60.1272	1 pce	2k7	MF, 1%, 0204, E24				
0	R 7	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 8	57.60.1242	1 pce	2k4	MF, 1%, 0204, E24				
0	R 9	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 10	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 11	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 12	57.60.1104	1 pce	100k	MF, 1%, 0204, E24				
0	R 13	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 14	57.60.1471	1 pce	470R	MF, 1%, 0204, E24				
0	R 15	57.60.1683	1 pce	68k	MF, 1%, 0204, E24				
0	R 16	57.60.1683	1 pce	68k	MF, 1%, 0204, E24				
0	W 15	not used	1 pce	Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6				
0	W 16	not used	1 pce	Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6				
0	W 17	not used	1 pce	Wire	DRAHTBRUECKE U, 4.3* 5.0, 0.6				

End of List

[81] Supply-snoober added as add-on: D8, C5, Q4, R15, R16,  
 (01) PCB redesign to eliminate add-on

Control Connection 1.940.630.81

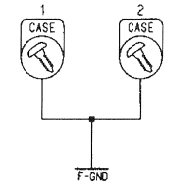
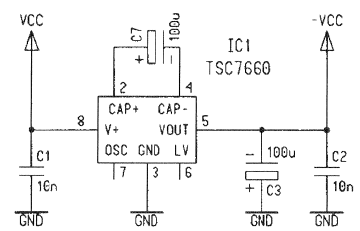
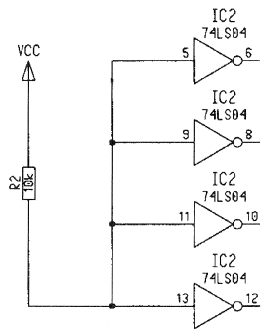
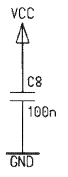
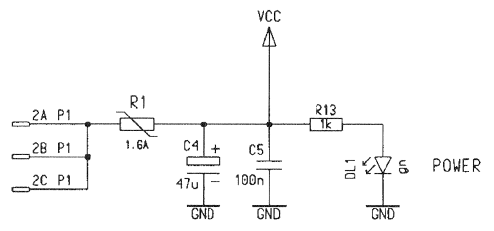
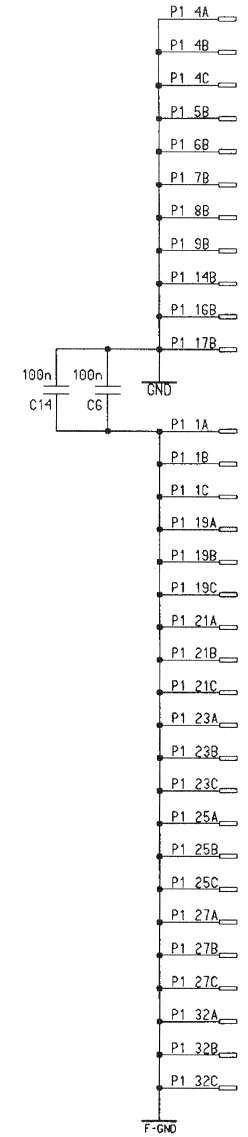
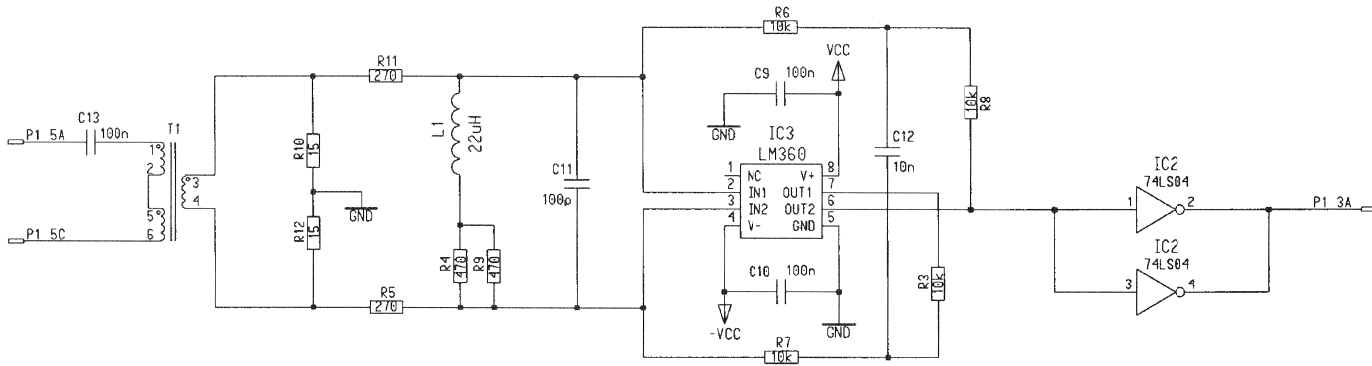


Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	J 1	54.13.0073		25p	D-Sub, PCB, Winkel
0	J 2	54.13.0073		25p	D-Sub, PCB, Winkel
0	JP 1	54.01.0021	2 pcs	Jumper	0.63 * 0.63mm
0	MP 1	1.940.630.12	1 pce		Control Connection PCB
0	MP 2	1.940.630.10	1 pce		NR, Etikette 5 x 20
0	MP 3	1.940.619.02	1 pce		Rückwand D25+D25
0	MP 4	54.13.0081	4 pcs	4.85mm	Bolzen UNC 4-40
0	MP 5	24.16.1030	4 pcs		RIPPENSCHLEIBE D 3.2/5.5
0	P 1	54.14.2008		20p	1/20" Au, gerade, ohne Verrieg
0	P 2	54.14.2001		10p	1/20" Au, gerade, ohne Verrieg
0	P 3	54.14.2001		10p	1/20" Au, gerade, ohne Verrieg
0	P 4	54.14.2008		20p	1/20" Au, gerade, ohne Verrieg
0	P 5	54.14.2001		10p	1/20" Au, gerade, ohne Verrieg
0	P 6	54.14.2001		10p	1/20" Au, gerade, ohne Verrieg
0	P 7	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54

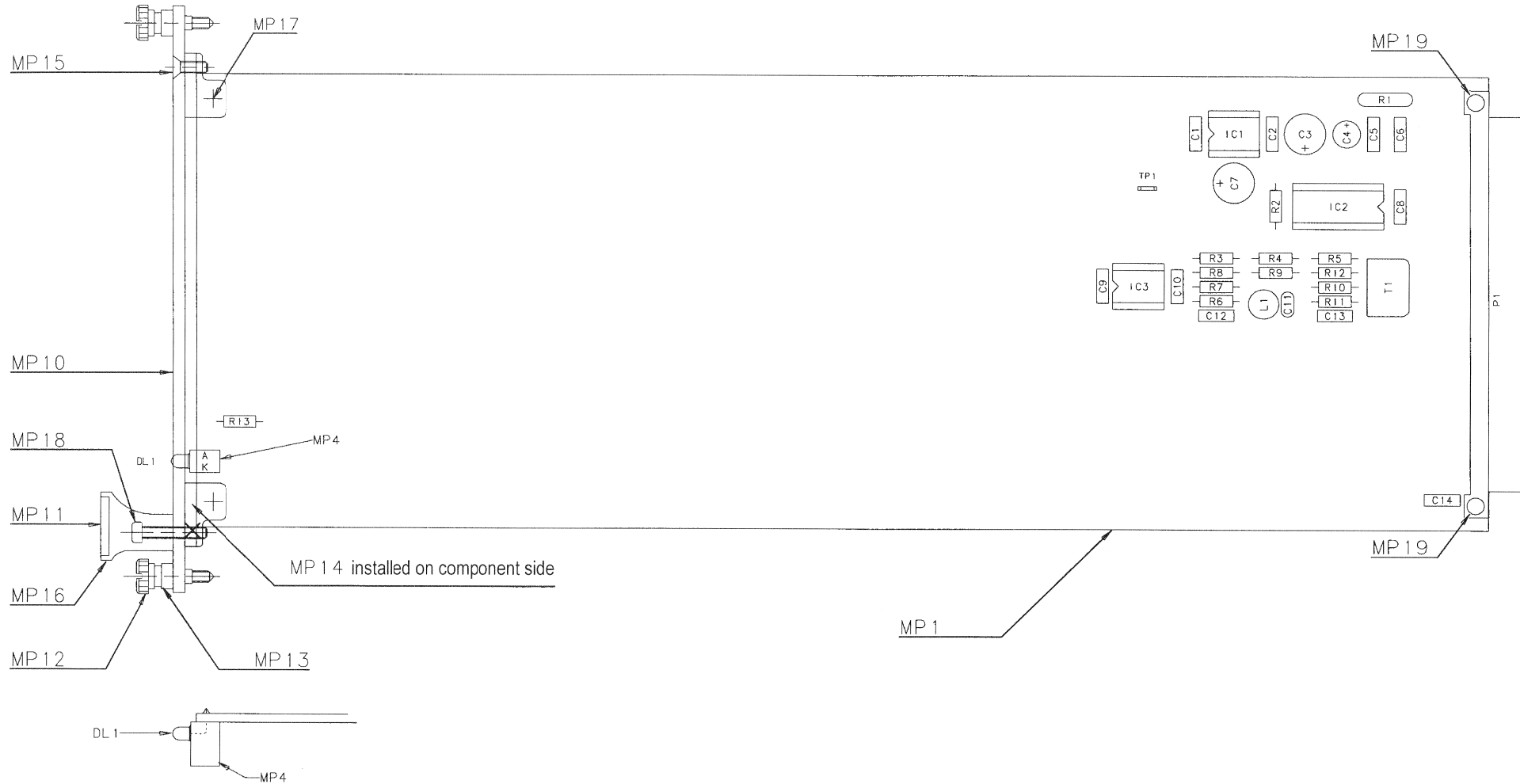
End of List

Comments

Sync Receiver 1.940.557.00 ( 0)



Sync Receiver 1.940.557.00 ( 0 )



Accompanying documents: Zugehörige Unterlagen: PL	General tolerance: Freimasstoleranz: ±	Scale: Maßstab:	Edition Ausgabe 03.09.98 ZT	Date Datum	Visa Gez.	Checked Gepr.	Seen Ges.	Index
Substitute for: Ersatz fuer:	Replaced by: Ersetzt durch:	Copy to: Kopie fuer:						
<b>STUDER</b> REGENSDORF			Description: Benennung: D19M SYNC RECEIVER "ESE"			Number: Number: 1.940.557.00		

**Sync Receiver 1.940.557.00 ( 1)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0103	10n	PETP, 63V, 10%, RM5
0	C 2	59.06.0103	10n	PETP, 63V, 10%, RM5
0	C 3	59.22.4101	100u	EL 16V 20% RM5
0	C 4	59.22.3470	47u	EL 10V 20% RM5
0	C 5	59.06.0104	100n	PETP, 63V, 10%, RM5
0	C 6	59.06.0104	100n	PETP, 63V, 10%, RM5
0	C 7	59.22.4101	100u	EL 16V 20% RM5
0	C 8	59.06.0104	100n	PETP, 63V, 10%, RM5
0	C 9	59.06.0104	100n	PETP, 63V, 10%, RM5
0	C 10	59.06.0104	100n	PETP, 63V, 10%, RM5
0	C 11	59.34.4101	100p	CER 63V, 5%, N750
0	C 12	59.06.0103	10n	PETP, 63V, 10%, RM5
0	C 13	59.06.0104	100n	PETP, 63V, 10%, RM5
0	C 14	59.06.0104	100n	PETP, 63V, 10%, RM5
0	DL 1	50.04.2202	HLMP1790	DL HLMP - 1790 GN
0	IC 1	50.11.0131	ICL7660	IC ICL 7660 CPA,TSC.,SI.,
0	IC 2	50.06.0004	74LS04	SN 74 LS 04 N
0	IC 3	50.11.1002	LM360	High speed Comparator
0	L 1	62.02.3220	22uH	10%, radial RM 5
0	MP 1	1.940.557.11		D19M SYNC RECEIVER PCB
0	MP 2	1.940.557.04		TYPENSCHILD
0	MP 3	43.01.0108	Label	ESE-WARNschild
0	MP 4	50.20.2501 1 pce	Spacer	LED-Sockel
0	MP 10	1.940.557.01 1 pce		FRONTPLATTE
0	MP 11	1.940.600.04 1 pce		GRIFFEINLAGE 4TE
0	MP 12	49.02.0520 2 pcs	M2.5*12	Rändelschraube (Rack)
0	MP 13	49.02.0521 2 pcs		Metall-Buchse (Rack)
0	MP 14	49.02.0522 2 pcs		Kartenhalter mit Z-Schr
0	MP 15	49.02.0523 1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0	MP 16	49.02.0504 1 pce	4TE	Frontplatten-Griff
1	MP 17	not used 2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr
				<i>Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten</i>
0	MP 18	21.53.0284 1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0	MP 19	28.99.0119 2 pcs		ROHRNIETE D 2.5*0.15* 9
0	P 1	54.11.2009	96p	EU-R 3*32p
0	R 1	57.92.7053	1.6A	PTC 30V
0	R 2	57.11.3103	10k	MF, 1%, 0207
0	R 3	57.11.3103	10k	MF, 1%, 0207
0	R 4	57.11.3471	470R	MF, 1%, 0207
0	R 5	57.11.3271	270R	MF, 1%, 0207
0	R 6	57.11.3103	10k	MF, 1%, 0207
0	R 7	57.11.3103	10k	MF, 1%, 0207
0	R 8	57.11.3103	10k	MF, 1%, 0207
0	R 9	57.11.3471	470R	MF, 1%, 0207
0	R 10	57.11.3150	15R	MF, 1%, 0207
0	R 11	57.11.3271	270R	MF, 1%, 0207
0	R 12	57.11.3150	15R	MF, 1%, 0207
0	R 13	57.11.3102	1k0	MF, 1%, 0207
0	T 1	63.15.0001	1:1:1	Impuls-Transformator
0	TP 1	54.02.0320	1p	PCB-Flachst 2.8*0.8, gerade

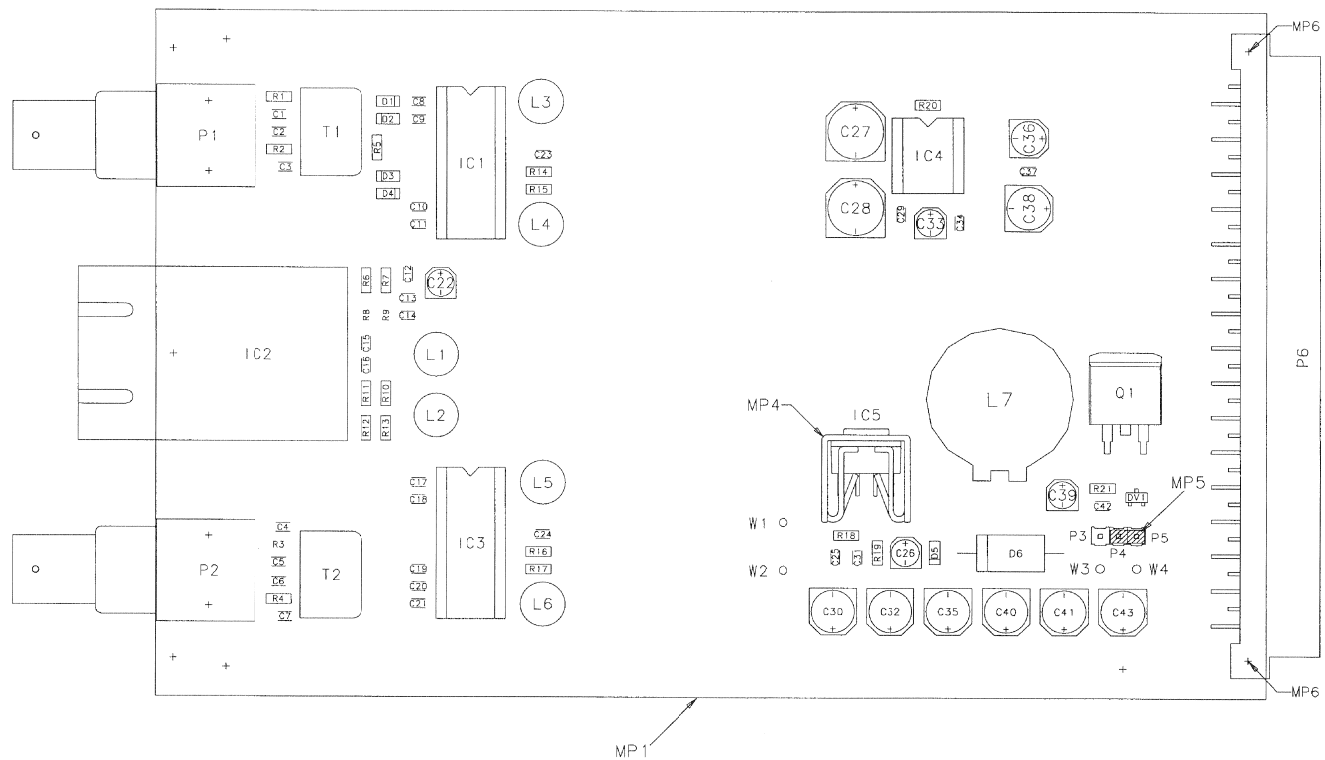
End of List

(1) 12.04.00 MP 17 not used





**Optical/Coax Interface 1.940.558.00 ( 0 )**



Accompanying documents: Zugehörige Unterlagen: PL, BV640	General tolerance: Feinsmasstoleranz:	Scale: Masstab:	Edition: Ausgabe: 02.12.1999	Date: Datum: ZT	Viso: Gez.	Checked: Gepr.	Seen: Ges.	Index: 0
Substitute for: Ersatz fuer:			Page: Seite: 1 / 1					
<b>STUDER</b> REGENSBERG	Beschriftung: Bezeichnung: OPTICAL COAX INTERFACE, ESE			Number: Nummer: 1.940.558.00				

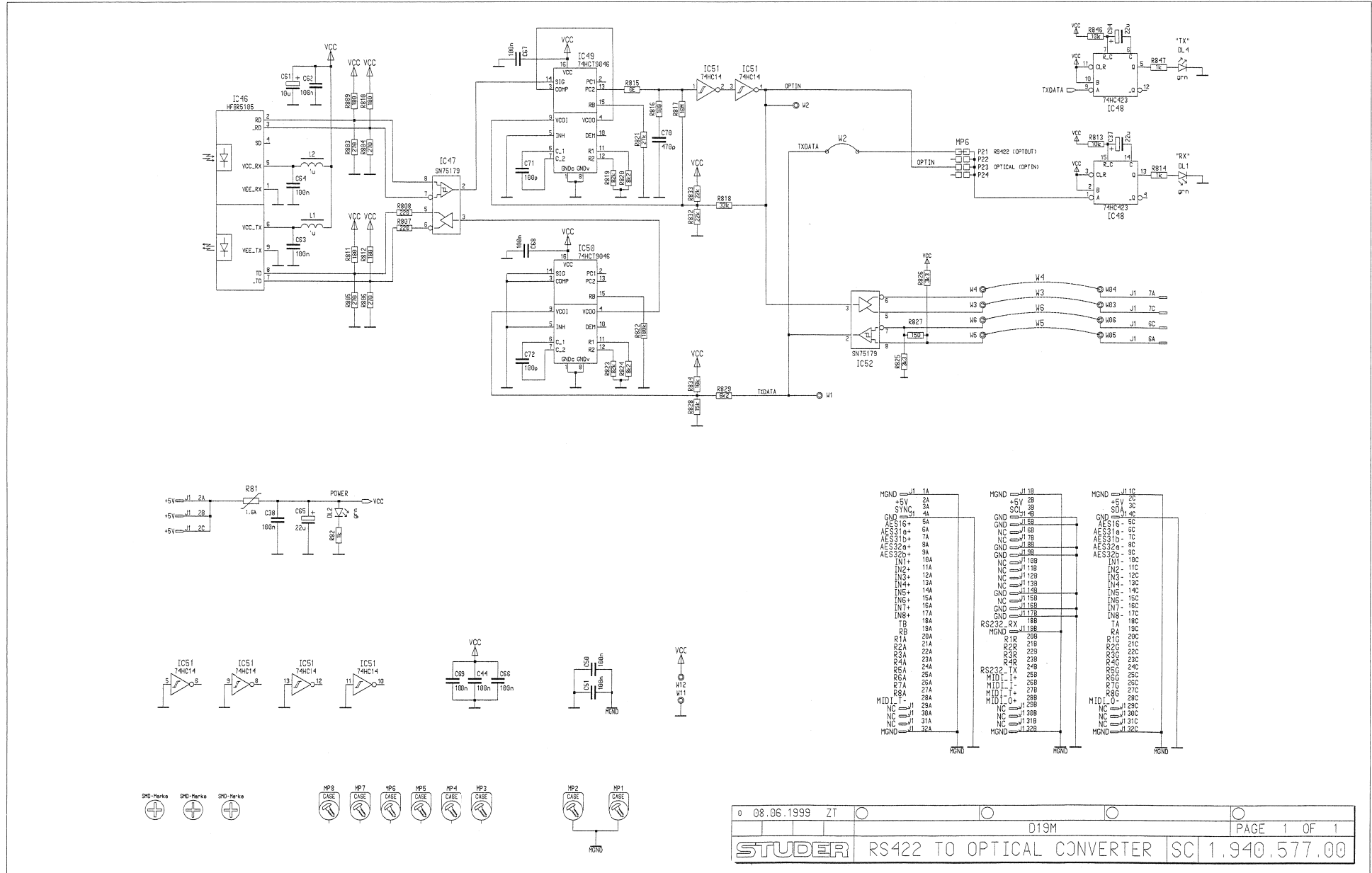
**Optical/Coax Interface 1.940.558.00 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3333		47n	CER 50V, 10%, X7R, 0805	0 R 13	57.60.1820		82R	MF, 1%, 0204, E24
0 C 2	59.60.2373		1n0	CER 50V, 5%, COG, 0805	0 R 14	57.60.1331		330R	MF, 1%, 0204, E24
0 C 3	59.60.3333		47n	CER 50V, 10%, X7R, 0805	0 R 15	57.60.1331		330R	MF, 1%, 0204, E24
0 C 4	59.60.3333		47n	CER 50V, 10%, X7R, 0805	0 R 16	57.60.1471		470R	MF, 1%, 0204, E24
0 C 5	59.60.3333		47n	CER 50V, 10%, X7R, 0805	0 R 17	57.60.1471		470R	MF, 1%, 0204, E24
0 C 6	59.60.2373		1n0	CER 50V, 5%, COG, 0805	0 R 18	57.60.1153		15k	MF, 1%, 0204, E24
0 C 7	59.60.3333		47n	CER 50V, 10%, X7R, 0805	0 R 19	57.60.1123		12k	MF, 1%, 0204, E24
0 C 8	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0 R 20	57.60.1101		100R	MF, 1%, 0204, E24
0 C 9	59.60.2373		1n0	CER 50V, 5%, COG, 0805	0 R 21	57.60.1102		1k0	MF, 1%, 0204, E24
0 C 10	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0 T 1	63.15.0001		1:1:1	Impuls-Transformator
0 C 11	59.60.2373		1n0	CER 50V, 5%, COG, 0805	0 T 2	63.15.0001		1:1:1	Impuls-Transformator
0 C 12	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 13	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 14	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 15	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 16	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 17	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 18	59.60.2373		1n0	CER 50V, 5%, COG, 0805					
0 C 19	59.60.3333		47n	CER 50V, 10%, X7R, 0805					
0 C 20	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 21	59.60.2373		1n0	CER 50V, 5%, COG, 0805					
0 C 22	59.68.0065		10u	EL 16V, 4.0*5.7					
0 C 23	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 24	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 25	59.60.3331		33n	CER 50V, 10%, X7R, 0805					
0 C 26	59.68.0065		10u	EL 16V, 4.0*5.7					
0 C 27	59.68.0073		220u	EL 16V, 8.0*10.7					
0 C 28	59.68.0073		220u	EL 16V, 8.0*10.7					
0 C 29	59.60.3325		10n	CER 50V, 10%, X7R, 0805					
0 C 30	59.68.0111		22u	EL 35V, 6.3*5.7					
0 C 31	59.60.3315		1n5	CER 50V, 10%, X7R, 0805					
0 C 32	59.68.0111		22u	EL 35V, 6.3*5.7					
0 C 33	59.68.0065		10u	EL 16V, 4.0*5.7					
0 C 34	59.60.3325		10n	CER 50V, 10%, X7R, 0805					
0 C 35	59.68.0029		100u	EL 6V, 6.3*5.7					
0 C 36	59.68.0067		22u	EL 16V, 5.0*5.7					
0 C 37	59.60.3337		100n	CER 50V, 10%, X7R, 0805					
0 C 38	59.68.0111		22u	EL 35V, 6.3*5.7					
0 C 39	59.68.0065		10u	EL 16V, 4.0*5.7					
0 C 40	59.68.0029		100u	EL 6V, 6.3*5.7					
0 C 41	59.68.0029		100u	EL 6V, 6.3*5.7					
0 C 42	59.60.3325		10n	CER 50V, 10%, X7R, 0805					
0 C 43	59.68.0029		100u	EL 6V, 6.3*5.7					
0 D 1	50.60.8001		4448	200mA 75V 4ns SOD 80					
0 D 2	50.60.8001		4448	200mA 75V 4ns SOD 80					
0 D 3	50.60.8001		4448	200mA 75V 4ns SOD 80					
0 D 4	50.60.8001		4448	200mA 75V 4ns SOD 80					
0 D 5	50.60.8001		4448	200mA 75V 4ns SOD 80					
0 D 6	50.04.0519		1N5822	3A, Schottky					
0 DV 1	50.60.9011		5V6	5%, 0.2W, SOT 23					
0 IC 1	50.11.0156		MAX9685	ECL Comparator, latching					
0 IC 2	89.10.0021		HFBRS103	LWL Transceiver FDDI/MADI					
0 IC 3	50.11.0156		MAX9685	ECL Comparator, latching					
0 IC 4	50.10.0124		MAX660	V-Converter ... +5.5V to -5.5V					
0 IC 5	50.10.0122		L4960	L 4960,					
0 L 1	62.02.3109		1uH	20%, radial RM 5					
0 L 2	62.02.3109		1uH	20%, radial RM 5					
0 L 3	62.02.3100		10uH	10%, radial RM 5					
0 L 4	62.02.3100		10uH	10%, radial RM 5					
0 L 5	62.02.3100		10uH	10%, radial RM 5					
0 L 6	62.02.3100		10uH	10%, radial RM 5					
0 L 7	62.03.0025		250uH	2A Toroid Chocke					
0 MP 1	1.940.558.11			opt-coax Interface PCB					
0 MP 2	1.940.558.10			NR. ETIKETTE 5 * 20					
0 MP 3	43.01.0108		Label	ESE-WARNSCHILD					
0 MP 4	50.20.3011			Kühlkörper, TO 220, vertikal					
0 MP 5	54.01.0021		Jumper	0.63*0.63mm, Au					
0 MP 6	28.99.0119 2 pcs			ROHRNIETE D 2.5*0.15* 9					
0 P 1	54.21.2021		BNC	BNC 1p, angle, PCB					
0 P 2	54.21.2021		BNC	BNC 1p, angle, PCB					
0 P 3	54.01.0020		1p	Pin, 1reihig, gerade					
0 P 4	54.01.0020		1p	Pin, 1reihig, gerade					
0 P 5	54.01.0020		1p	Pin, 1reihig, gerade					
0 P 6	54.01.0359		32p	EU-B 2*16p					
0 Q 1	50.60.7001		BT138B	Triac 8A, 600V, SOT 404					
0 R 1	57.60.1750		75R	MF, 1%, 0204, E24					
0 R 2	57.60.1100		10R	MF, 1%, 0204, E24					
0 R 3	57.60.1560		56R	MF, 1%, 0204, E24					
0 R 4	57.60.1100		10R	MF, 1%, 0204, E24					
0 R 5	57.60.1122		1k2	MF, 1%, 0204, E24					
0 R 6	57.60.1101		100R	MF, 1%, 0204, E24					
0 R 7	57.60.1101		100R	MF, 1%, 0204, E24					
0 R 8	57.60.1221		220R	MF, 1%, 0204, E24					
0 R 9	57.60.1221		220R	MF, 1%, 0204, E24					
0 R 10	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 11	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 12	57.60.1820		82R	MF, 1%, 0204, E24					

End of List

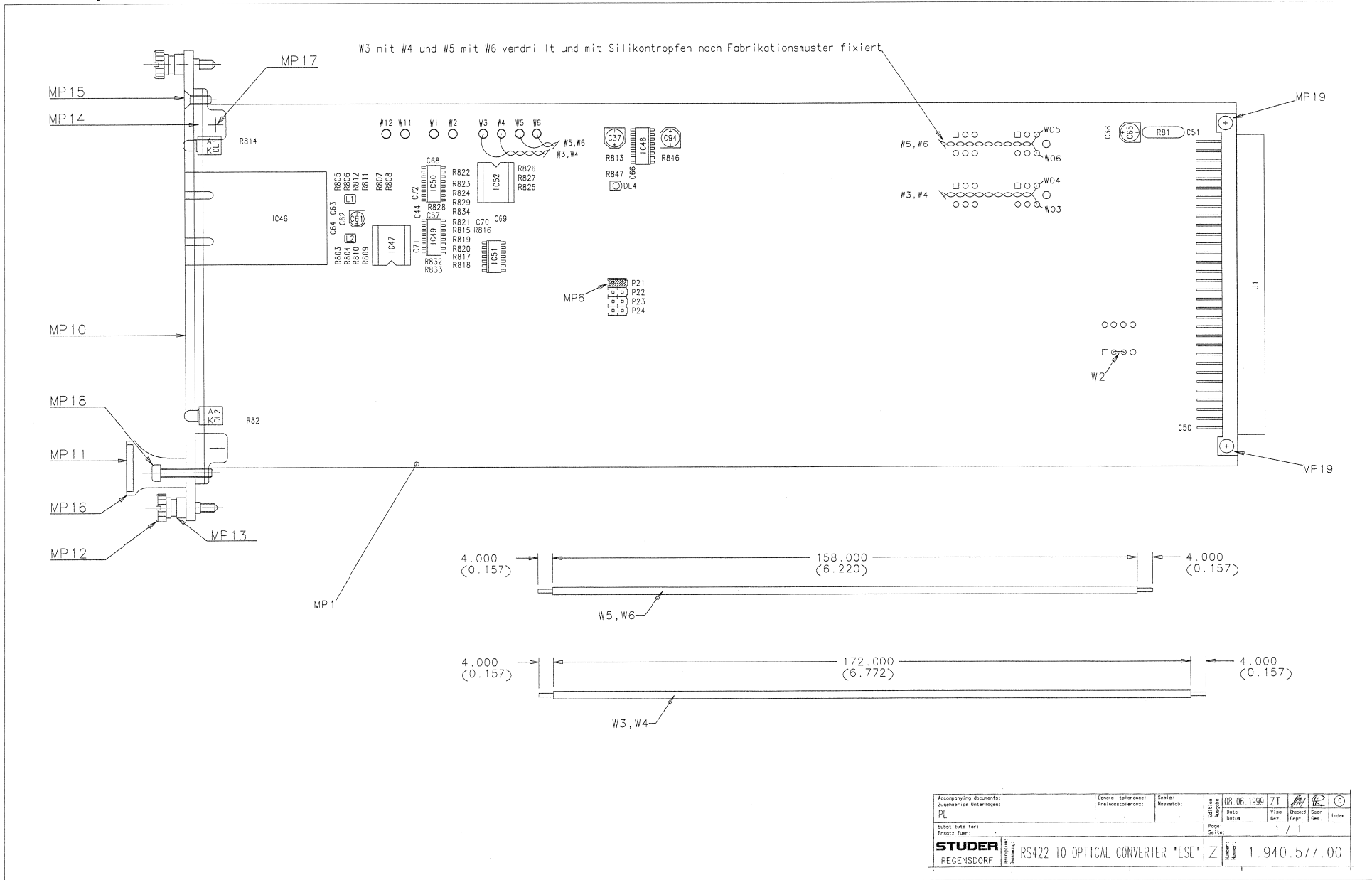


RS 422 To Optical Converter 1.940.577.00





RS 422 To Optical Converter 1.940.577.00



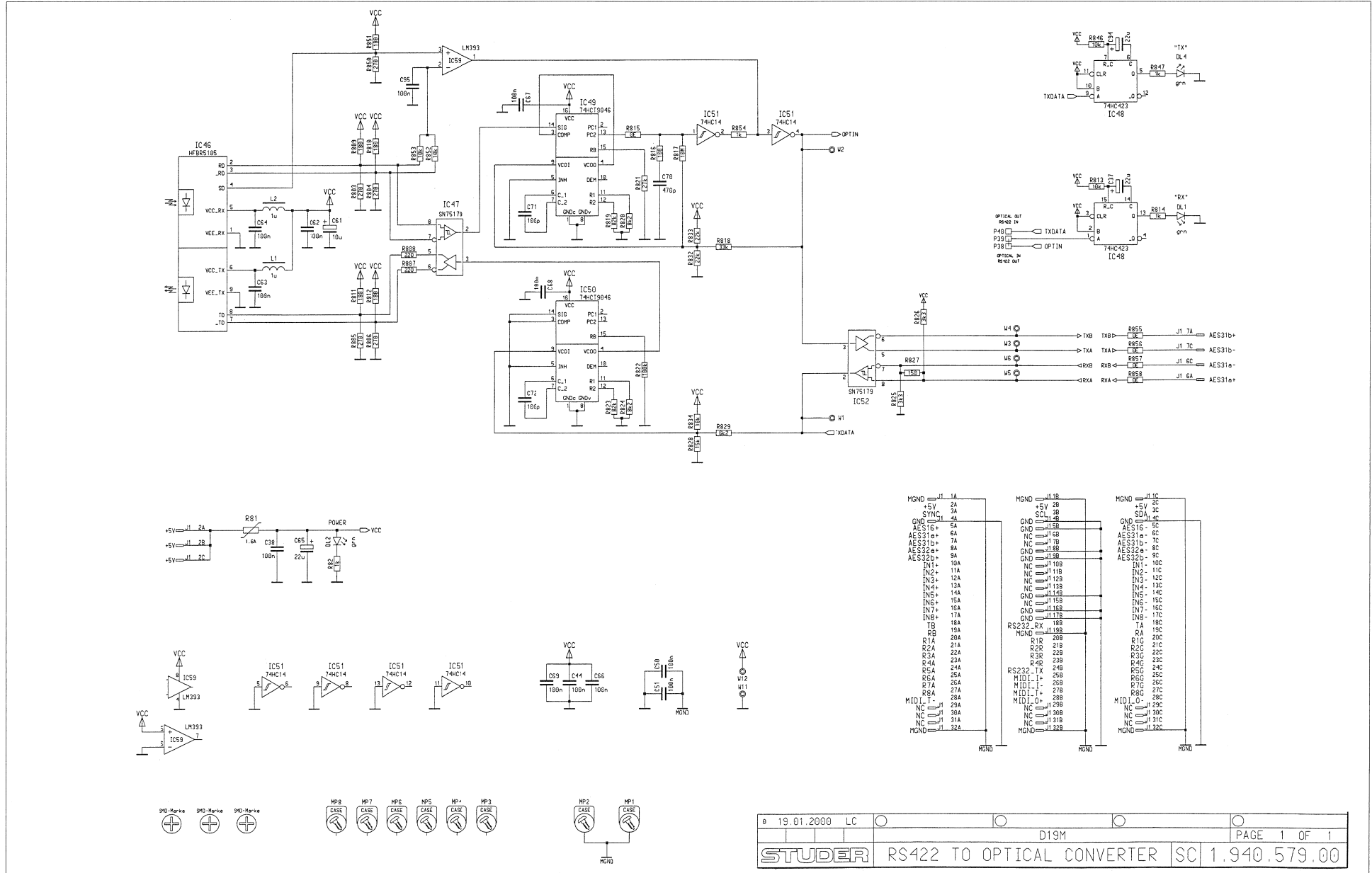
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Substitute for: Ersatz für:	Page: Seite:		Date: Datum:		Version: Verz.		Checked: Gepr.
STUDER REGENSDORF			RS422 TO OPTICAL CONVERTER "ESE"		Z		Number: Menge: 1.940.577.00



RS 422 To Optical Converter I.940.577.00

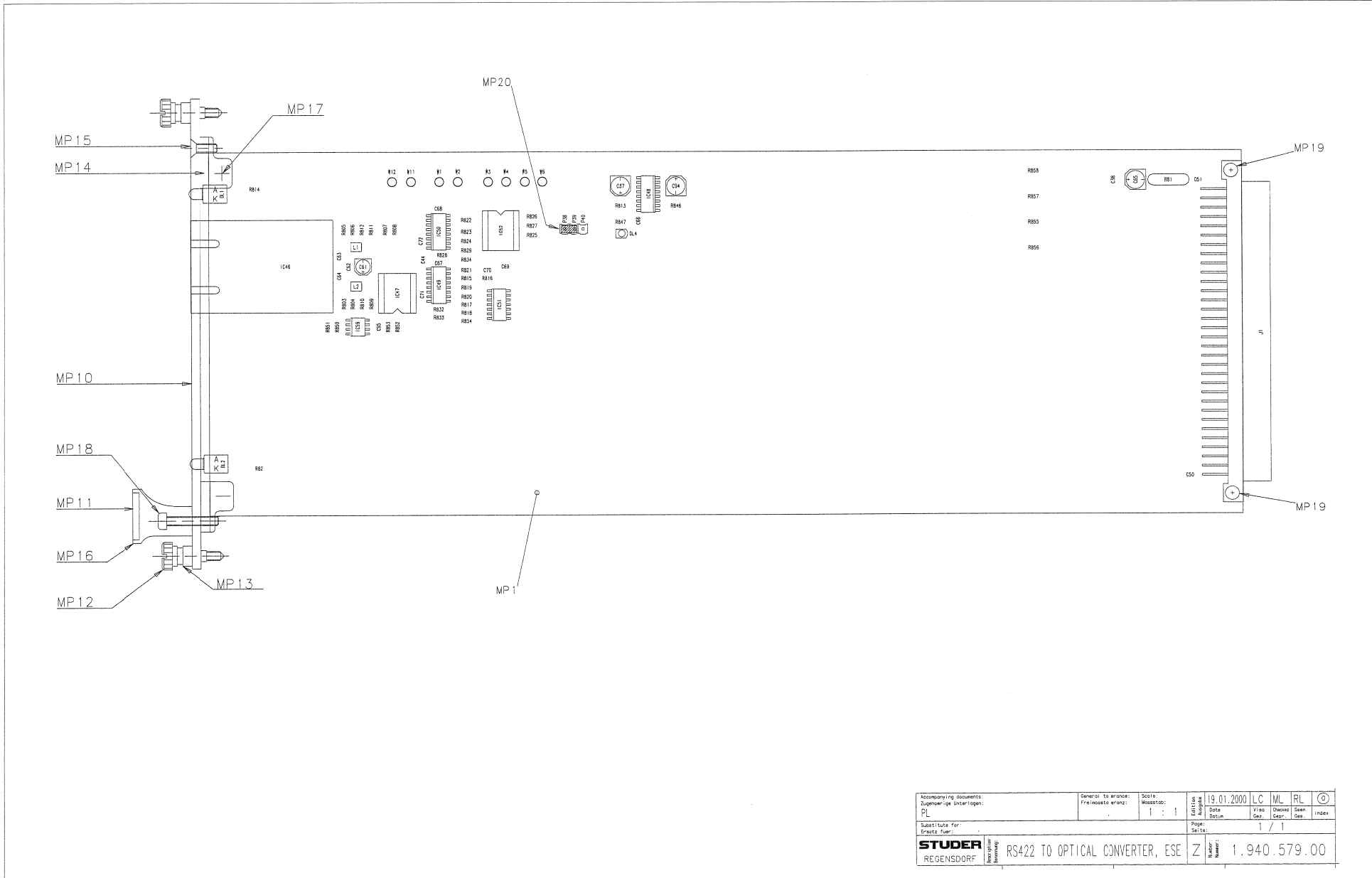
Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 37	59.68.0067		22u	C-EL 16V, 5.0*5.7	0	R 829	57.60.1622		6K2	MF, 1%, 0204, E24
0	C 38	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 832	57.60.1223		22K	MF, 1%, 0204, E24
0	C 44	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 833	57.60.1223		22K	MF, 1%, 0204, E24
0	C 50	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 834	57.60.1103		10K	MF, 1%, 0204, E24
0	C 51	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 846	57.60.1103		10K	MF, 1%, 0204, E24
0	C 61	59.68.0065		10u	C-EL 16V, 4.0*5.7	0	R 847	57.60.1102		1K	MF, 1%, 0204, E24
0	C 62	59.60.3337		100n	CER 50V, 10%, X7R, 0805						
0	C 63	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	W 2	1.010.329.64		Wire	DRAHTBRUECKE U, 4.3* 2.5, 0.6
0	C 64	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	W 3	64.02.0183	180 mm		LITZE OR AWG 26
0	C 65	59.68.0067		22u	C-EL 16V, 5.0*5.7	0	W 4	64.02.0184	180 mm		LITZE GB AWG 26
0	C 66	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	W 5	64.02.0185	166 mm		LITZE GN AWG 26
0	C 67	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	W 6	64.02.0186	166 mm		LITZE BL AWG 26
0	C 68	59.60.3337		100n	CER 50V, 10%, X7R, 0805						
0	C 69	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	XDL 1	50.20.2501		Spacer	LED-Sockel
0	C 70	59.60.2365		470p	CER 50V, 5%, COG, 0805	0	XDL 2	50.20.2501		Spacer	LED-Sockel
0	C 71	59.60.2249		100p	CER 50V, 5%, COG, 0803						
0	C 72	59.60.2249		100p	CER 50V, 5%, COG, 0803						
0	C 94	59.68.0067		22u	C-EL 16V, 5.0*5.7	0	XIC 52	53.03.0166		8p	DIL 0.3", lötl, gerade
End of List											
<b>Comments</b>											
0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN						
0	DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN						
0	DL 4	not used		TLUG 2401	DL TLUG 2401 GN MATT						
0	IC 46	89.10.0021		HFBRS105	LWL Transceiver FDDI/MADI						
0	IC 47	50.15.0126		75179B	IC SN 75179B P						
0	IC 48	50.62.1423		74HC423	Dual multivibr monost retrigg						
0	IC 49	50.62.4946		74HCT9046	PLL with bandgap contr VCO						
0	IC 50	50.62.4946		74HCT9046	PLL with bandgap contr VCO						
0	IC 51	50.62.1014		74HC 14	Hex Schmitt trigger inverter						
0	IC 52	50.15.0126		75179B	IC SN 75179B P						
0	J 1	54.11.2009		96p	EU-R 3*32p						
0	L 1	62.60.0101		1.0uH	10%, SMD 1210						
0	L 2	62.60.0101		1.0uH	10%, SMD 1210						
0	MP 1	1.940.576.11			Processor Board PCB						
0	MP 2	1.940.577.04			Typenschild						
0	MP 3	43.01.0108		Label	ESE-WARNschild						
0	MP 6	54.01.0021	1 pce	Jumper	0.63 * 0.63mm						
0	MP 10	1.940.576.01	1 pce		FRONTPLATTE RCC						
0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE						
0	MP 12	49.02.0520	2 pcs	M2.5*12	Randelschraube (Rack)						
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)						
0	MP 14	49.02.0522	2 pcs		Kartenhalter (Rack)						
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp						
0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff						
0	MP 17	21.53.0279	2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr						
0	MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr						
0	MP 19	28.99.0119	2 pcs		ROHRNIETE D.2.5*0.15* 9						
0	P 21	54.01.0020	2 pcs	1p	Pin 0.63*0.63						
0	P 22	54.01.0020	2 pcs	1p	Pin 0.63*0.63						
0	P 23	54.01.0020	2 pcs	1p	Pin 0.63*0.63						
0	P 24	54.01.0020	2 pcs	1p	Pin 0.63*0.63						
0	R 81	57.92.7053		1.6A	POLY- PTC, 30V						
0	R 82	57.60.1102		1K	MF, 1%, 0204, E24						
0	R 803	57.60.1271		270R	MF, 1%, 0204, E24						
0	R 804	57.60.1271		270R	MF, 1%, 0204, E24						
0	R 805	57.60.1271		270R	MF, 1%, 0204, E24						
0	R 806	57.60.1271		270R	MF, 1%, 0204, E24						
0	R 807	57.60.1221		220R	MF, 1%, 0204, E24						
0	R 808	57.60.1221		220R	MF, 1%, 0204, E24						
0	R 809	57.60.1181		180R	MF, 1%, 0204, E24						
0	R 810	57.60.1181		180R	MF, 1%, 0204, E24						
0	R 811	57.60.1181		180R	MF, 1%, 0204, E24						
0	R 812	57.60.1181		180R	MF, 1%, 0204, E24						
0	R 813	57.60.1103		10K	MF, 1%, 0204, E24						
0	R 814	57.60.1102		1K	MF, 1%, 0204, E24						
0	R 815	57.60.1000		0R0	MF, 0204						
0	R 816	57.60.1101		100R	MF, 1%, 0204, E24						
0	R 817	57.60.1106		10M	MF, 1%, 0204, E24						
0	R 818	57.60.1333		33K	MF, 1%, 0204, E24						
0	R 819	57.60.1823		82K	MF, 1%, 0204, E24						
0	R 820	57.60.1622		8K2	MF, 1%, 0204, E24						
0	R 821	57.60.1273		27K	MF, 1%, 0204, E24						
0	R 822	57.60.1104		100K	MF, 1%, 0204, E24						
0	R 823	57.60.1823		82K	MF, 1%, 0204, E24						
0	R 824	57.60.1822		8K2	MF, 1%, 0204, E24						
0	R 825	57.60.1332		3K3	MF, 1%, 0204, E24						
0	R 826	57.60.1332		3K3	MF, 1%, 0204, E24						
0	R 827	57.60.1151		150R	MF, 1%, 0204, E24						
0	R 828	57.60.1153		15K	MF, 1%, 0204, E24						

RS 422 to Optical Converter 1.940.579.00





RS 422 to Optical Converter 1.940.579.00







RS 422 to Optical Converter 1.940.579.00

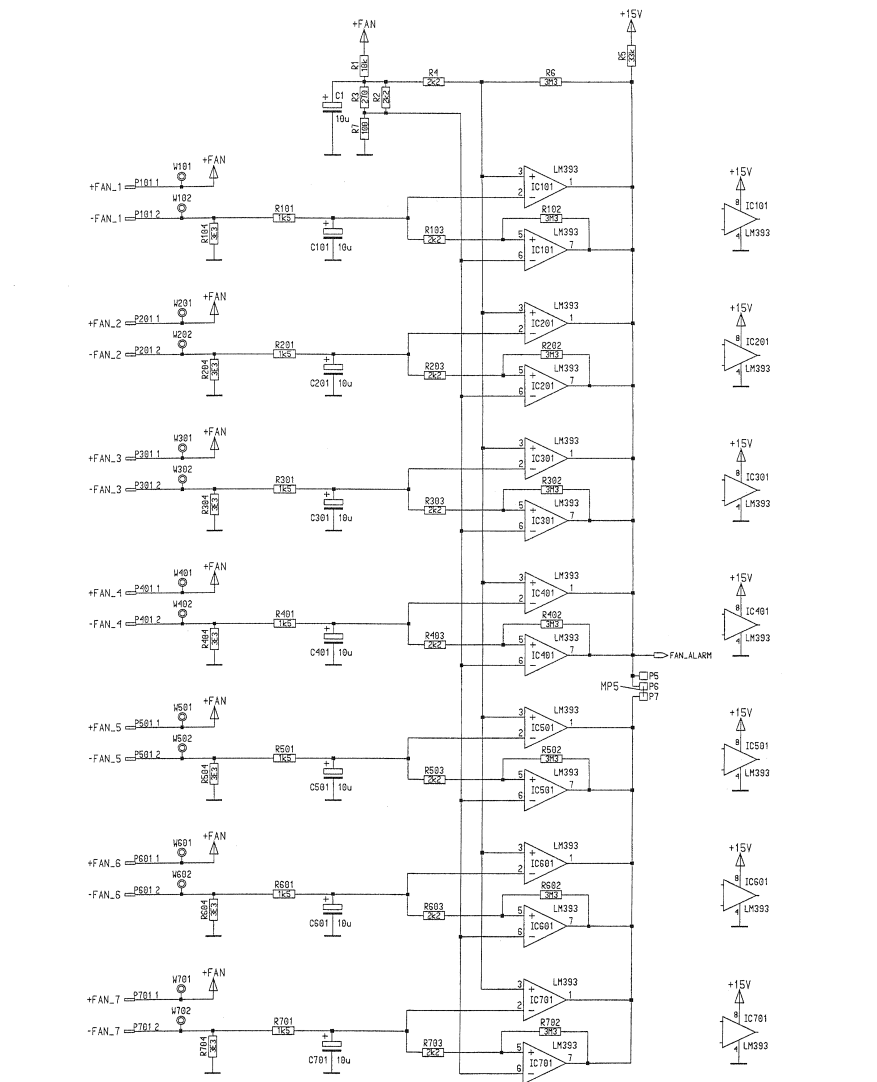
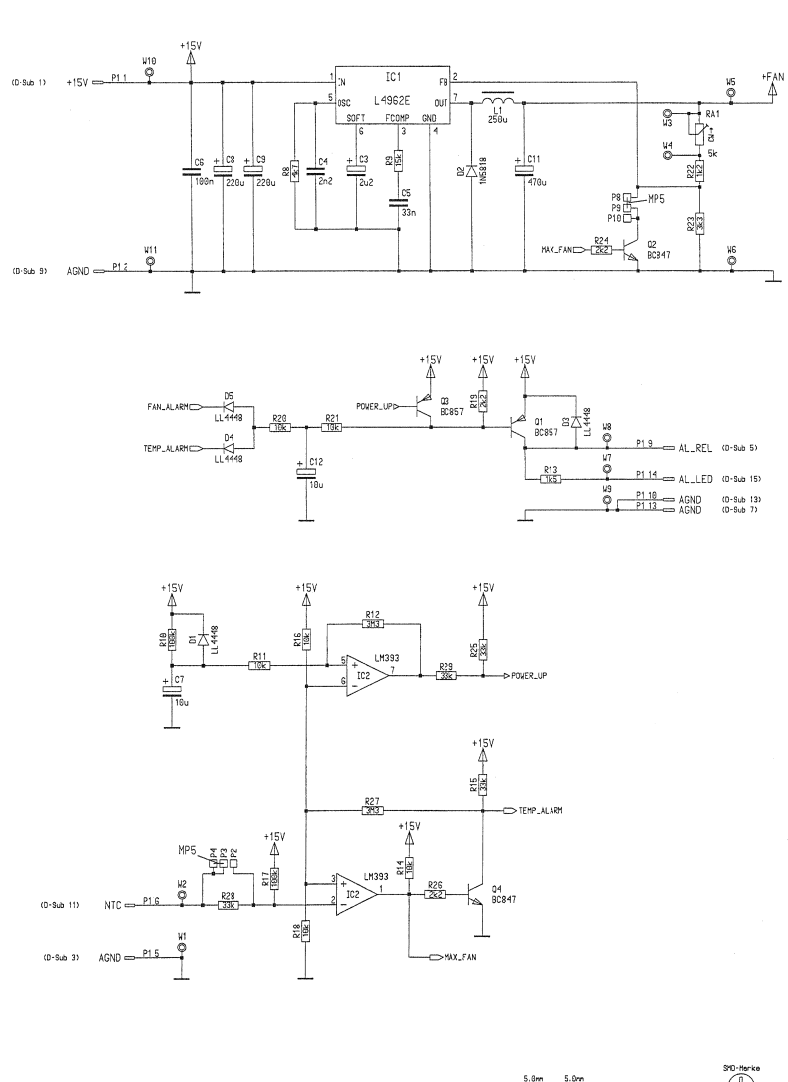
Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 37	59.68.0067		22u	EL 16V, 5.0*5.7	0	MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0	C 38	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0	C 44	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	MP 20	54.01.0021	1 pce	Jumper	0.63 * 0.63mm
0	C 50	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	P 38	54.01.0020	1 pcs	1p	Pin 0.63*0.63
0	C 51	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	P 39	54.01.0020	1 pcs	1p	Pin 0.63*0.63
0	C 61	59.68.0065		10u	EL 16V, 4.0*5.7	0	P 40	54.01.0020	1 pcs	1p	Pin 0.63*0.63
0	C 62	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 81	57.92.7053		1.6A	PTC 30V
0	C 63	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 82	57.60.1102		1K	MF, 1%, 0204, E24
0	C 64	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 803	57.60.1271		270R	MF, 1%, 0204, E24
0	C 65	59.68.0067		22u	EL 16V, 5.0*5.7	0	R 804	57.60.1271		270R	MF, 1%, 0204, E24
0	C 66	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 805	57.60.1271		270R	MF, 1%, 0204, E24
0	C 67	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 806	57.60.1271		270R	MF, 1%, 0204, E24
0	C 68	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 807	57.60.1221		220R	MF, 1%, 0204, E24
0	C 69	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 808	57.60.1221		220R	MF, 1%, 0204, E24
0	C 70	59.60.2365		470p	CER 50V, 5%, C0G, 0805	0	R 809	57.60.1181		180R	MF, 1%, 0204, E24
0	C 71	59.60.2249		100p	CER 50V, 5%, C0G, 0603	0	R 810	57.60.1181		180R	MF, 1%, 0204, E24
0	C 72	59.60.2249		100p	CER 50V, 5%, C0G, 0603	0	R 811	57.60.1181		180R	MF, 1%, 0204, E24
0	C 94	59.68.0067		22u	EL 16V, 5.0*5.7	0	R 812	57.60.1181		180R	MF, 1%, 0204, E24
0	C 95	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	R 813	57.60.1103		10K	MF, 1%, 0204, E24
0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	R 814	57.60.1102		1K	MF, 1%, 0204, E24
0	DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	R 815	57.60.1000		0R0	MF, 0204
0	DL 4	not used		TLUG 2401	DL TLUG 2401 GN MATT	0	R 816	57.60.1101		100R	MF, 1%, 0204, E24
0	IC 46	89.10.0021		HFBRS105	LWL Transceiver FDDI/MADI	0	R 817	57.60.1106		10M	MF, 1%, 0204, E24
0	IC 47	50.15.0126		75179B	IC SN 75179B P	0	R 818	57.60.1333		33K	MF, 1%, 0204, E24
0	IC 48	50.62.1423		74HC423	Dual multivibr monost retrigg	0	R 819	57.60.1823		82K	MF, 1%, 0204, E24
0	IC 49	50.62.4946		74HCT9046	PLL with bandgap contr VCO	0	R 820	57.60.1822		8K2	MF, 1%, 0204, E24
0	IC 50	50.62.4946		74HCT9046	PLL with bandgap contr VCO	0	R 821	57.60.1273		27K	MF, 1%, 0204, E24
0	IC 51	50.62.1014		74HC 14	Hex Schmitt trigger inverter	0	R 822	57.60.1104		100K	MF, 1%, 0204, E24
0	IC 52	50.15.0126		75179B	IC SN 75179B P	0	R 823	57.60.1823		82K	MF, 1%, 0204, E24
0	IC 59	50.61.9001		LM393	Dual voltage comp. SO 8	0	R 824	57.60.1822		8K2	MF, 1%, 0204, E24
0	J 1	54.11.2009		96p	EU-R 3*32p	0	R 825	57.60.1332		3K3	MF, 1%, 0204, E24
0	L 1	62.60.0101		1.0uH	10%, SMD 1210	0	R 826	57.60.1332		3K3	MF, 1%, 0204, E24
0	L 2	62.60.0101		1.0uH	10%, SMD 1210	0	R 827	57.60.1151		150R	MF, 1%, 0204, E24
0	MP 1	1.940.576.12			Processor Board PCB	0	R 828	57.60.1153		15K	MF, 1%, 0204, E24
0	MP 2	1.940.579.04			Typenschild	0	R 829	57.60.1622		6K2	MF, 1%, 0204, E24
0	MP 3	43.01.0108		Label	ESE-WARNSCHILD	0	R 832	57.60.1223		22K	MF, 1%, 0204, E24
0	MP 10	1.940.576.01	1 pce		FRONTPLATTE RCC	0	R 833	57.60.1223		22K	MF, 1%, 0204, E24
0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE	0	R 834	57.60.1103		10K	MF, 1%, 0204, E24
0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)	0	R 846	57.60.1103		10K	MF, 1%, 0204, E24
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)	0	R 847	57.60.1102		1K	MF, 1%, 0204, E24
0	MP 14	49.02.0522	2 pcs		Kartenhalter (Rack)	0	R 850	57.60.1271		270R	MF, 1%, 0204, E24
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp	0	R 851	57.60.1181		180R	MF, 1%, 0204, E24
0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff	0	R 852	57.60.1103		10K	MF, 1%, 0204, E24
0	MP 17	21.53.0279	2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr	0	R 853	57.60.1103		10K	MF, 1%, 0204, E24
						0	R 854	57.60.1102		1K	MF, 1%, 0204, E24
						0	R 855	57.60.1000		0R0	MF, 0204
						0	R 856	57.60.1000		0R0	MF, 0204
						0	R 857	57.60.1000		0R0	MF, 0204
						0	R 858	57.60.1000		0R0	MF, 0204
						0	XDL 1	50.20.2501		Spacer	LED-Sockel
						0	XDL 2	50.20.2501		Spacer	LED-Sockel
						0	XIC 52	53.03.0166		8p	DIL 0.3", löt, gerade

End of List

Comments



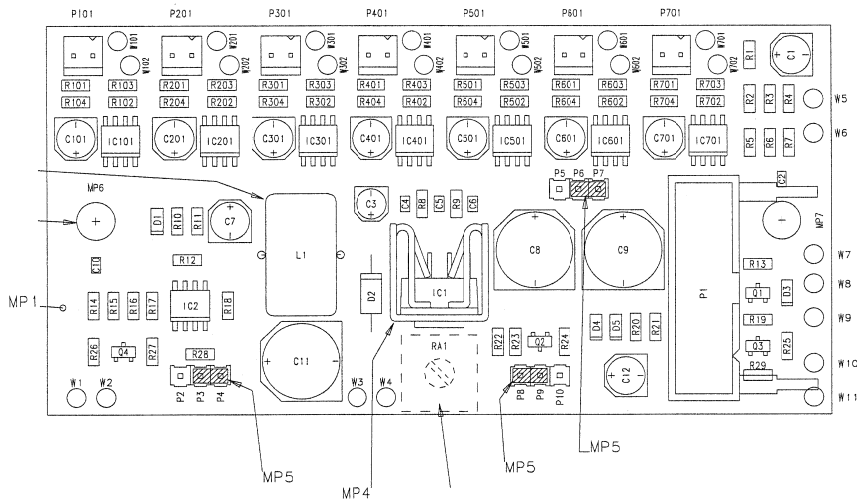
Fan Regulation 1.940.596.81



- (D-Sub 21) P1 3
  - (D-Sub 10) P1 4
  - (D-Sub 14) P1 11
  - (D-Sub 14) P1 12
  - (D-Sub 4) P1 7
  - (D-Sub 12) P1 8
  - (D-Sub 8) P1 15
  - (D-Sub 10) P1 16
- 5.0m  
100n
- 5.0m  
100n
- +15V  
LM393
- SMD-Markie  
SMD-Markie  
SMD-Markie



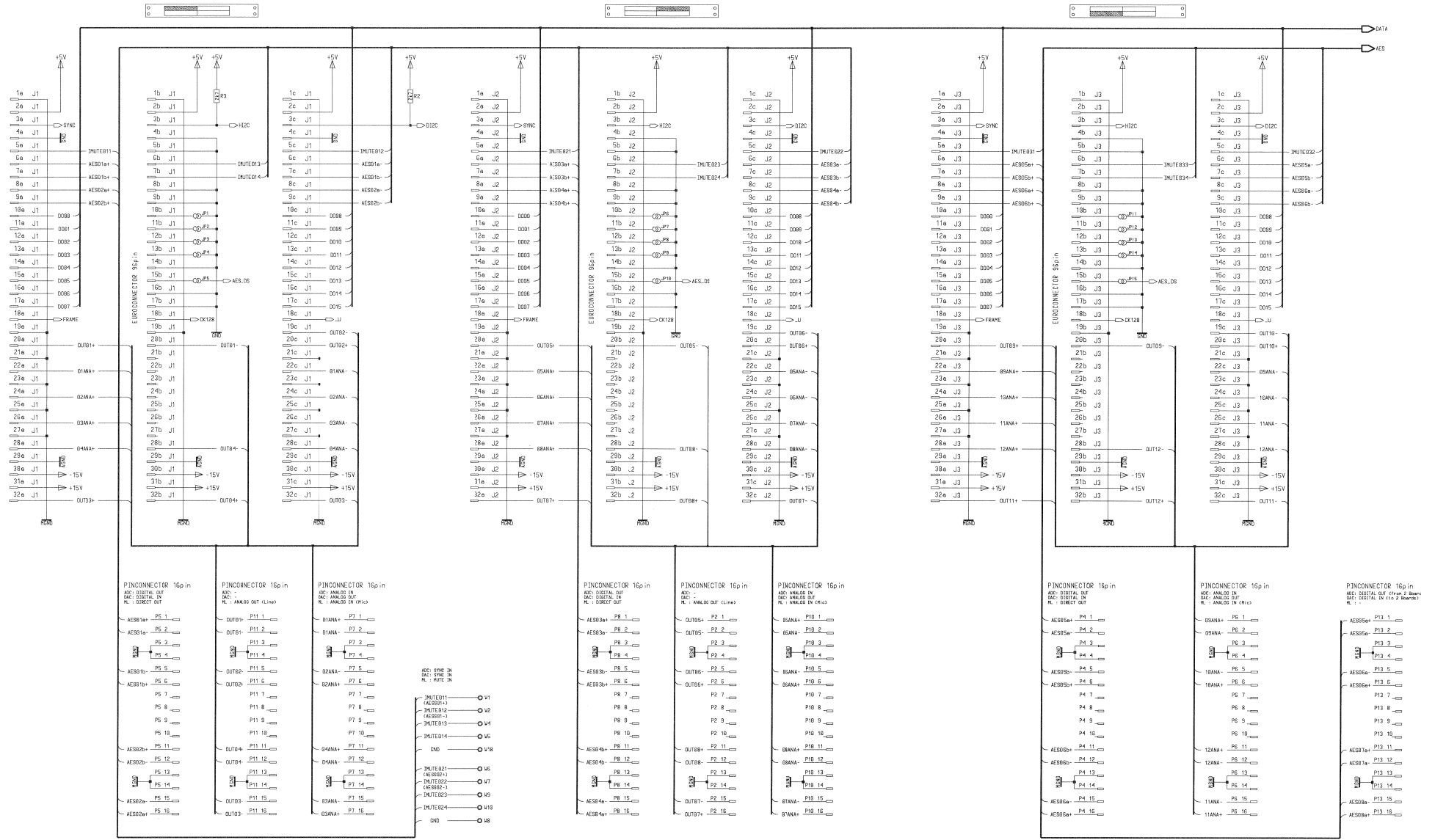
Fan Regulation 1.940.596.81



Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	∞ 1	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 18	57.60.1103	10K		MF, 1%, 0204, E24
0	∞ 2	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 19	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ 3	59.68.0129	2u2		C-EL 50V, 4.0*5.7	0	R 20	57.60.1103	10K		MF, 1%, 0204, E24
0	∞ 4	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0	R 21	57.60.1103	10K		MF, 1%, 0204, E24
0	∞ 5	59.60.3331	33n		CER 50V, 10%, X7R, 0805	0	R 22	57.60.1152	1K5		MF, 1%, 0204, E24
0	∞ 6	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 23	57.60.1472	4K7		MF, 1%, 0204, E24
0	∞ 7	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 24	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ 8	59.68.0117	220u		C-EL 35V, 10 *10.7	0	R 25	57.60.1333	33K		MF, 1%, 0204, E24
0	∞ 9	59.68.0117	220u		C-EL 35V, 10 *10.7	0	R 26	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ 10	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 27	57.60.1335	3M3		MF, 1%, 0204, E24
0	∞ 11	59.68.0075	470u		C-EL 35V, 10 *10.7	0	R 28	57.60.1333	33K		MF, 1%, 0204, E24
0	∞ 12	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 29	57.60.1333	33K		MF, 1%, 0204, E24
0	∞ 101	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 101	57.60.1152	1K5		MF, 1%, 0204, E24
0	∞ 201	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 102	57.60.1335	3M3		MF, 1%, 0204, E24
0	∞ 301	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 103	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ 401	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 104	57.60.1339	3R3		MF, 1%, 0204, E24
0	∞ 501	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 201	57.60.1152	1K5		MF, 1%, 0204, E24
0	∞ 601	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 202	57.60.1335	3M3		MF, 1%, 0204, E24
0	∞ 701	59.68.0109	10u		C-EL 35V, 5.0*5.7	0	R 203	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ 1	50.60.8001	4448		200mA 75V 4ns SOD 80	0	R 204	57.60.1339	3R3		MF, 1%, 0204, E24
0	∞ 2	50.04.0512	1N5818		D 1N 5818, 1N 5819	0	R 301	57.60.1152	1K5		MF, 1%, 0204, E24
0	∞ 3	50.60.8001	4448		200mA 75V 4ns SOD 80	0	R 302	57.60.1335	3M3		MF, 1%, 0204, E24
0	∞ 4	50.60.8001	4448		200mA 75V 4ns SOD 80	0	R 303	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ 5	50.60.8001	4448		200mA 75V 4ns SOD 80	0	R 304	57.60.1339	3R3		MF, 1%, 0204, E24
0	∞ 6	50.60.8001	4448		200mA 75V 4ns SOD 80	0	R 401	57.60.1152	1K5		MF, 1%, 0204, E24
0	∞ C 1	50.10.0118	L4982		IC L 4982 E,	0	R 402	57.60.1335	3M3		MF, 1%, 0204, E24
0	∞ C 2	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 403	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ C 101	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 404	57.60.1339	3R3		MF, 1%, 0204, E24
0	∞ C 201	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 501	57.60.1152	1K5		MF, 1%, 0204, E24
0	∞ C 301	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 502	57.60.1335	3M3		MF, 1%, 0204, E24
0	∞ C 401	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 503	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ C 501	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 504	57.60.1339	3R3		MF, 1%, 0204, E24
0	∞ C 601	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 601	57.60.1152	1K5		MF, 1%, 0204, E24
0	∞ C 601	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 602	57.60.1335	3M3		MF, 1%, 0204, E24
0	∞ C 701	50.61.9001	LM393		Dual voltage comp. SO 8	0	R 603	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ R 1	62.03.0005	250uH		1A Toroid Core	0	R 604	57.60.1339	3R3		MF, 1%, 0204, E24
0	∞ VP 1	1.940.596.12			Fan Regulation PCB	0	R 701	57.60.1152	1K5		MF, 1%, 0204, E24
0	∞ VP 2	1.940.596.10			Nr. Etikette	0	R 702	57.60.1335	3M3		MF, 1%, 0204, E24
0	∞ VP 3	43.01.0108		Label	ESE-WARNschild	0	R 703	57.60.1222	2K2		MF, 1%, 0204, E24
0	∞ VP 4	50.20.3011			Kühlkörper, TO 220, vertikal	0	R 704	57.60.1339	3R3		MF, 1%, 0204, E24
0	∞ VP 5	54.01.0021	3 pcs	Jumper	0.63 * 0.63mm	0	RA 1	58.01.8502	5k		Cermet, 10%, 0.5W, horizontal
0	∞ VP 6	1.010.018.22			NIETMUTTER SW 6 M 3 * 5						End of List
0	∞ VP 7	1.010.018.22			NIETMUTTER SW 6 M 3 * 5						
0	∞ P 1	54.4.2102	16p		P STECKER 16 PAU,VR,GERADE						
0	∞ 2	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ 3	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ 4	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ 5	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ 6	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ 7	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ 8	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ 9	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ 10	54.C1.0020	1p		Pin 0.63*0.63						
0	∞ P 101	54.12.0702	2p		Stecker gerade PCB						
0	∞ P 201	54.12.0702	2p		Stecker gerade PCB						
0	∞ P 301	54.12.0702	2p		Stecker gerade PCB						
0	∞ P 401	54.12.0702	2p		Stecker gerade PCB						
0	∞ P 501	54.12.0702	2p		Stecker gerade PCB						
0	∞ P 601	54.12.0702	2p		Stecker gerade PCB						
0	∞ P 701	54.12.0702	2p		Stecker gerade PCB						
0	∞ Q 1	50.60.1001		BC857B	PNP 45V 100mA SOT 23						
0	∞ Q 2	50.60.0001		BC847B	NPN 45V 100mA SOT 23						
0	∞ Q 3	50.60.1001		BC857B	PNP 45V 100mA SOT 23						
0	∞ Q 4	50.60.0001		BC847B	NPN 45V 100mA SOT 23						
0	R 1	57.60.1103	10K		MF, 1%, 0204, E24						
0	R 2	57.60.1222	2K2		MF, 1%, 0204, E24						
0	R 3	57.60.1271	270R		MF, 1%, 0204, E24						
0	R 4	57.60.1222	2K2		MF, 1%, 0204, E24						
0	R 5	57.60.1333	33K		MF, 1%, 0204, E24						
0	R 6	57.60.1335	3M3		MF, 1%, 0204, E24						
0	R 7	57.60.1101	100R		MF, 1%, 0204, E24						
0	R 8	57.60.1472	4K7		MF, 1%, 0204, E24						
0	R 9	57.60.1153	15K		MF, 1%, 0204, E24						
0	R 10	57.60.1104	100K		MF, 1%, 0204, E24						
0	R 11	57.60.1103	10K		MF, 1%, 0204, E24						
0	R 12	57.60.1335	3M3		MF, 1%, 0204, E24						
0	R 13	57.60.1152	1K5		MF, 1%, 0204, E24						
0	R 14	57.60.1103	10K		MF, 1%, 0204, E24						
0	R 15	57.60.1333	33K		MF, 1%, 0204, E24						
0	R 16	57.60.1103	10K		MF, 1%, 0204, E24						
0	R 17	57.60.1104	100K		MF, 1%, 0204, E24						

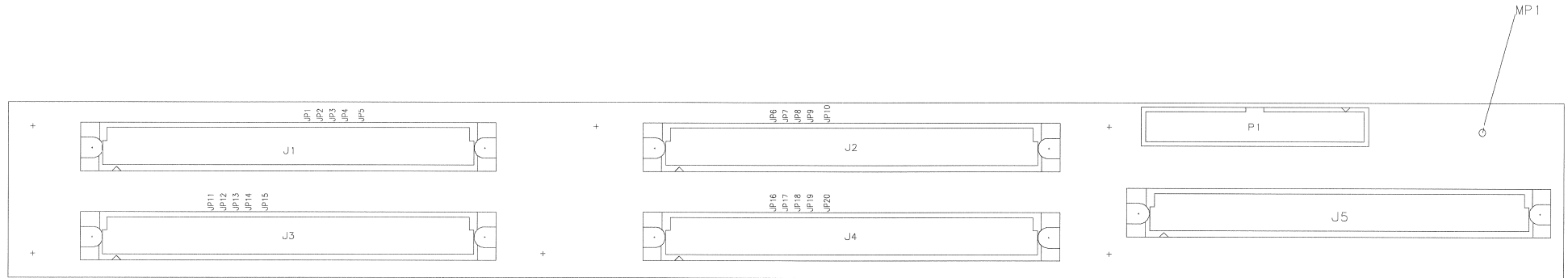
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Substitute for: Ersatz für:								
STUDER REGENSDORF		Fan Regulation, ESE		Z		Number: Nummer: 1.940.596.81		

Back Plane 1U 1.940.553.00 ( 0)

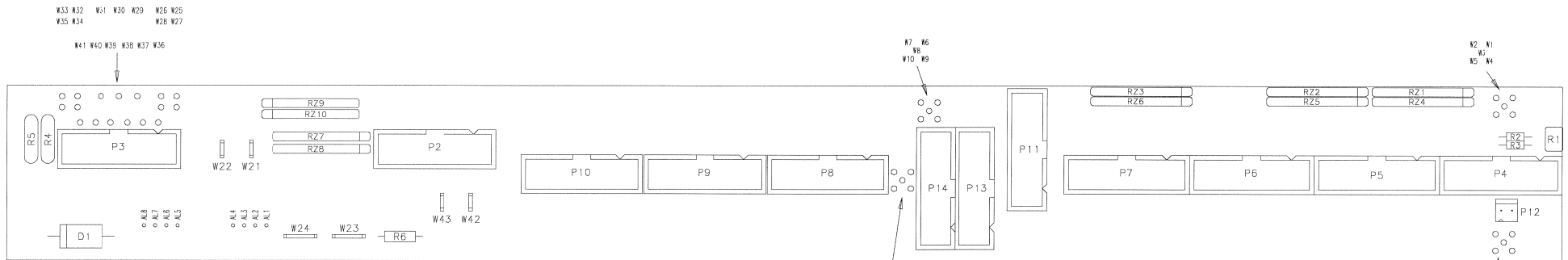




Back Plane 1U 1.940.553.00 ( 0 )



Component side



Solder side

Accompanying documents: Zugehörige Unterlagen: PL	General tolerance: Freimasstoleranz:	Scale: Maßstab:	Edition Ausgabe Date Datum	03.04.2000	LC	ML	RL	Ⓢ	
Substitute for: Ersatz fuer:	Page: Seite:			1 / 1					
<b>STUDER</b> REGENSDORF	Description: Bezeichnung:	BACK PLANE 1HE			Number: Nummer:	1.940.553.00			

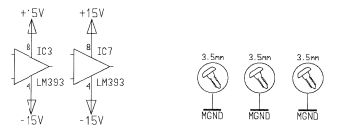
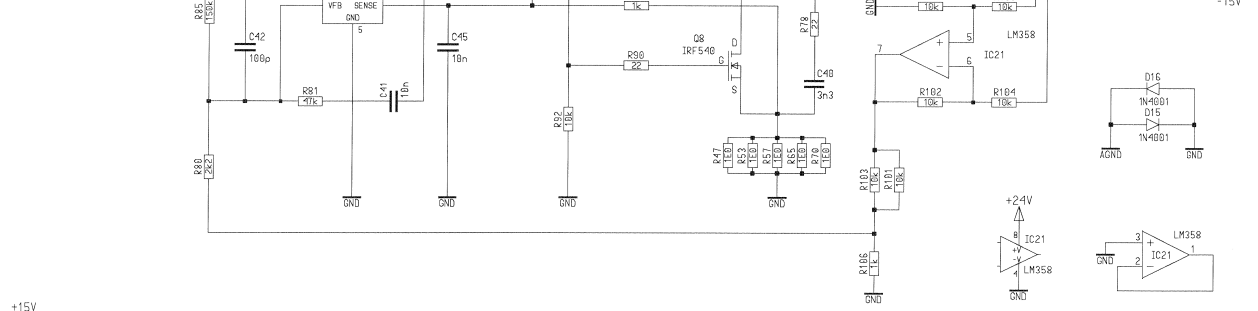
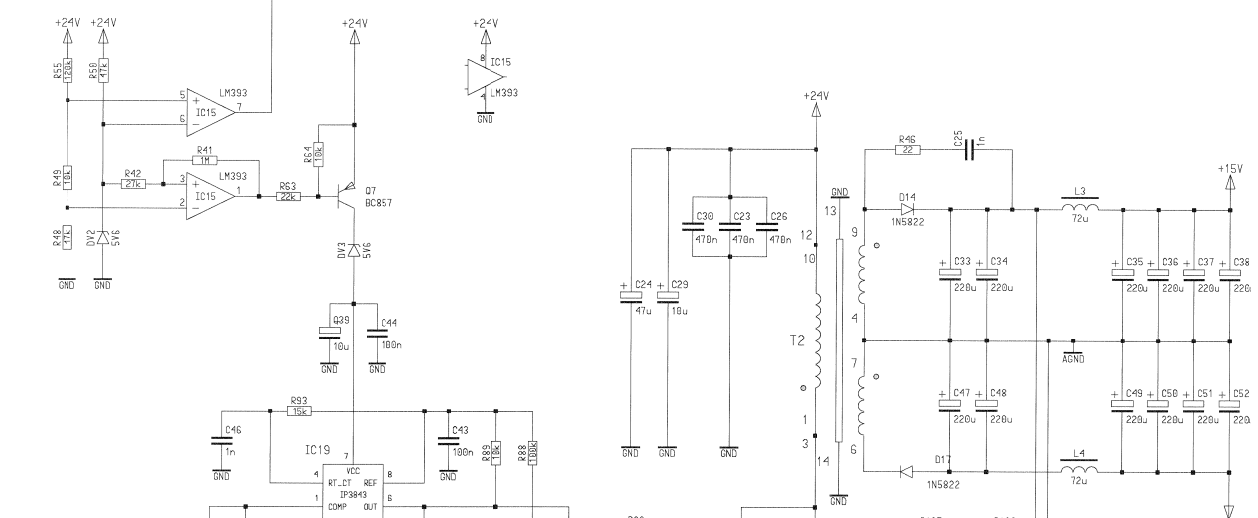
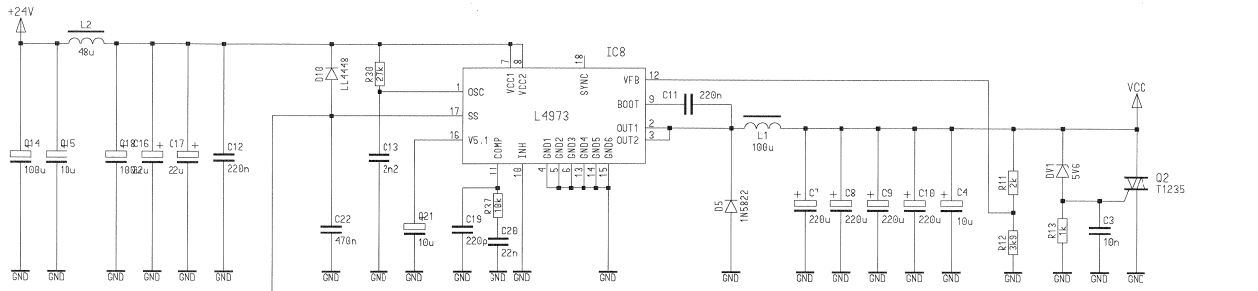
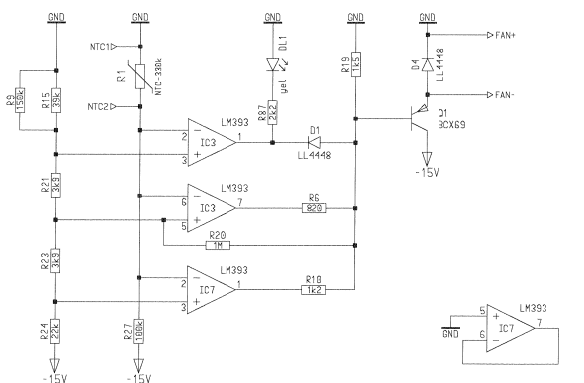
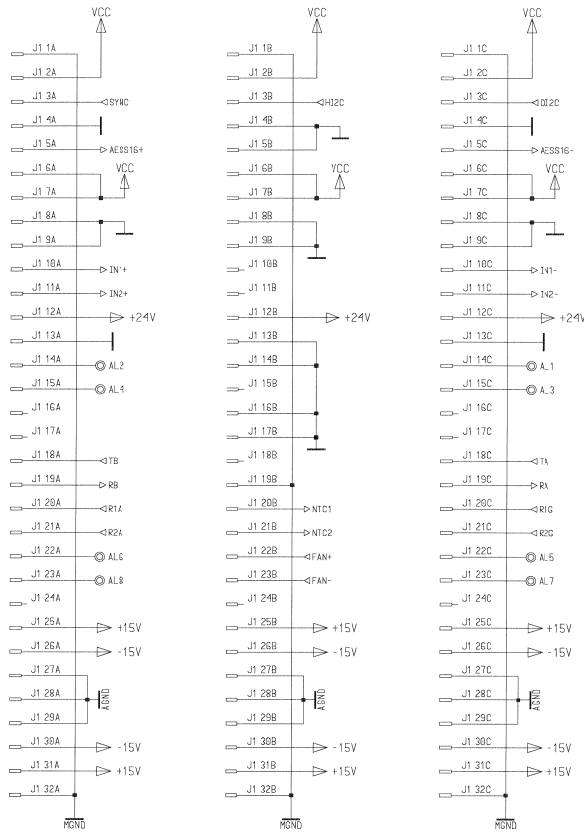
**Back Plane 1U 1.940.553.00 ( 0)**

Page: 1 of 1

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 D 1	50.04.0519		1N5822	3A, Schöttky
0 J 1	1.940.550.01			MESSERLEISTE 96 pol DIN 41612
0 J 2	1.940.550.01			MESSERLEISTE 96 pol DIN 41612
0 J 3	1.940.550.01			MESSERLEISTE 96 pol DIN 41612
0 J 4	1.940.550.01			MESSERLEISTE 96 pol DIN 41612
0 J 5	1.940.550.01			MESSERLEISTE 96 pol DIN 41612
0 MP 1	1.940.553.11	mp		BACK PLANE 1HE PCB
0 MP 2	1.940.553.04	mp		NR. ETIKETTE 5 * 20
0 P 1		not used	34p	1/20" Au, gerade, ohne Verrieg
0 P 2	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 3	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 4	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 5	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 6	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 7	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 8	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 9	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 10	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 11	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 12	54.12.0702		2p	Stecker gerade PCB
0 P 13	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 P 14	54.14.2002		16p	1/20" Au, gerade, ohne Verrieg
0 R 1	57.99.0801		330k	NTC, 5%
0 R 2	57.10.1272		2k7	MF, 1%, 0204
0 R 3	57.10.1272		2k7	MF, 1%, 0204
0 R 4	57.92.7053		1.6A	PTC 30V
0 R 5	57.92.7053		1.6A	PTC 30V
0 R 6	57.11.3000		0R0	MF, 0207
0 RZ 1	57.88.4471		470R	8*R Resistor-Netw 2% SIP9
0 RZ 2	57.88.4471		470R	8*R Resistor-Netw 2% SIP9
0 RZ 3	57.88.4471		470R	8*R Resistor-Netw 2% SIP9
0 RZ 4	57.88.4681		680R	8*R Resistor-Netw 2% SIP9
0 RZ 5	57.88.4681		680R	8*R Resistor-Netw 2% SIP9
0 RZ 6	57.88.4681		680R	8*R Resistor-Netw 2% SIP9
0 RZ 7	not used		470R	8*R Resistor-Netw 2% SIP9
0 RZ 8	not used		470R	8*R Resistor-Netw 2% SIP9
0 RZ 9	not used		680R	8*R Resistor-Netw 2% SIP9
0 RZ 10	not used		680R	8*R Resistor-Netw 2% SIP9
0 W 21	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade
0 W 22	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade
0 W 23	54.02.0335		1p	PCB-Flachst 6.3*0.8, gerade
0 W 24	54.02.0335		1p	PCB-Flachst 6.3*0.8, gerade
0 W 42	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade
0 W 43	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade

End of List

Supply Board 1.940.578.20 ( 1 )

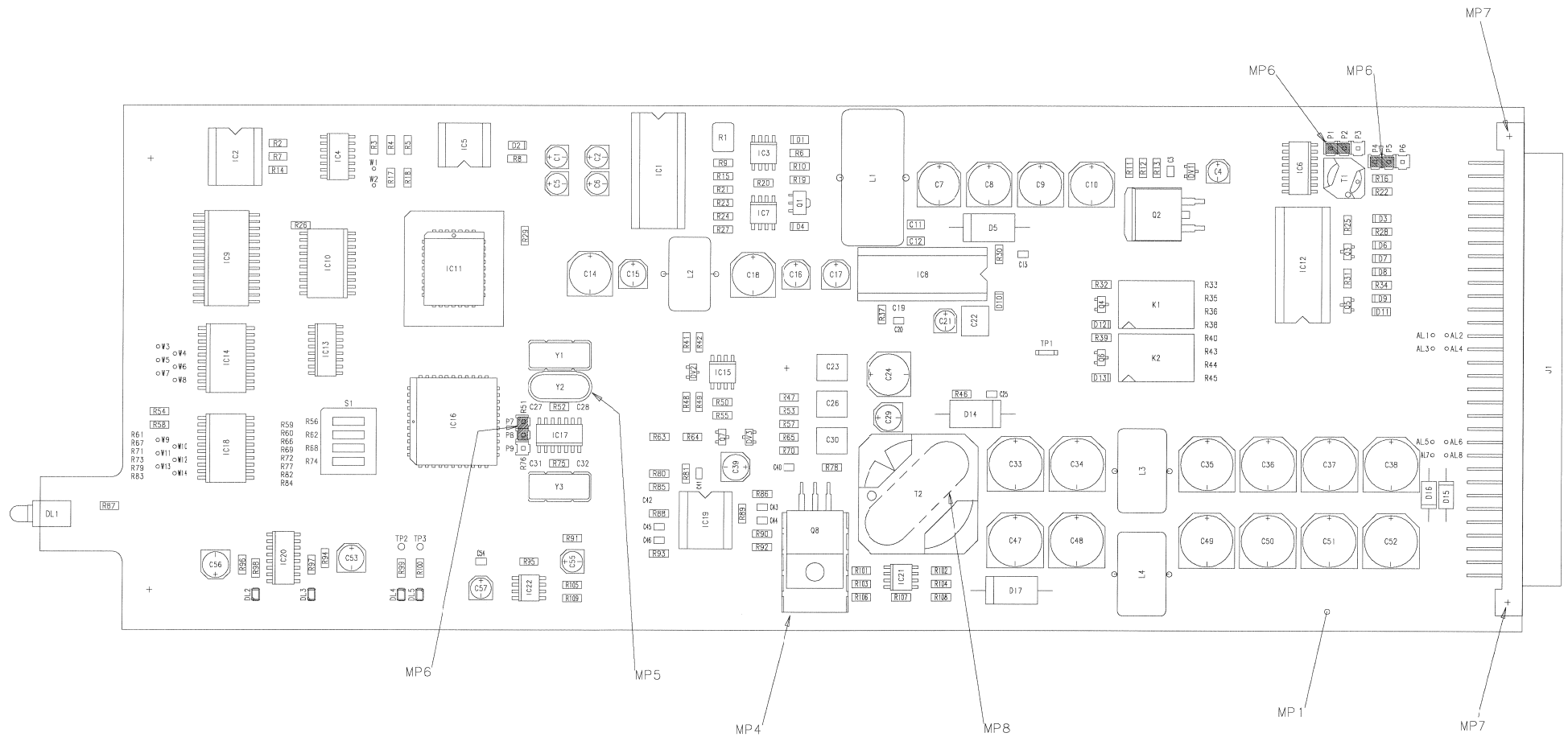


Erstellt	05.04.2000	LC	23.06.2000	ZT				
STUDER							SUPPLY BOARD	
							PAGE 1 OF 2	
							1.940.578.20	





Supply Board 1.940.578.20 ( 1 )



Accompanying documents: Zugehörige Unterlagen: PL, BV640		General tolerance: Freimasstoleranz:	Scale: Masstab:	Edition: Ausgabe: 23.06.2000	LC	ML	RL	①	
Substitute for: Ersatz fuer: 1.940.578.20		Index 0		Date: Datum:	Visa: Gez.	Checked: Gepr.	Seen: Ges.	Index	
STUDER REGENSDORF				Designation: Benennung: SUPPLY BOARD, ESE				Page: Seite: 1 / 1	
				Number: Nummer: 1.940.578.20					

**Supply Board 1.940.578.22 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	not used	1 pce	10u	EL 16V, 4.0*5.7	0 IC 6	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0 C 2	not used	1 pce	10u	EL 16V, 4.0*5.7	0 IC 7	50.61.9001	1 pce	LM393	Dual voltage comp. SO 8
0 C 3	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 IC 8	50.10.0127	1 pce	4973V3.3	Switching Reg 3.3V 3.5A
0 C 4	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 IC 9	50.63.1502	1 pce	6264	SRAM 8K*8, 120ns
0 C 5	not used	1 pce	10u	EL 16V, 4.0*5.7	0 IC 10	50.62.3573	1 pce	74HCT573	Octal D-type latch
0 C 6	not used	1 pce	10u	EL 16V, 4.0*5.7	0 IC 11	1.940.982.23	1 pce		SW 576 Control (50.63.1303)
0 C 7	59.68.0073	1 pce	220u	EL 16V, 8.0*10.7	0 IC 12	50.04.2138	1 pce	ILQ615	DLQ 4*LED/Transistor
0 C 8	59.68.0073	1 pce	220u	EL 16V, 8.0*10.7	0 IC 13	50.62.3139	1 pce	74HCT139	Dual 2 to 4 line decoder
0 C 9	59.68.0073	1 pce	220u	EL 16V, 8.0*10.7	0 IC 14	50.62.1273	1 pce	74HC273	Octal D-FF with clear
0 C 10	59.68.0073	1 pce	220u	EL 16V, 8.0*10.7	0 IC 15	50.61.9001	1 pce	LM393	Dual voltage comp. SO 8
0 C 11	59.60.3441	1 pce	220n	CER 50V, 10%, X7R, 1206	0 IC 16	50.63.0009	1 pce	80C652	MPU 8bit
0 C 12	59.60.3441	1 pce	220n	CER 50V, 10%, X7R, 1206	0 IC 17	50.62.1904	1 pce	74HCU04	Hex inverter unbuffered
0 C 13	59.60.3317	1 pce	2n2	CER 50V, 10%, X7R, 0805	0 IC 18	50.62.1541	1 pce	74HC541	Octal buffer/line driver tri
0 C 14	59.68.0115	1 pce	100u	EL 35V, 8.0*10.7	0 IC 19	50.10.0113	1 pce	3843	IC IP 3843 N
0 C 15	59.68.0109	1 pce	10u	EL 35V, 5.0*5.7	0 IC 20	not used	1 pce	74HC423	Dual multivibr monost retrigg
0 C 16	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 IC 21	50.61.0202	1 pce	LM358	Op-Amp single supply
0 C 17	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 IC 22	50.63.2001	1 pce	7705B	Reset Generator
0 C 18	59.68.0115	1 pce	100u	EL 35V, 8.0*10.7	0 J 1	54.11.2009	1 pce	96p	EU-R 3*32p
0 C 19	59.60.2257	1 pce	220p	CER 50V, 5%, C0G, 0603	0 K 1	not used	1 pce	2*u	24V 125V 2A Ag/Au
0 C 20	59.60.3329	1 pce	22n	CER 50V, 10%, X7R, 0805	0 K 2	not used	1 pce	2*u	24V 125V 2A Ag/Au
0 C 21	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 L 1	62.03.0040	1 pce	100uH	5A Toroid Chocke
0 C 22	59.60.3845	1 pce	470n	CER 50V, 10%, X7R, 2220	0 L 2	62.03.0010	1 pce	48uH	2A Toroid Chocke
0 C 23	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220	0 L 3	62.03.0015	1 pce	72uH	2A Toroid Chocke
0 C 24	59.68.0113	1 pce	47u	EL 35V, 8.0*6.3	0 L 4	62.03.0015	1 pce	72uH	2A Toroid Chocke
0 C 25	59.60.2373	1 pce	1n0	CER 50V, 5%, C0G, 0805	0 MP 1	1.940.578.11	1 pce		Supply Board PCB
0 C 26	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220	0 MP 2	1.940.578.04	1 pce		NR. ETIKETTE 5 * 20
0 C 27	59.60.2235	1 pce	27p	CER 50V, 5%, C0G, 0603	0 MP 3	43.01.0108	1 pce	Label	ESE-Warnschild
0 C 28	59.60.2235	1 pce	27p	CER 50V, 5%, C0G, 0603	0 MP 4	50.20.3004	1 pce		Kühlkörper, TO 220, horizontal
0 C 29	59.68.0109	1 pce	10u	EL 35V, 5.0*5.7	0 MP 5	not used	1 pce		QUARZ - ISOLIERPLATTE
0 C 30	59.63.0133	1 pce	470n	PEN 50V, 5%, 2220	0 MP 6	54.01.0021	3 pcs	Jumper	0.63*0.63mm, Au
0 C 31	59.60.2235	1 pce	27p	CER 50V, 5%, C0G, 0603	0 MP 7	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 C 32	59.60.2235	1 pce	27p	CER 50V, 5%, C0G, 0603	0 MP 8	1.010.005.61	1 pce		UNTERLAGE ZU RM 10
0 C 33	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 P 1	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 34	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 P 2	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 35	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 P 3	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 36	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 P 4	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 37	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 P 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 38	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 P 6	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 39	59.68.0109	1 pce	10u	EL 35V, 5.0*5.7	0 P 7	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 40	59.60.3319	1 pce	3n3	CER 50V, 10%, X7R, 0805	0 P 8	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 41	not used	1 pce	10n	CER 50V, 10%, X7R, 0805	0 P 9	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 42	59.60.2249	1 pce	100p	CER 50V, 5%, C0G, 0603	0 Q 1	50.60.1100	1 pce	BCX69-25	PNP 45V 1.0A SOT 89
0 C 43	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 Q 2	50.60.7001	1 pce	BT138B	Triac 8A, 600V, SOT 404
0 C 44	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 Q 3	50.60.1003	1 pce	BC856B	PNP 65V 100mA SOT 23
0 C 45	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 Q 4	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0 C 46	59.60.2373	1 pce	1n0	CER 50V, 5%, C0G, 0805	0 Q 5	50.60.1003	1 pce	BC856B	PNP 65V 100mA SOT 23
0 C 47	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 Q 6	50.60.0050	1 pce	BC817-25	NPN 45V 800mA SOT 23
0 C 48	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 Q 7	50.60.1001	1 pce	BC857B	PNP 45V 100mA SOT 23
0 C 49	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 Q 8	50.03.1509	1 pce	IRF540	N-V MOS-FET 100V, 27A
0 C 50	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 R 1	not used	1 pce	330k	NTC, 5%
0 C 51	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 R 2	57.60.1332	1 pce	3k3	MF, 1%, 0204, E24
0 C 52	59.68.0117	1 pce	220u	EL 35V, 10 *10.7	0 R 3	not used	1 pce	220R	MF, 1%, 0204, E24
0 C 53	not used	1 pce	22u	EL 16V, 5.0*5.7	0 R 4	not used	1 pce	390R	MF, 1%, 0204, E24
0 C 54	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 5	not used	1 pce	220R	MF, 1%, 0204, E24
0 C 55	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 6	57.60.1821	1 pce	820R	MF, 1%, 0204, E24
0 C 56	not used	1 pce	22u	EL 16V, 5.0*5.7	0 R 7	57.60.1151	1 pce	150R	MF, 1%, 0204, E24
0 C 57	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 8	not used	1 pce	220R	MF, 1%, 0204, E24
0 D 1	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 9	57.60.1154	1 pce	150k	MF, 1%, 0204, E24
0 D 2	not used	1 pce	4448	200mA 75V 4ns SOD 80	0 R 10	57.60.1122	1 pce	1k2	MF, 1%, 0204, E24
0 D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 11	57.60.1202	1 pce	2k0	MF, 1%, 0204, E24
0 D 4	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 12	57.60.1392	1 pce	3k9	MF, 1%, 0204, E24
0 D 5	50.04.0519	1 pce	1N5822	3A, Schottky	0 R 13	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 D 6	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 14	57.60.1332	1 pce	3k3	MF, 1%, 0204, E24
0 D 7	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 15	57.60.1393	1 pce	39k	MF, 1%, 0204, E24
0 D 8	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 16	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0 D 9	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 17	not used	1 pce	220R	MF, 1%, 0204, E24
0 D 10	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 18	not used	1 pce	220R	MF, 1%, 0204, E24
0 D 11	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 19	57.60.1152	1 pce	1k5	MF, 1%, 0204, E24
0 D 12	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 20	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0 D 13	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 21	57.60.1392	1 pce	3k9	MF, 1%, 0204, E24
0 D 14	50.04.0519	1 pce	1N5822	3A, Schottky	0 R 22	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0 D 15	50.04.0122	1 pce	1N4001	1A, DO 41	0 R 23	57.60.1392	1 pce	3k9	MF, 1%, 0204, E24
0 D 16	50.04.0122	1 pce	1N4001	1A, DO 41	0 R 24	57.60.1223	1 pce	22k	MF, 1%, 0204, E24
0 D 17	50.04.0519	1 pce	1N5822	3A, Schottky	0 R 25	57.60.1223	1 pce	22k	MF, 1%, 0204, E24
0 DL 1	50.04.2752	1 pce	yel	LED mit Halter	0 R 26	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 DL 2	not used	1 pce	yel	SMD LED yellow	0 R 27	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 DL 3	not used	1 pce	yel	SMD LED yellow	0 R 28	57.60.1181	1 pce	180R	MF, 1%, 0204, E24
0 DL 4	not used	1 pce	yel	SMD LED yellow	0 R 29	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 DL 5	not used	1 pce	yel	SMD LED yellow	0 R 30	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0 DV 1	50.60.9011	1 pce	5V6	5%, 0.2W, SOT 23	0 R 31	57.60.1223	1 pce	22k	MF, 1%, 0204, E24
0 DV 2	50.60.9011	1 pce	5V6	5%, 0.2W, SOT 23	0 R 32	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 DV 3	50.60.9011	1 pce	5V6	5%, 0.2W, SOT 23	0 R 33	57.60.1000	1 pce	0R0	MF, 0204
0 IC 1	not used	1 pce	MAX232	IC MAX 232 CPE	0 R 34	57.60.1181	1 pce	180R	MF, 1%, 0204, E24
0 IC 2	50.15.0126	1 pce	75179B	IC SN 75179B P	0 R 37	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 IC 3	50.61.9001	1 pce	LM393	Dual voltage comp. SO 8	0 R 39	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 IC 4	not used	1 pce	74HC 14	Hex Schmitt trigger inverter	0 R 40	57.60.1000	1 pce	0R0	MF, 0204
0 IC 5	not used	1 pce	PC900V	DLQ PC 900 V	0 R 41	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24

**Supply Board 1.940.578.22 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 R 42	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0 R 46	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 R 47	57.60.1109	1 pce	1R0	MF, 1%, 0204, E24
0 R 48	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0 R 49	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 50	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0 R 51	57.69.1097	1 pce	10k	CF 5% 0603
0 R 52	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0 R 53	57.60.1109	1 pce	1R0	MF, 1%, 0204, E24
0 R 54	57.60.1223	1 pce	22k	MF, 1%, 0204, E24
0 R 55	57.60.1124	1 pce	120k	MF, 1%, 0204, E24
0 R 56	57.69.1097	1 pce	10k	CF 5% 0603
0 R 57	57.60.1109	1 pce	1R0	MF, 1%, 0204, E24
0 R 58	57.60.1223	1 pce	22k	MF, 1%, 0204, E24
0 R 59	57.69.1097	1 pce	10k	CF 5% 0603
0 R 60	57.69.1097	1 pce	10k	CF 5% 0603
0 R 61	57.69.1097	1 pce	10k	CF 5% 0603
0 R 62	57.69.1097	1 pce	10k	CF 5% 0603
0 R 63	57.60.1223	1 pce	22k	MF, 1%, 0204, E24
0 R 64	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 65	57.60.1109	1 pce	1R0	MF, 1%, 0204, E24
0 R 66	57.69.1097	1 pce	10k	CF 5% 0603
0 R 67	57.69.1097	1 pce	10k	CF 5% 0603
0 R 68	57.69.1097	1 pce	10k	CF 5% 0603
0 R 69	57.69.1097	1 pce	10k	CF 5% 0603
0 R 70	57.60.1109	1 pce	1R0	MF, 1%, 0204, E24
0 R 71	57.69.1097	1 pce	10k	CF 5% 0603
0 R 72	57.69.1097	1 pce	10k	CF 5% 0603
0 R 73	57.69.1097	1 pce	10k	CF 5% 0603
0 R 74	57.69.1097	1 pce	10k	CF 5% 0603
0 R 75	57.60.1105	1 pce	1M0	MF, 1%, 0204, E24
0 R 76	57.69.1097	1 pce	10k	CF 5% 0603
0 R 77	57.69.1097	1 pce	10k	CF 5% 0603
0 R 78	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 R 79	57.69.1097	1 pce	10k	CF 5% 0603
0 R 80	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 81	not used	1 pce	47k	MF, 1%, 0204, E24
0 R 82	57.69.1097	1 pce	10k	CF 5% 0603
0 R 83	57.69.1097	1 pce	10k	CF 5% 0603
0 R 84	57.69.1097	1 pce	10k	CF 5% 0603
0 R 85	57.60.1154	1 pce	150k	MF, 1%, 0204, E24
0 R 86	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 R 87	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 88	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 R 89	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 90	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 R 91	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0 R 92	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 93	57.60.1153	1 pce	15k	MF, 1%, 0204, E24
0 R 94	not used	1 pce	10k	MF, 1%, 0204, E24
0 R 95	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 96	not used	1 pce	10k	MF, 1%, 0204, E24
0 R 97	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 98	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 99	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 100	not used	1 pce	1k0	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	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 R 107	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 108	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 109	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 S 1	55.01.0164	1 pce	4*a	DIL-Switch, PCB
0 T 1	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER
0 T 2	1.022.654.00	1 pce		TRAFO +/-14V
0 TP 1	not used	1 pce	2.8*0.8	PCB-Flachstecker, gerade
0 XIC 11	53.03.2232	1 pce	32p	PLCC-Socket
0 Y 1	89.60.1007	1 pce	14.7456MHz	SMD Quartz
0 Y 2	not used	1 pce	12.000MHz	XTAL HC 49/U
0 Y 3	89.60.1003	1 pce	12.000MHz	SMD Quartz

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
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End of List

Comments:

[22] New RCC firmware

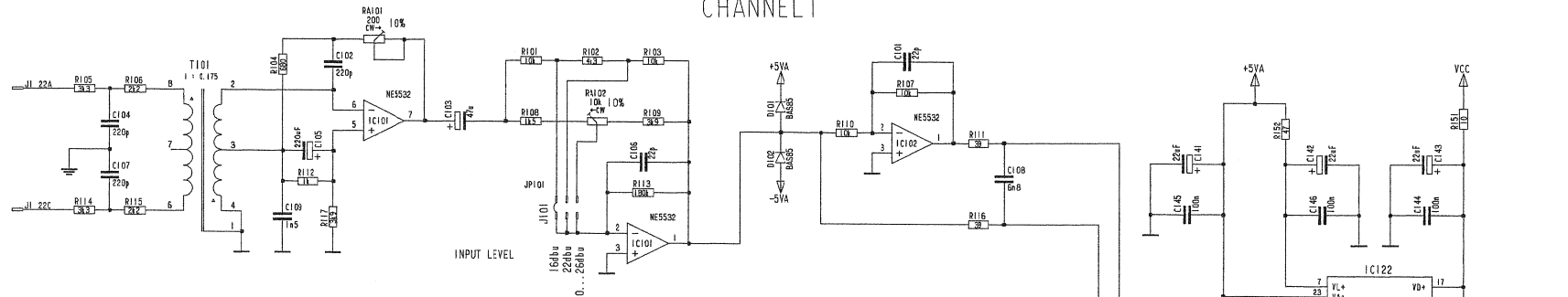
**CIRCUIT DIAGRAMS: D19m INPUT INTERFACE CARDS**

C4AD Board .....	1.940.560
C1AD NS Board .....	1.940.561
C4AD/24 Board .....	1.940.562
C4AD NS/24 Board .....	1.940.563
MP4RC Board.....	1.940.575
RCC Board.....	1.940.576
AESI Board .....	1.940.580
Block Diagram AESI SFC Board .....	1.940.540
AESI SFC Board .....	1.940.540
Block Diagram MADI .....	1.940.500/1.940.510
MADI Coaxial .....	1.940.500
MADI Optical .....	1.940.510
MADI Optical .....	1.940.511
MADI Optical with redundant MADI IN .....	1.940.512
MADI Optical Route56.....	1.940.514
TDIFI Interface .....	1.940.480
TDIFI Interface with AES Out.....	1.950.481
ADATI Interface .....	1.940.490
ADATI Interface with AES Out .....	1.940.491

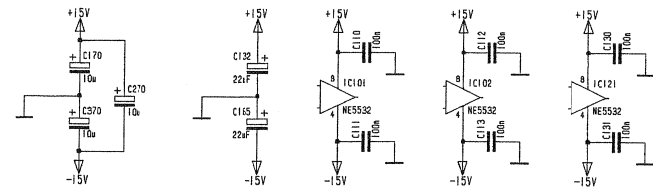
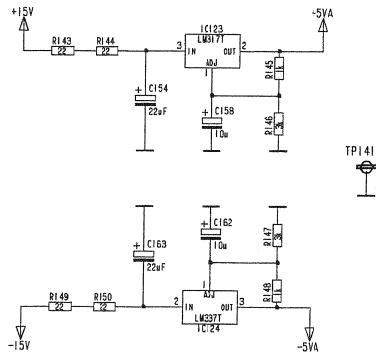
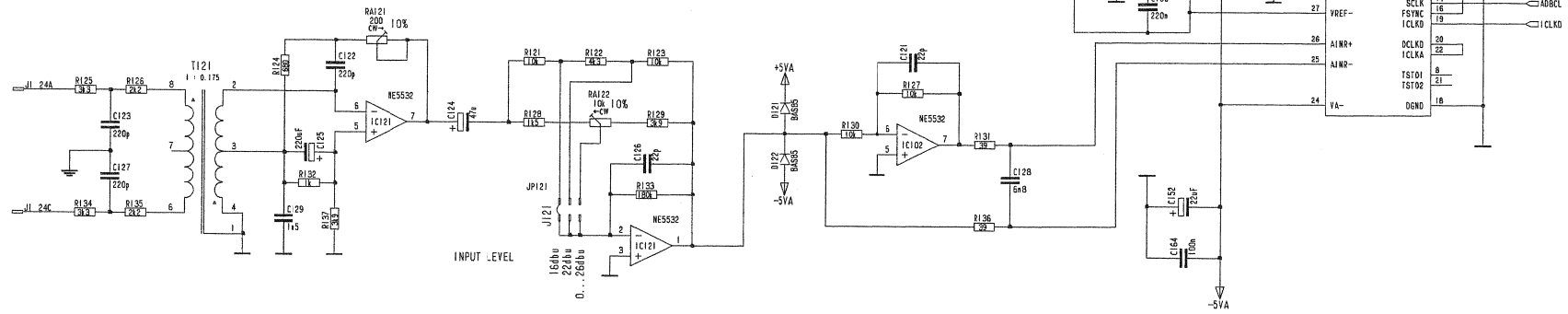
DI9M C4 AD Board 1.940.560.21



CHANNEL 1

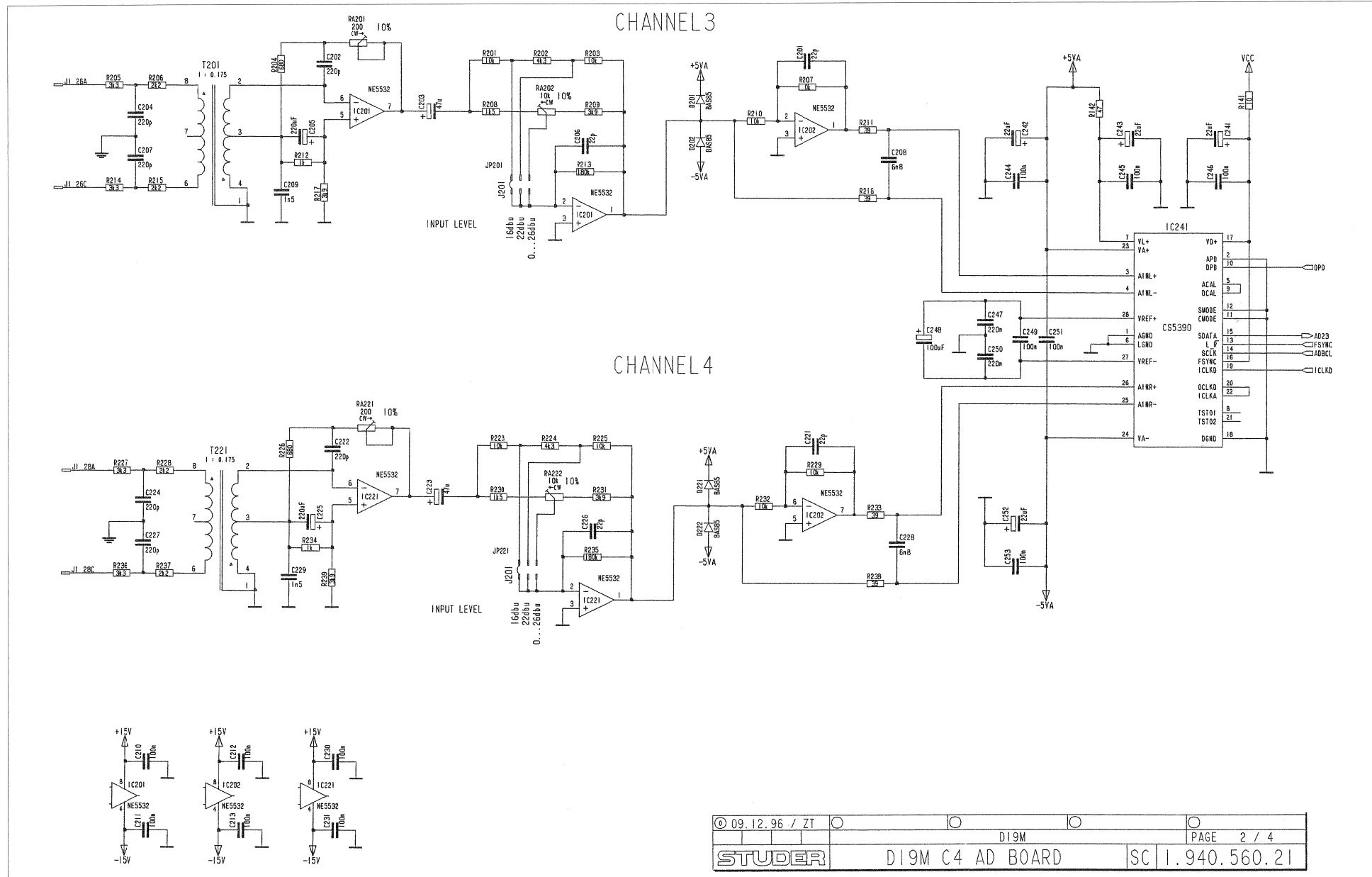


CHANNEL 2



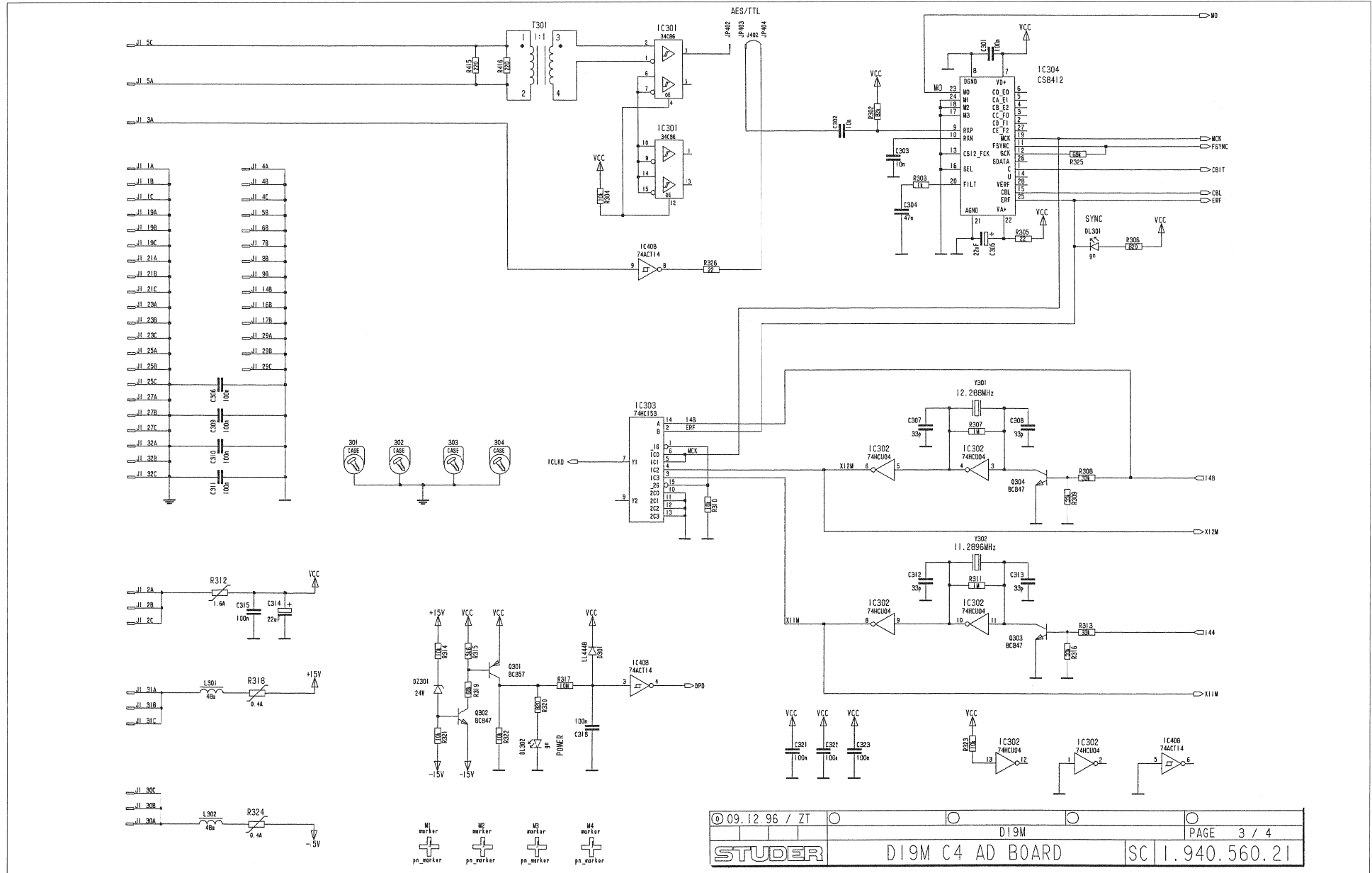


D19M C4 AD Board 1.940.560.21





D19M C4 AD Board 1.940.560.21

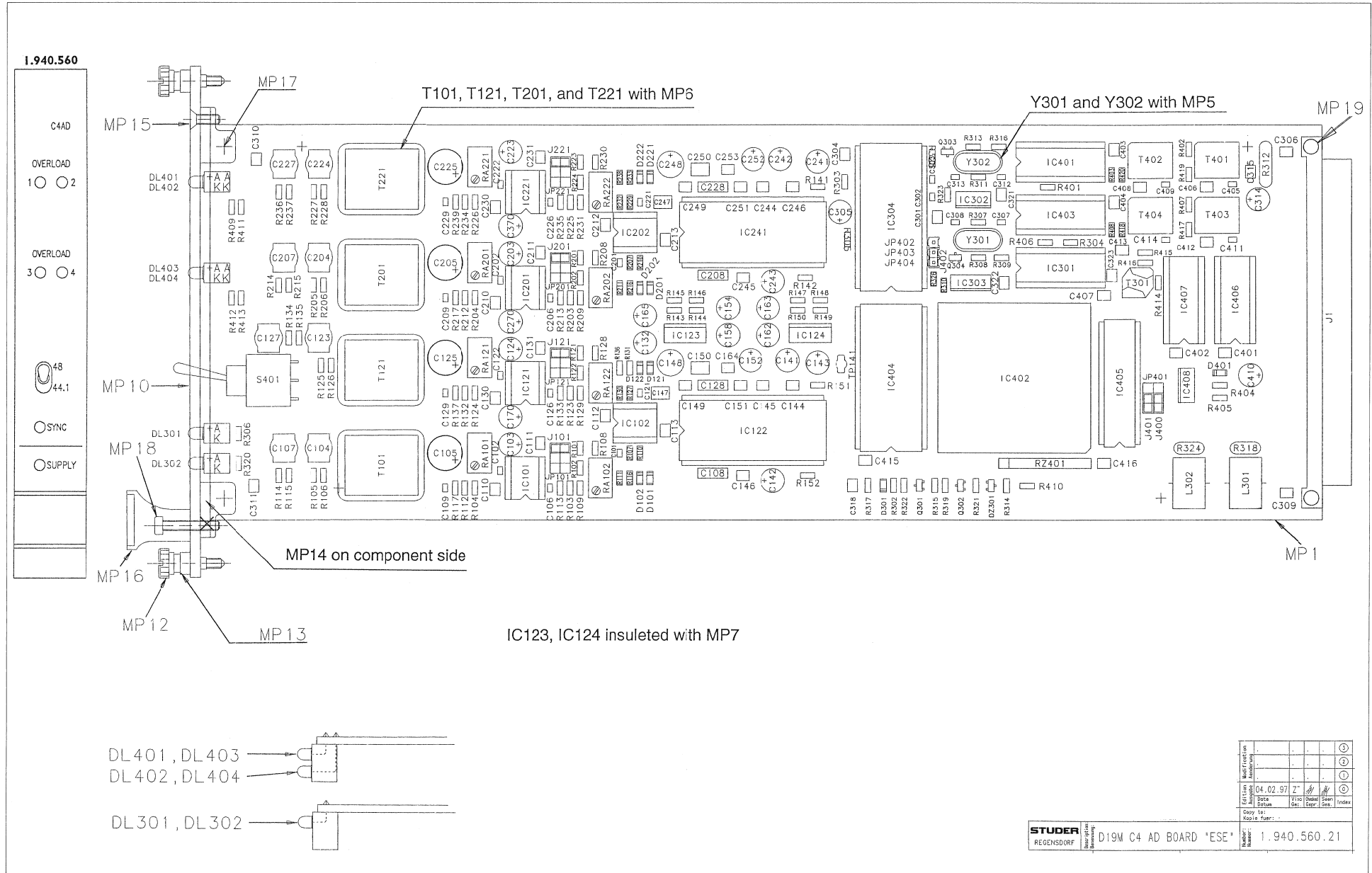






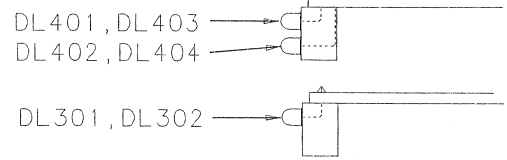
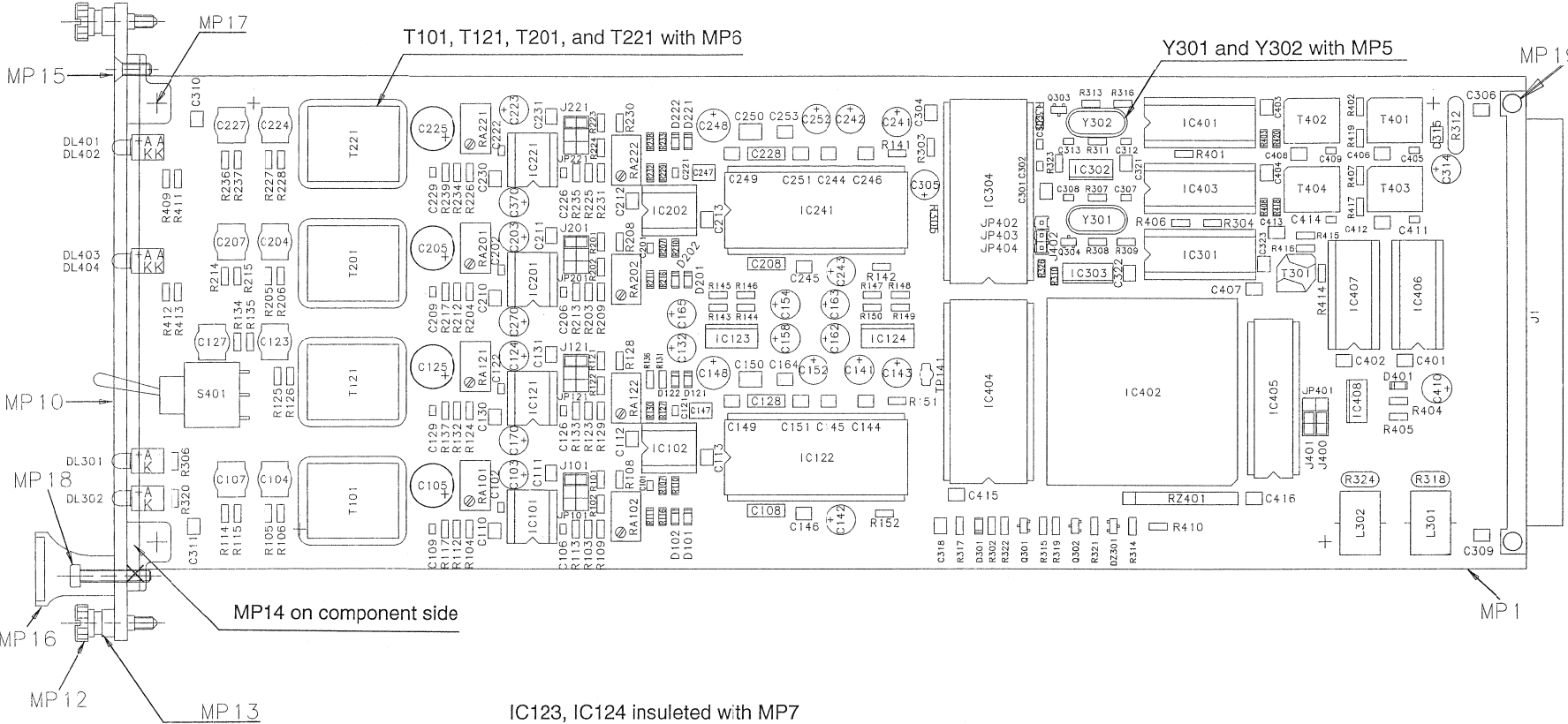


D19M C4 AD Board 1.940.560.21



1.940.560

- C4AD
- OVERLOAD 1 ○ 2
- OVERLOAD 3 ○ 4
- 48 44.1
- SYNC
- SUPPLY



STUDER	D19M C4 AD BOARD *ESE*	1.940.560.21
REGENSDORF		

EdiTech	Mod/Trans on				
MicroSoft	Accessories				
Date	04.02.97	Z			
Drawn	Vic	Desk	Start		
By	Ge	Exp	Stat		
Index					

Copy to: \_\_\_\_\_

Scale: 1:1



D19M C4 AD Board 1.940.560.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	
0	C 101	59.60.0220	22p	CER 63V, 5%, COG, 0805	0	C 308	59.60.0330	33p	CER 63V, 5%, COG, 0805	0	JP 404	54.01.0020	1p	Pin 0.63*0.63	0	R 216	57.80.1390	39R	MF, 1%, 0204, E24	0	R 217	57.80.1392	39G	MF, 1%, 0204, E24
0	C 102	59.60.0221	22p	CER 63V, 5%, COG, 0805	0	C 309	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	C 301	62.03.0010	48uH	2A Toroid Choque	0	R 223	57.80.1103	10K	MF, 1%, 0204, E24	0	R 224	57.80.1432	4K3	MF, 1%, 0204, E24
0	C 103	59.22.3470	47u	EL 10V, 20%, RM5	0	C 310	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	C 302	62.03.0010	48uH	2A Toroid Choque	0	R 225	57.80.1103	10K	MF, 1%, 0204, E24	0	R 226	57.80.1103	10K	MF, 1%, 0204, E24
0	C 104	59.05.1221	22p	PP, 1%, 630V	0	C 311	59.60.0330	33p	CER 63V, 5%, COG, 0805	0	MP 1	1.94c.560.11		D19M C4 AD BOARD PCB	0	R 227	57.80.1681	680R	MF, 1%, 0204, E24	0	R 228	57.80.1332	3K3	MF, 1%, 0204, E24
0	C 105	59.22.3221	22u	EL 10V, 20%, RM5	0	C 312	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 2	1.94c.560.04		TYPENSCHILDE	0	R 229	57.80.1332	3K3	MF, 1%, 0204, E24	0	R 230	57.80.1222	2K2	MF, 1%, 0204, E24
0	C 106	59.60.0220	22p	CER 63V, 5%, COG, 0805	0	C 313	59.60.0330	33p	CER 63V, 5%, COG, 0805	0	MP 3	42.91.0108		ESSE-WARNSCHILD	0	R 231	57.80.1103	10K	MF, 1%, 0204, E24	0	R 232	57.80.1103	10K	MF, 1%, 0204, E24
0	C 107	59.05.1221	22p	PP, 1%, 630V	0	C 314	59.22.5220	22u	EL 25V, 20%, RM5	0	MP 4	1.101.001.20		TEXT-ETIK. 5"20 HARDWARE -20	0	R 233	57.80.1152	1K5	MF, 1%, 0204, E24	0	R 234	57.80.1102	1K	MF, 1%, 0204, E24
0	C 108	59.08.0882	6n8	PETP, 63V, 10%, RM5	0	C 315	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 5	89.01.1499	2 pcs	QUARZ - ISOLIERPLATTE	0	R 235	57.80.1152	1K5	MF, 1%, 0204, E24	0	R 236	57.80.1332	3K3	MF, 1%, 0204, E24
0	C 109	59.60.1162	1n5	CER 63V, 10%, X7R, 0805	0	C 316	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 6	1.022.400.03	4 pcs	ISOLATION	0	R 237	57.80.1332	3K3	MF, 1%, 0204, E24	0	R 238	57.80.1332	3K3	MF, 1%, 0204, E24
0	C 110	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	C 317	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 7	1.010.127.65	2 pcs	SCHRUMPPESCHLAUCH BLD 9.5" 16	0	R 239	57.80.1103	10K	MF, 1%, 0204, E24	0	R 240	57.80.1333	33K	MF, 1%, 0204, E24
0	C 111	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	C 318	59.22.8100	10u	EL 35V, 20%, RM5	0	MP 11	1.940.600.01	1 pos	FRONTPLATTE	0	R 241	57.80.1333	33K	MF, 1%, 0204, E24	0	R 242	57.80.1333	33K	MF, 1%, 0204, E24
0	C 112	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	C 319	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 12	49.02.0520	2 pcs	M2.5*12 Rändelschraube (Rack)	0	R 243	57.80.1184	180K	MF, 1%, 0204, E24	0	R 244	57.80.1332	3K3	MF, 1%, 0204, E24
0	C 113	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	C 320	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 13	49.02.0521	2 pcs	M2.5*12 Rändelschraube (Rack)	0	R 245	57.80.1332	3K3	MF, 1%, 0204, E24	0	R 246	57.80.1332	3K3	MF, 1%, 0204, E24
0	C 114	59.60.0220	22p	CER 63V, 5%, COG, 0805	0	C 401	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 14	49.02.0522	2 pcs	M2.5*7 Kartenhalter (Rack)	0	R 247	57.80.1103	10K	MF, 1%, 0204, E24	0	R 248	57.80.1390	39R	MF, 1%, 0204, E24
0	C 115	59.22.3470	47u	EL 10V, 20%, RM5	0	C 402	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 15	49.02.0523	1 pos	M2.5*7 Senk-Schr., KS, Senkripp	0	R 249	57.80.1392	39R	MF, 1%, 0204, E24	0	R 250	57.80.1392	39R	MF, 1%, 0204, E24
0	C 116	59.05.1221	22p	PP, 1%, 630V	0	C 403	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 16	49.02.0524	1 pos	4TE Frontplatten-Griff	0	R 251	57.80.1103	10K	MF, 1%, 0204, E24	0	R 252	57.80.1333	33K	MF, 1%, 0204, E24
0	C 117	59.08.0882	6n8	PETP, 63V, 10%, RM5	0	C 404	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	MP 17	21.53.0279	2 pcs	Z - SCHR. IS. 2W, M2.5 * 6	0	R 253	57.80.1333	33K	MF, 1%, 0204, E24	0	R 254	57.80.1333	33K	MF, 1%, 0204, E24
0	C 118	59.60.1162	1n5	CER 63V, 10%, X7R, 0805	0	C 405	59.60.1104	100p	CER 63V, 5%, COG, 0805	0	MP 18	21.53.0284	1 pos	Z - SCHR. IS. 2W, M2.5 * 6	0	R 255	57.80.1103	10K	MF, 1%, 0204, E24	0	R 256	57.80.1333	33K	MF, 1%, 0204, E24
0	C 119	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	C 406	59.60.0101	100p	CER 63V, 5%, COG, 0805	0	MP 19	28.09.0119	2 pcs	ROHRNETE D 2,5*0,16" 9	0	R 257	57.80.1103	10K	MF, 1%, 0204, E24	0	R 258	57.80.1220	22R	MF, 1%, 0204, E24
0	C 120	59.22.3221	22u	EL 10V, 20%, RM5	0	C 407	59.60.1104	100p	CER 63V, 5%, COG, 0805	0	Q 301	59.60.1001	BC857B	Q BC 857 B, SOT 23	0	R 259	57.80.1103	10K	MF, 1%, 0204, E24	0	R 260	57.80.1103	10K	MF, 1%, 0204, E24
0	C 121	59.22.3220	22u	EL 25V, 20%, RM5	0	C 408	59.60.1104	100p	CER 63V, 5%, COG, 0805	0	Q 302	59.60.0001	BC847B	Q BC 847 B, SOT 23	0	R 261	57.80.1103	10K	MF, 1%, 0204, E24	0	R 262	57.80.1103	10K	MF, 1%, 0204, E24
0	C 122	59.60.0221	22p	CER 63V, 5%, COG, 0805	0	C 409	59.60.0101	100p	CER 63V, 5%, COG, 0805	0	Q 303	59.60.0001	BC847B	Q BC 847 B, SOT 23	0	R 263	57.80.1333	33K	MF, 1%, 0204, E24	0	R 264	57.80.1333	33K	MF, 1%, 0204, E24
0	C 123	59.05.1221	22p	PP, 1%, 630V	0	C 410	59.22.8479	4.7	EL 50V, 20%, RM5	0	Q 304	59.60.0001	BC847B	Q BC 847 B, SOT 23	0	R 265	57.80.1103	10K	MF, 1%, 0204, E24	0	R 266	57.80.1103	10K	MF, 1%, 0204, E24
0	C 124	59.22.3470	47u	EL 10V, 20%, RM5	0	C 411	59.60.0101	100p	CER 63V, 5%, COG, 0805	0	R 101	57.80.1103	10K	MF, 1%, 0204, E24	0	R 267	57.80.1103	10K	MF, 1%, 0204, E24	0	R 268	57.80.1103	10K	MF, 1%, 0204, E24
0	C 125	59.22.3221	22u	EL 10V, 20%, RM5	0	C 412	59.60.1104	100p	CER 63V, 5%, COG, 0805	0	R 102	57.80.1432	4K3	MF, 1%, 0204, E24	0	R 269	57.80.1103	10K	MF, 1%, 0204, E24	0	R 270	57.80.1103	10K	MF, 1%, 0204, E24
0	C 126	59.60.0220	22p	CER 63V, 5%, COG, 0805	0	C 413	59.60.1104	100p	CER 63V, 5%, COG, 0805	0	R 103	57.80.1103	10K	MF, 1%, 0204, E24	0	R 271	57.80.1103	10K	MF, 1%, 0204, E24	0	R 272	57.80.1103	10K	MF, 1%, 0204, E24
0	C 127	59.05.1221	22p	PP, 1%, 630V	0	C 414	59.60.0101	100p	CER 63V, 5%, COG, 0805	0	R 104	57.80.1681	680R	MF, 1%, 0204, E24	0	R 273	57.80.1103	10K	MF, 1%, 0204, E24	0	R 274	57.80.1103	10K	MF, 1%, 0204, E24
0	C 128	59.08.0882	6n8	PETP, 63V, 10%, RM5	0	C 415	59.60.1104	100p	CER 63V, 5%, COG, 0805	0	R 105	57.80.1332	3K3	MF, 1%, 0204, E24	0	R 275	57.80.1682	68K	MF, 1%, 0204, E24	0	R 276	57.80.1682	68K	MF, 1%, 0204, E24
0	C 129	59.60.1162	1n5	CER 63V, 10%, X7R, 0805	0	C 416	59.60.1104	100p	CER 63V, 5%, COG, 0805	0	R 106	57.80.1222	2K2	MF, 1%, 0204, E24	0	R 277	57.80.1333	33K	MF, 1%, 0204, E24	0	R 278	57.80.1333	33K	MF, 1%, 0204, E24
0	C 130	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	D 201	59.60.8101	BA885	D BA8 85 SOD 80	0	R 107	57.80.1103	10K	MF, 1%, 0204, E24	0	R 279	57.80.1103	10K	MF, 1%, 0204, E24	0	R 280	57.80.1103	10K	MF, 1%, 0204, E24
0	C 131	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	D 202	59.60.8101	BA885	D BA8 85 SOD 80	0	R 108	57.80.1152	1K5	MF, 1%, 0204, E24	0	R 281	57.80.1103	10K	MF, 1%, 0204, E24	0	R 282	57.80.1103	10K	MF, 1%, 0204, E24
0	C 132	59.22.3220	22u	EL 25V, 20%, RM5	0	D 221	59.60.8101	BA885	D BA8 85 SOD 80	0	R 109	57.80.1392	39R	MF, 1%, 0204, E24	0	R 283	57.80.1103	10K	MF, 1%, 0204, E24	0	R 284	57.80.1103	10K	MF, 1%, 0204, E24
0	C 141	59.22.3220	22u	EL 25V, 20%, RM5	0	D 222	59.60.8101	BA885	D BA8 85 SOD 80	0	R 110	57.80.1103	10K	MF, 1%, 0204, E24	0	R 285	57.80.1220	22R	MF, 1%, 0204, E24	0	R 286	57.80.1220	22R	MF, 1%, 0204, E24
0	C 142	59.22.3220	22u	EL 25V, 20%, RM5	0	D 301	59.60.8001	4448	D LL 4448 SOD 80	0	R 111	57.80.1390	39R	MF, 1%, 0204, E24	0	R 287	57.80.1220	22R	MF, 1%, 0204, E24	0	R 288	57.80.1220	22R	MF, 1%, 0204, E24
0	C 143	59.22.3220	22u	EL 25V, 20%, RM5	0	D 401	59.60.8001	4448	D LL 4448 SOD 80	0	R 112	57.80.1102	1K	MF, 1%, 0204, E24	0	R 289	57.80.1220	22R	MF, 1%, 0204, E24	0	R 290	57.80.1220	22R	MF, 1%, 0204, E24
0	C 144	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	DL 301	50.04.2202	HLMP1790	DL HLMP - 1790 GN	0	R 113	57.80.1164	180K	MF, 1%, 0204, E24	0	R 291	57.80.1220	22R	MF, 1%, 0204, E24	0	R 292	57.80.1220	22R	MF, 1%, 0204, E24
0	C 145	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	DL 302	50.04.2202	HLMP1790	DL HLMP - 1790 GN	0	R 114	57.80.1332	3K3	MF, 1%, 0204, E24	0	R 293	57.80.1220	22R	MF, 1%, 0204, E24	0	R 294	57.80.1220	22R	MF, 1%, 0204, E24
0	C 146	59.60.1104	100n	CER 63V, 10%, X7R, 1210	0	DL 401	50.04.2200	HLMP1790	DL HLMP - 1790 RT	0	R 115	57.80												

**DI9M C4 AD Board I.940.560.2I**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	XDL 301	50.20.2501		Spacer	LED-Sockel
0	XDL 302	50.20.2501		Spacer	LED-Sockel
0	XDL 401	50.20.2501		Spacer	LED-Sockel
0	XDL 403	50.20.2501		Spacer	LED-Sockel
0	XIC 401	53.03.0168		16p	DIL 0.3", lot, gerade
0	XIC 402	53.03.2284		PLCC84p	PLCC-Socket 84p
0	XIC 403	53.03.0168		16p	DIL 0.3", lot, gerade
0	XIC 404	53.03.0173		28p	DIL 0.6", lot, gerade
0	Y 301	89.01.1015		12.288MHz	Y 12.288 MHz, HC 49/U
0	Y 302	89.01.0559		11.289MHz	Y 11.2896 MHz,

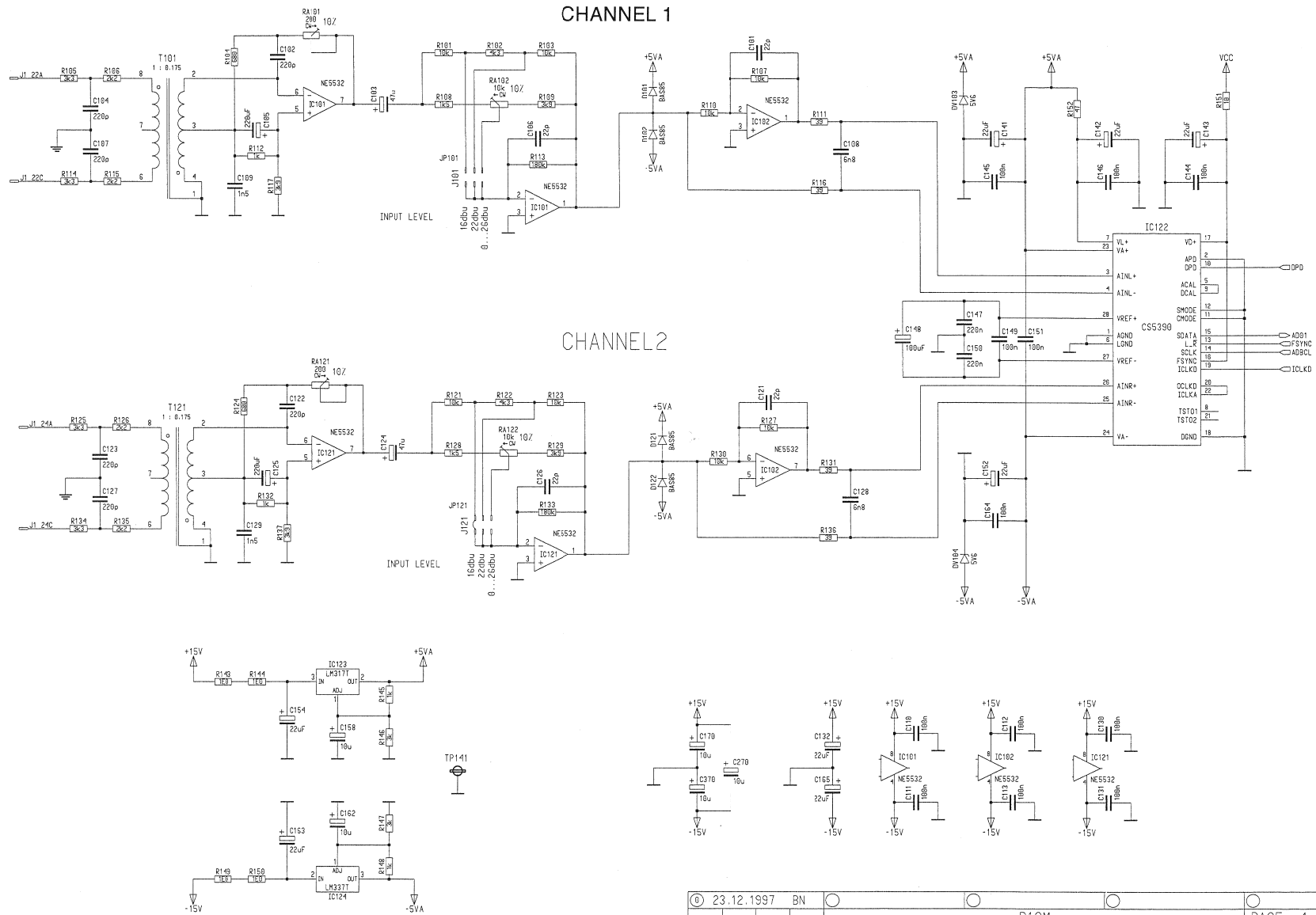
End of List

**Comments:**

IC-Sockel XIC nn entsprechend den IC Nummern bestuecken.  
LED-Sockel XDL nn entsprechend den DL Nummern bestuecken.



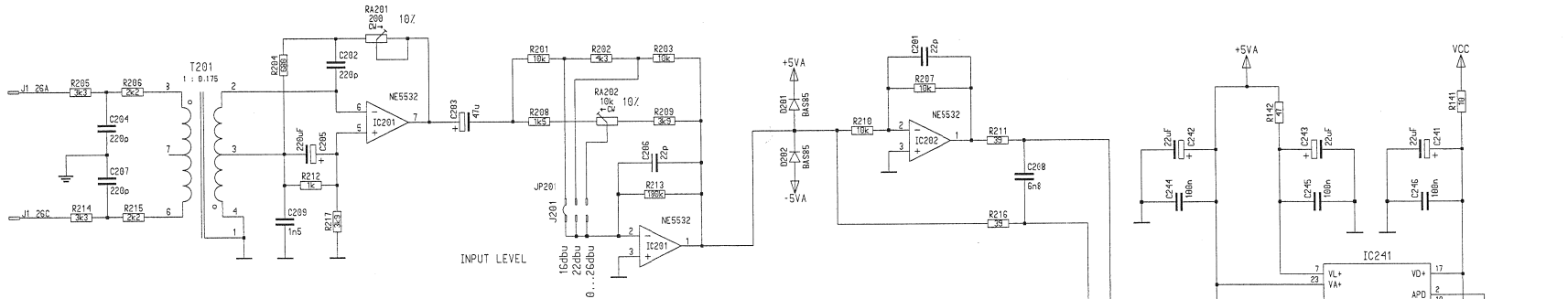
CD19M C4 AD NS Board 1.940.561.21



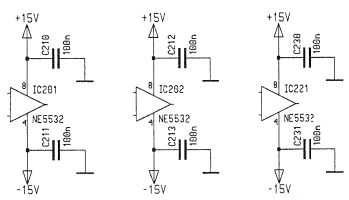
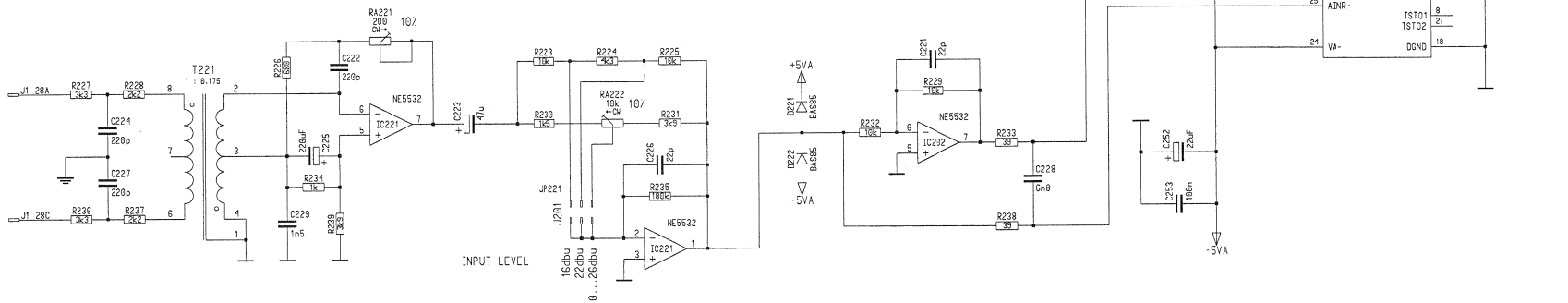


CD19M C4 AD NS Board 1.940.561.21

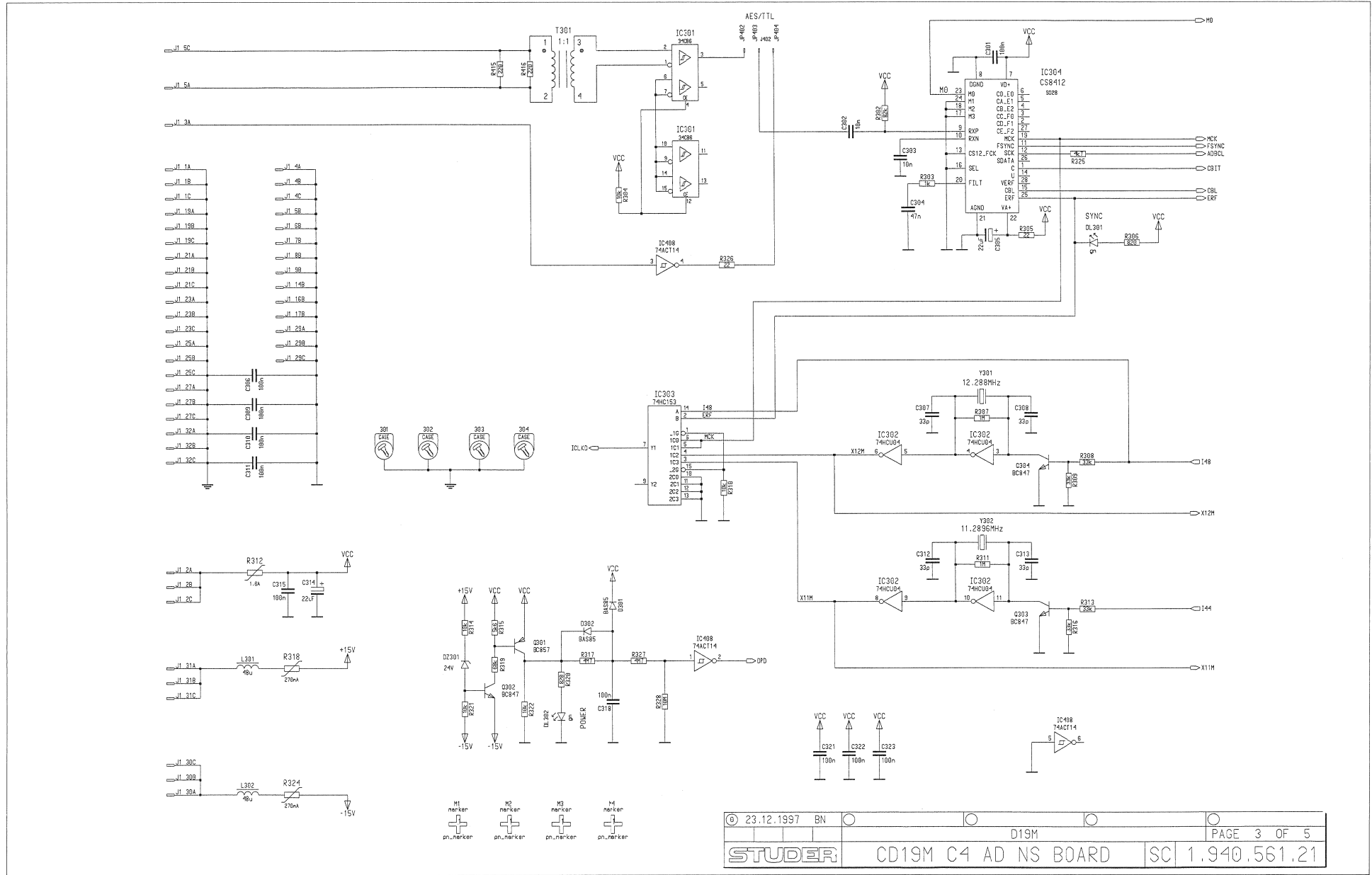
CHANNEL 3



CHANNEL 4

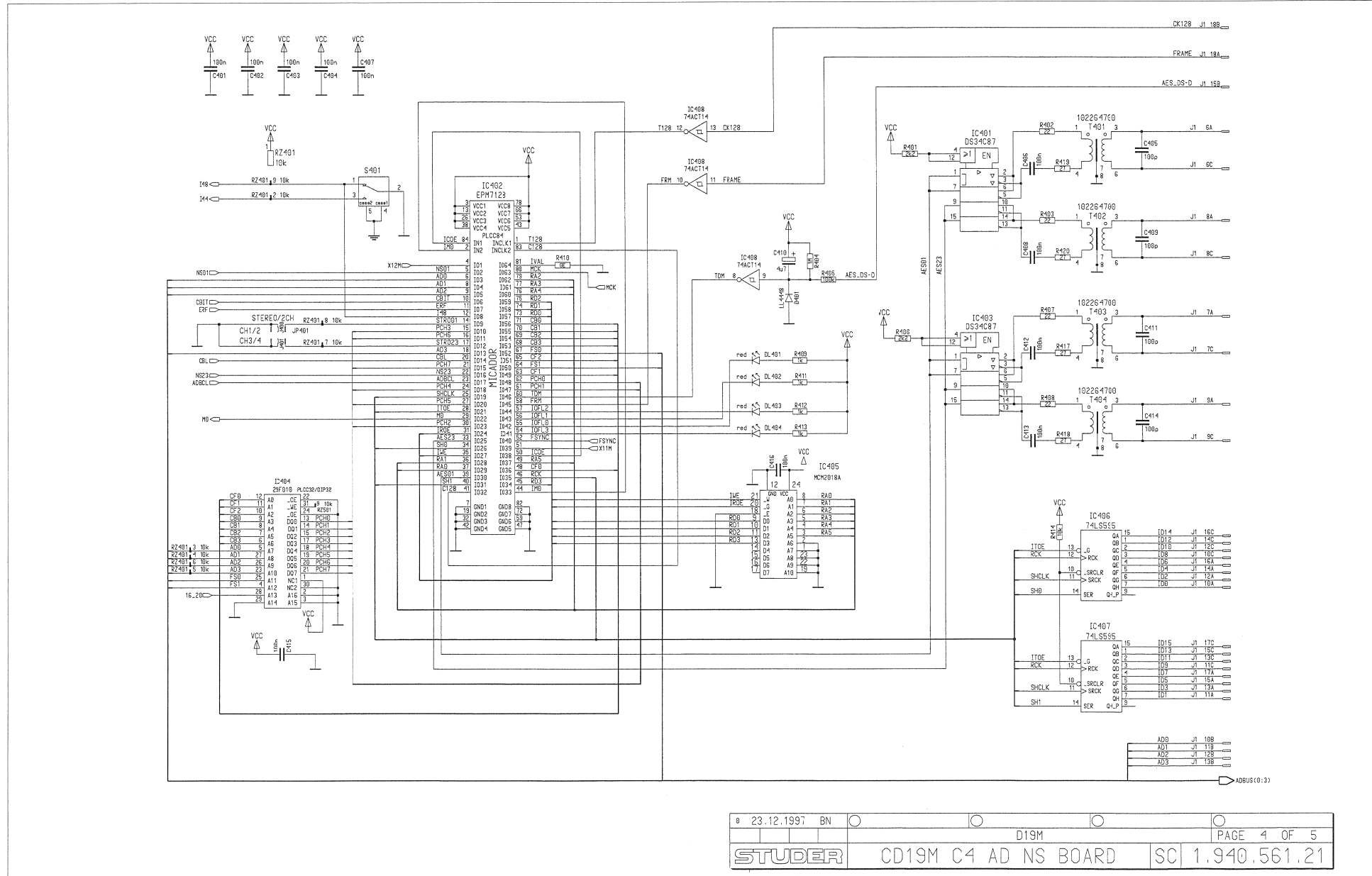


CD19M C4 AD NS Board 1.940.561.21





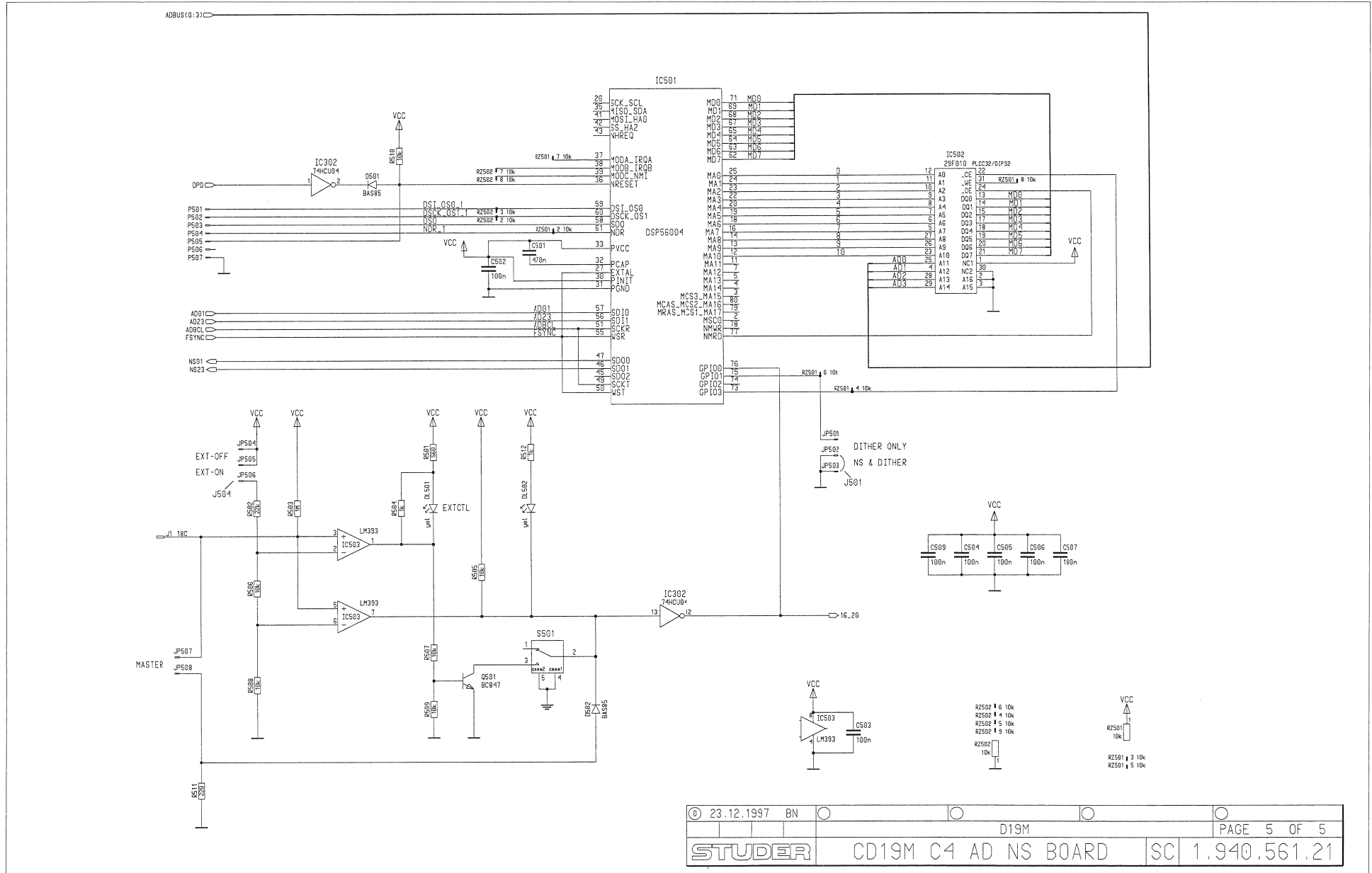
CD19M C4 AD NS Board 1.940.561.21





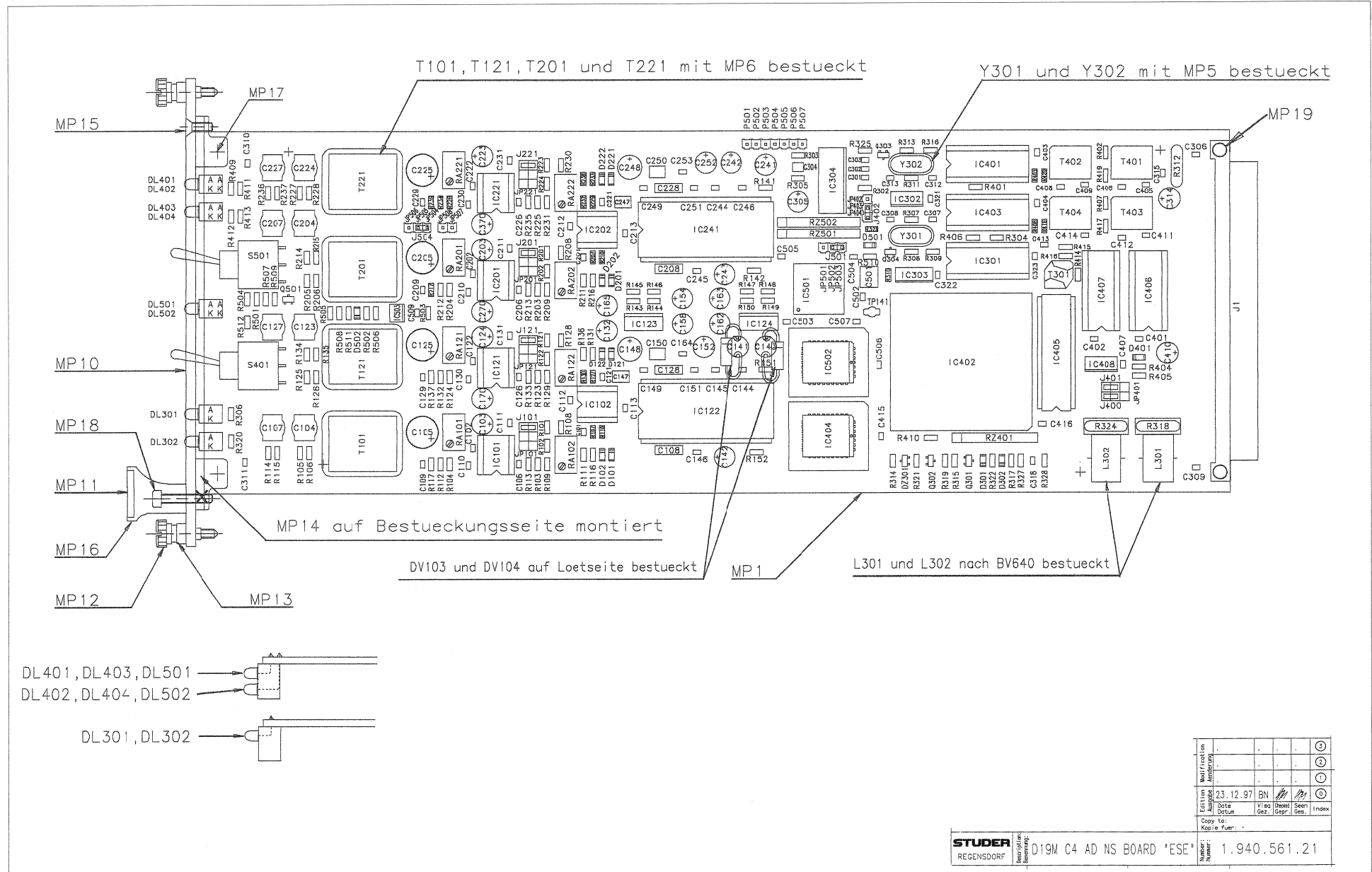


CD19M C4 AD NS Board 1.940.561.21





CD19M C4 AD NS Board 1.940.561.21



Kritik	Modifikation								
Maßnahme	Änderung								
Date	23.12.97	BN							
Detun		Via	Gez	Gepr	Gez	Gez			Index
Copy for:	Kopie fuer:								



CDI9M C4 AD NS Board I.940.561.21

Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 101	59.60.0220		22p	CER 63V, 5%, COG, 0805	0	C 301	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 102	59.60.0221		220p	CER 63V, 5%, COG, 0805	0	C 302	59.60.1103		10n	CER 63V, 10%, X7R, 0805
0	C 103	59.22.3470		47u	EL 10V 20% RM5	0	C 303	59.60.1103		10n	CER 63V, 10%, X7R, 0805
0	C 104	59.05.1221		220p	PP, 1%, 630V	0	C 304	59.60.1473		47n	CER 63V, 10%, X7R, 1210
0	C 105	59.22.3221		220u	EL 10V 20% RM5	0	C 305	59.22.5220		22u	EL 25V 20% RM5
0	C 106	59.60.0220		22p	CER 63V, 5%, COG, 0805	0	C 306	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 107	59.05.1221		220p	PP, 1%, 630V	0	C 307	59.60.0330		33p	CER 63V, 5%, COG, 0805
0	C 108	59.06.0682		6n8	PETP, 63V, 10%, RM5	0	C 308	59.60.0330		33p	CER 63V, 5%, COG, 0805
0	C 109	59.60.1152		1n5	CER 63V, 10%, X7R, 0805	0	C 309	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 110	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 310	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 111	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 311	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 112	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 312	59.60.0330		33p	CER 63V, 5%, COG, 0805
0	C 113	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 313	59.60.0330		33p	CER 63V, 5%, COG, 0805
0	C 121	59.60.0220		22p	CER 63V, 5%, COG, 0805	0	C 314	59.22.5220		22u	EL 25V 20% RM5
0	C 122	59.60.0221		220p	CER 63V, 5%, COG, 0805	0	C 315	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 123	59.05.1221		220p	PP, 1%, 630V	0	C 318	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 124	59.22.3470		47u	EL 10V 20% RM5	0	C 321	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 125	59.22.3221		220u	EL 10V 20% RM5	0	C 322	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 126	59.60.0220		22p	CER 63V, 5%, COG, 0805	0	C 323	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 127	59.05.1221		220p	PP, 1%, 630V	0	C 370	59.22.6100		10u	EL 35V 20% RM5
0	C 128	59.06.0682		6n8	PETP, 63V, 10%, RM5	0	C 401	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 129	59.60.1152		1n5	CER 63V, 10%, X7R, 0805	0	C 402	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 130	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 403	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 131	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 404	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 132	59.22.5220		22u	EL 25V 20% RM5	0	C 405	59.60.0101		100p	CER 63V, 5%, COG, 0805
0	C 141	59.22.5220		22u	EL 25V 20% RM5	0	C 406	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 142	59.22.5220		22u	EL 25V 20% RM5	0	C 407	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 143	59.22.5220		22u	EL 25V 20% RM5	0	C 408	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 144	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 409	59.60.0101		100p	CER 63V, 5%, COG, 0805
0	C 145	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 410	59.22.8479		4u7	EL 50V 20% RM5
0	C 146	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 411	59.60.0101		100p	CER 63V, 5%, COG, 0805
0	C 147	59.60.1224		220n	CER 63V, 10%, X7R, 1812	0	C 412	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 148	59.22.3101		100u	EL 10V 20% RM5	0	C 413	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 149	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 414	59.60.0101		100p	CER 63V, 5%, COG, 0805
0	C 150	59.60.1224		220n	CER 63V, 10%, X7R, 1812	0	C 415	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 151	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 416	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 152	59.22.5220		22u	EL 25V 20% RM5	0	C 501	59.60.3845		470n	CER 50V, 10%, X7R, 2220
0	C 154	59.22.5220		22u	EL 25V 20% RM5	0	C 502	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 158	59.22.6100		10u	EL 35V 20% RM5	0	C 503	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 162	59.22.6100		10u	EL 35V 20% RM5	0	C 504	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 163	59.22.5220		22u	EL 25V 20% RM5	0	C 505	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 164	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	C 506	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 165	59.22.5220		22u	EL 25V 20% RM5	0	C 507	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 170	59.22.6100		10u	EL 35V 20% RM5	0	C 509	59.60.3337		100n	CER 50V, 10%, X7R, 0805
0	C 201	59.60.0220		22p	CER 63V, 5%, COG, 0805	0	D 101	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 202	59.60.0221		220p	CER 63V, 5%, COG, 0805	0	D 102	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 203	59.22.3470		47u	EL 10V 20% RM5	0	D 121	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 204	59.05.1221		220p	PP, 1%, 630V	0	D 122	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 205	59.22.3221		220u	EL 10V 20% RM5	0	D 201	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 206	59.60.0220		22p	CER 63V, 5%, COG, 0805	0	D 202	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 207	59.05.1221		220p	PP, 1%, 630V	0	D 221	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 208	59.06.0682		6n8	PETP, 63V, 10%, RM5	0	D 222	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 209	59.60.1152		1n5	CER 63V, 10%, X7R, 0805	0	D 301	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 210	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	D 302	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 211	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	D 401	50.60.8001		4448	200mA 75V 4ns SOD 80
0	C 212	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	D 501	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 213	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	D 502	50.60.8101		BAS85	200mA 30V Schottky SOD 80
0	C 221	59.60.0220		22p	CER 63V, 5%, COG, 0805	0	DL 301	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0	C 222	59.60.0221		220p	CER 63V, 5%, COG, 0805	0	DL 302	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0	C 223	59.22.3470		47u	EL 10V 20% RM5	0	DL 401	50.04.2200		HLMP1700	DL HLMP - 1700 RT
0	C 224	59.05.1221		220p	PP, 1%, 630V	0	DL 402	50.04.2200		HLMP1700	DL HLMP - 1700 RT
0	C 225	59.22.3221		220u	EL 10V 20% RM5	0	DL 403	50.04.2200		HLMP1700	DL HLMP - 1700 RT
0	C 226	59.60.0220		22p	CER 63V, 5%, COG, 0805	0	DL 404	50.04.2200		HLMP1700	DL HLMP - 1700 RT
0	C 227	59.05.1221		220p	PP, 1%, 630V	0	DL 501	50.04.2201		HLMP1719	DL HLMP - 1719 GB
0	C 228	59.06.0682		6n8	PETP, 63V, 10%, RM5	0	DL 502	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0	C 229	59.60.1152		1n5	CER 63V, 10%, X7R, 0805	0	DV 103	50.04.1108		5V6	Zener, 5%, 0.5W, DO-35
0	C 230	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	DV 104	50.04.1108		5V6	Zener, 5%, 0.5W, DO-35
0	C 231	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	DZ 301	50.60.9026		24V	5%, 0.2W, SOT 23
0	C 241	59.22.5220		22u	EL 25V 20% RM5	0	IC 101	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, A
0	C 242	59.22.5220		22u	EL 25V 20% RM5	0	IC 102	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, A
0	C 243	59.22.5220		22u	EL 25V 20% RM5	0	IC 121	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, A
0	C 244	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	IC 122	50.19.0205		CS5390	A/D Converter 20bit delta sigma
0	C 245	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	IC 123	50.10.0104		LM317SP	Series regulator 1.5A ...+37V
0	C 246	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	IC 124	50.10.0105		LM337KC	Series regulator 1.5A ...-37V
0	C 247	59.60.1224		220n	CER 63V, 10%, X7R, 1812	0	IC 201	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, A
0	C 248	59.22.3101		100u	EL 10V 20% RM5	0	IC 202	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, A
0	C 249	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	IC 221	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, A
0	C 250	59.60.1224		220n	CER 63V, 10%, X7R, 1812	0	IC 241	50.19.0205		CS5390	A/D Converter 20bit delta sigma
0	C 251	59.60.3337		100n	CER 50V, 10%, X7R, 0805	0	IC 301	50.15.0128		34C86	IC DS 34 C 86 TN, MC34C86P, A
0	C 252	59.22.5220		22u	EL 25V 20% RM5						
0	C 253	59.60.3337		100n	CER 50V, 10%, X7R, 0805						
0	C 270	59.22.6100		10u	EL 35V 20% RM5						



## CDI9M C4 AD NS Board 1.940.561.21

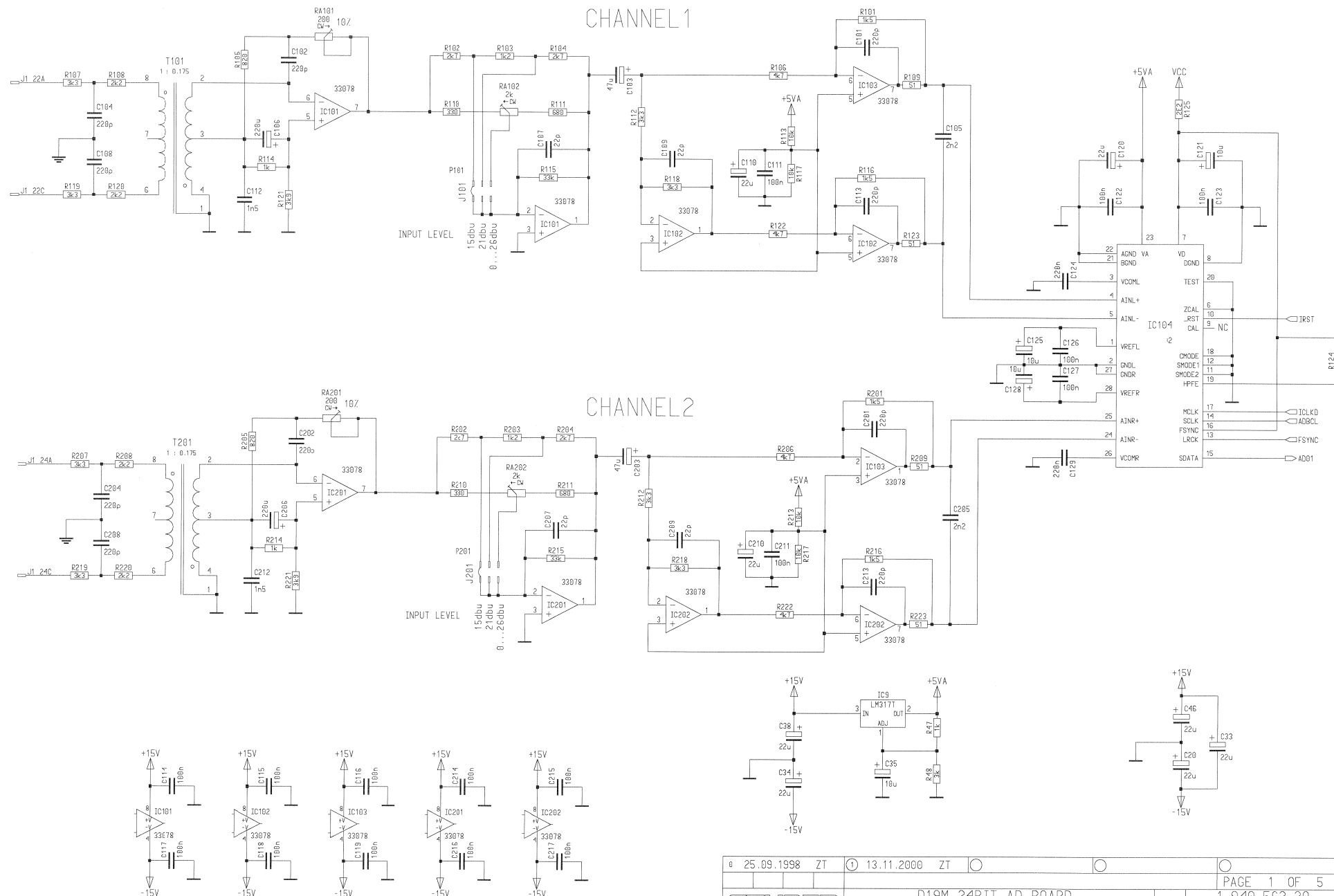
Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	IC 302	50.62.1904		74HCU04	Hex inverter unbuffered	0	R 109	57.60.1392		3K9	MF, 1%, 0204, E24
0	IC 303	50.62.1153		74HC153	Dual 4ch multiplexer	0	R 110	57.60.1103		10K	MF, 1%, 0204, E24
0	IC 304	50.62.0913		CS8412	AES-Receiver	0	R 111	57.60.1390		39R	MF, 1%, 0204, E24
0	IC 401	50.15.0127		34C87	IC DS 34 C 87 TN, MC34C87P ,A	0	R 112	57.60.1102		1K	MF, 1%, 0204, E24
0	IC 402	1.940.966.21			SW 560 MICADOR (60.63.4206)	0	R 113	57.60.1184		180K	MF, 1%, 0204, E24
0	IC 403	50.15.0127		34C87	IC DS 34 C 87 TN, MC34C87P ,A	0	R 114	57.60.1332		3K3	MF, 1%, 0204, E24
0	IC 404	1.940.969.20			SW 561 ADCBIT (50.63.1303)	0	R 115	57.60.1222		2K2	MF, 1%, 0204, E24
0	IC 405	50.14.1009		7C128A	SRAM 2K*8 35ns	0	R 116	57.60.1390		39R	MF, 1%, 0204, E24
0	IC 406	50.06.0595		74LS595	SN 74 LS 595 N	0	R 117	57.60.1392		3K9	MF, 1%, 0204, E24
0	IC 407	50.06.0595		74LS595	SN 74 LS 595 N	0	R 121	57.60.1103		10K	MF, 1%, 0204, E24
0	IC 408	50.62.6014		74ACT 14	Hex inverting Schmitt trigger	0	R 122	57.60.1432		4K3	MF, 1%, 0204, E24
0	IC 501	50.63.0404		56004	DSP 56 004 40MHz	0	R 123	57.60.1103		10K	MF, 1%, 0204, E24
0	IC 502	1.940.978.20			SW 561 Dither+NS (50.63.1303)	0	R 124	57.60.1681		680R	MF, 1%, 0204, E24
0	IC 503	50.61.9001		LM393	Dual voltage comp. SO 8	0	R 125	57.60.1332		3K3	MF, 1%, 0204, E24
						0	R 126	57.60.1222		2K2	MF, 1%, 0204, E24
						0	R 127	57.60.1103		10K	MF, 1%, 0204, E24
0	J 1	54.11.2009		96p	EU-R 3*32p	0	R 128	57.60.1152		1K5	MF, 1%, 0204, E24
0	J 101	54.01.0021		Jumper	0.63 * 0.63mm	0	R 129	57.60.1392		3K9	MF, 1%, 0204, E24
0	J 121	54.01.0021		Jumper	0.63 * 0.63mm	0	R 130	57.60.1103		10K	MF, 1%, 0204, E24
0	J 201	54.01.0021		Jumper	0.63 * 0.63mm	0	R 131	57.60.1390		39R	MF, 1%, 0204, E24
0	J 221	54.01.0021		Jumper	0.63 * 0.63mm	0	R 132	57.60.1102		1K	MF, 1%, 0204, E24
0	J 400	54.01.0021		Jumper	0.63 * 0.63mm	0	R 133	57.60.1184		180K	MF, 1%, 0204, E24
0	J 401	54.01.0021		Jumper	0.63 * 0.63mm	0	R 134	57.60.1332		3K3	MF, 1%, 0204, E24
0	J 402	54.01.0021		Jumper	0.63 * 0.63mm	0	R 135	57.60.1222		2K2	MF, 1%, 0204, E24
0	J 501	54.01.0021		Jumper	0.63 * 0.63mm	0	R 136	57.60.1390		39R	MF, 1%, 0204, E24
0	J 504	54.01.0021		Jumper	0.63 * 0.63mm	0	R 137	57.60.1392		3K9	MF, 1%, 0204, E24
0	JP 101	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 141	57.60.1100		10R	MF, 1%, 0204, E24
0	JP 121	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 142	57.60.1470		47R	MF, 1%, 0204, E24
0	JP 201	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 143	57.60.1109		1R	MF, 1%, 0204, E24
0	JP 221	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 144	57.60.1109		1R	MF, 1%, 0204, E24
0	JP 401	54.01.0020		1p	Pin 0.63*0.63	0	R 145	57.60.1102		1K	MF, 1%, 0204, E24
0	JP 402	54.01.0020		1p	Pin 0.63*0.63	0	R 146	57.60.1302		3K0	MF, 1%, 0204, E24
0	JP 403	54.01.0020		1p	Pin 0.63*0.63	0	R 147	57.60.1302		3K0	MF, 1%, 0204, E24
0	JP 404	54.01.0020		1p	Pin 0.63*0.63	0	R 148	57.60.1102		1K	MF, 1%, 0204, E24
0	JP 501	54.01.0020		1p	Pin 0.63*0.63	0	R 149	57.60.1109		1R	MF, 1%, 0204, E24
0	JP 502	54.01.0020		1p	Pin 0.63*0.63	0	R 150	57.60.1109		1R	MF, 1%, 0204, E24
0	JP 503	54.01.0020		1p	Pin 0.63*0.63	0	R 151	57.60.1100		10R	MF, 1%, 0204, E24
0	JP 504	54.01.0020		1p	Pin 0.63*0.63	0	R 152	57.60.1470		47R	MF, 1%, 0204, E24
0	JP 505	54.01.0020		1p	Pin 0.63*0.63	0	R 201	57.60.1103		10K	MF, 1%, 0204, E24
0	JP 506	54.01.0020		1p	Pin 0.63*0.63	0	R 202	57.60.1432		4K3	MF, 1%, 0204, E24
0	JP 507	54.01.0020		1p	Pin 0.63*0.63	0	R 203	57.60.1103		10K	MF, 1%, 0204, E24
0	JP 508	54.01.0020		1p	Pin 0.63*0.63	0	R 204	57.60.1681		680R	MF, 1%, 0204, E24
0	L 301	62.03.0010		48uH	2A Toroid Chocke	0	R 205	57.60.1332		3K3	MF, 1%, 0204, E24
0	L 302	62.03.0010		48uH	2A Toroid Chocke	0	R 206	57.60.1222		2K2	MF, 1%, 0204, E24
0	MP 1	1.940.561.11			DI9M C4 AD BOARD NS PCB	0	R 207	57.60.1103		10K	MF, 1%, 0204, E24
0	MP 2	1.940.561.04			TYPENSCHILD	0	R 208	57.60.1152		1K5	MF, 1%, 0204, E24
0	MP 3	43.01.0108		Label	ESE-WARNSCHILD	0	R 209	57.60.1392		3K9	MF, 1%, 0204, E24
0	MP 4	1.101.001.21			TEXT-ETIK. 5*20 HARDWARE -21	0	R 210	57.60.1103		10K	MF, 1%, 0204, E24
0	MP 5	89.01.1499	2 pcs		QUARZ - ISOLIERPLATTE	0	R 211	57.60.1390		39R	MF, 1%, 0204, E24
0	MP 6	1.022.400.03	4 pcs		ISOLATION	0	R 212	57.60.1102		1K	MF, 1%, 0204, E24
0	MP 7	1.010.127.65	2 pcs	9.5*15	Schrumpf-Schlauch bl	0	R 213	57.60.1184		180K	MF, 1%, 0204, E24
0	MP 10	1.940.561.01	1 pce		FRONTPLATTE C4AD NS	0	R 214	57.60.1332		3K3	MF, 1%, 0204, E24
0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE	0	R 215	57.60.1222		2K2	MF, 1%, 0204, E24
0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)	0	R 216	57.60.1390		39R	MF, 1%, 0204, E24
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)	0	R 217	57.60.1392		3K9	MF, 1%, 0204, E24
0	MP 14	49.02.0522	2 pcs		Kartenhalter (Rack)	0	R 223	57.60.1103		10K	MF, 1%, 0204, E24
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp	0	R 224	57.60.1432		4K3	MF, 1%, 0204, E24
0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff	0	R 225	57.60.1103		10K	MF, 1%, 0204, E24
0	MP 17	21.53.0279	2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr	0	R 226	57.60.1681		680R	MF, 1%, 0204, E24
0	MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr	0	R 227	57.60.1332		3K3	MF, 1%, 0204, E24
0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9	0	R 228	57.60.1222		2K2	MF, 1%, 0204, E24
0	P 501	not used		1p	Pin 0.63*0.63	0	R 229	57.60.1103		10K	MF, 1%, 0204, E24
0	P 502	not used		1p	Pin 0.63*0.63	0	R 230	57.60.1152		1K5	MF, 1%, 0204, E24
0	P 503	not used		1p	Pin 0.63*0.63	0	R 231	57.60.1392		3K9	MF, 1%, 0204, E24
0	P 504	not used		1p	Pin 0.63*0.63	0	R 232	57.60.1103		10K	MF, 1%, 0204, E24
0	P 505	not used		1p	Pin 0.63*0.63	0	R 233	57.60.1390		39R	MF, 1%, 0204, E24
0	P 506	not used		1p	Pin 0.63*0.63	0	R 234	57.60.1102		1K	MF, 1%, 0204, E24
0	P 507	not used		1p	Pin 0.63*0.63	0	R 235	57.60.1184		180K	MF, 1%, 0204, E24
						0	R 236	57.60.1332		3K3	MF, 1%, 0204, E24
						0	R 237	57.60.1222		2K2	MF, 1%, 0204, E24
0	Q 301	50.60.1001		BC857B	PNP 45V 100mA SOT 23	0	R 238	57.60.1390		39R	MF, 1%, 0204, E24
0	Q 302	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 239	57.60.1392		3K9	MF, 1%, 0204, E24
0	Q 303	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 302	57.60.1823		82K	MF, 1%, 0204, E24
0	Q 304	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 303	57.60.1102		1K	MF, 1%, 0204, E24
0	Q 501	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 304	57.60.1103		10K	MF, 1%, 0204, E24
0	R 101	57.60.1103		10K	MF, 1%, 0204, E24	0	R 305	57.60.1220		22R	MF, 1%, 0204, E24
0	R 102	57.60.1432		4K3	MF, 1%, 0204, E24	0	R 306	57.60.1102		1K	MF, 1%, 0204, E24
0	R 103	57.60.1103		10K	MF, 1%, 0204, E24	0	R 307	57.60.1105		1M	MF, 1%, 0204, E24
0	R 104	57.60.1681		680R	MF, 1%, 0204, E24	0	R 308	57.60.1333		33K	MF, 1%, 0204, E24
0	R 105	57.60.1332		3K3	MF, 1%, 0204, E24	0	R 309	57.60.1333		33K	MF, 1%, 0204, E24
0	R 106	57.60.1222		2K2	MF, 1%, 0204, E24	0	R 310	57.60.1103		10K	MF, 1%, 0204, E24
0	R 107	57.60.1103		10K	MF, 1%, 0204, E24	0	R 311	57.60.1105		1M	MF, 1%, 0204, E24
0	R 108	57.60.1152		1K5	MF, 1%, 0204, E24						



**CDI9M C4 AD NS Board I.940.561.21**

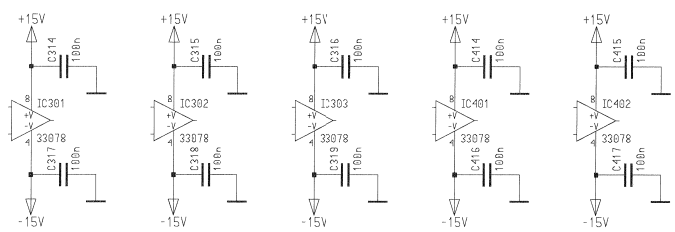
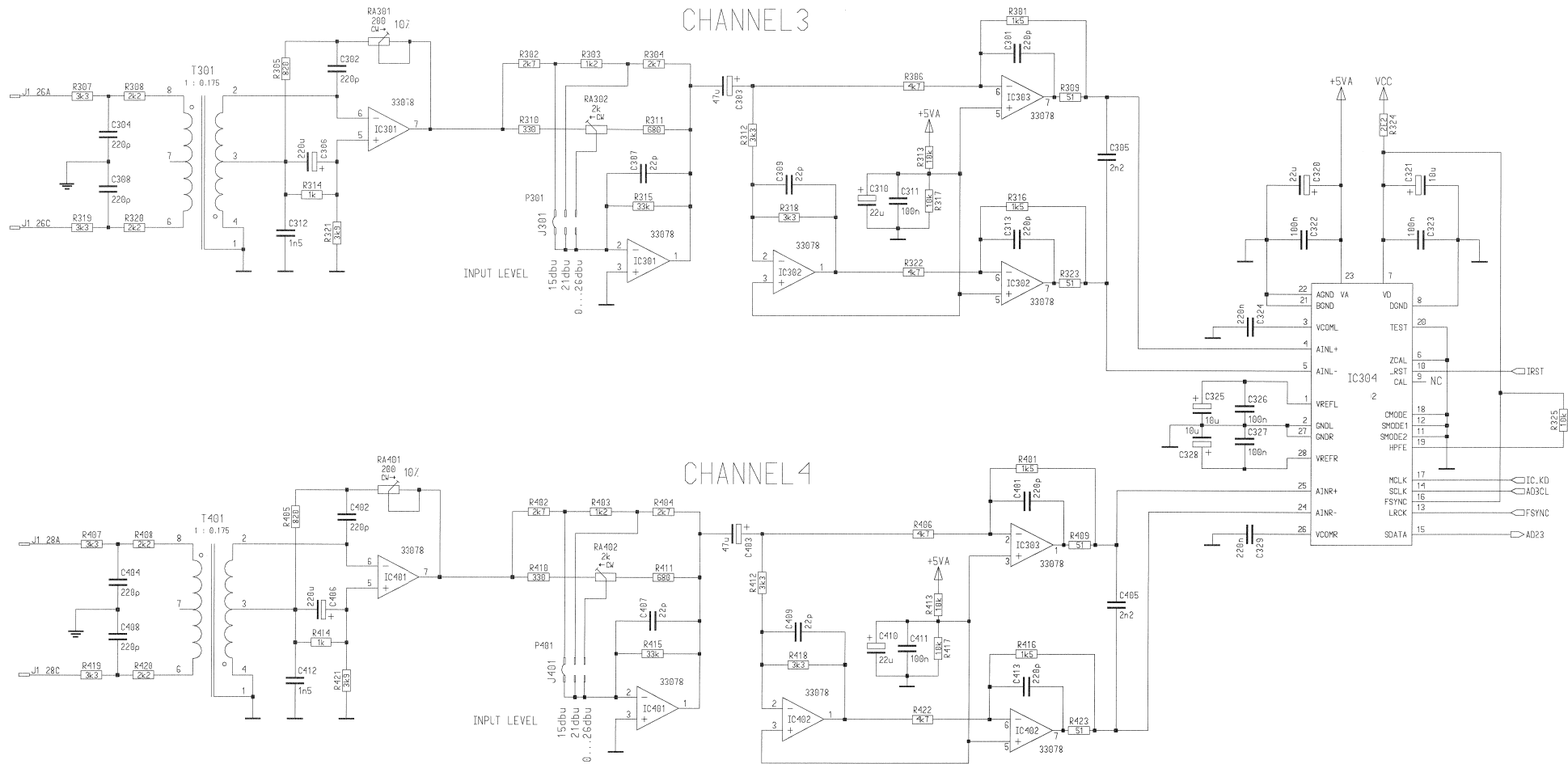
Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 312	57.92.7053		1.6A	PTC 30V	0	R 512	57.60.1102		1K	MF, 1%, 0204, E24
0	R 313	57.60.1333		33K	MF, 1%, 0204, E24	0	RA 101	58.05.1201		200R	10%, 0.5W, Cermet
0	R 314	57.60.1103		10K	MF, 1%, 0204, E24	0	RA 102	58.05.1103		10k	10%, 0.5W, Cermet
0	R 315	57.60.1562		5K6	MF, 1%, 0204, E24	0	RA 121	58.05.1201		200R	10%, 0.5W, Cermet
0	R 316	57.60.1333		33K	MF, 1%, 0204, E24	0	RA 122	58.05.1103		10k	10%, 0.5W, Cermet
0	R 317	57.60.1475		4M7	MF, 1%, 0204, E24	0	RA 201	58.05.1201		200R	10%, 0.5W, Cermet
0	R 318	57.92.1221		270mA	PTC 30V 60hm	0	RA 202	58.05.1103		10k	10%, 0.5W, Cermet
0	R 319	57.60.1683		68K	MF, 1%, 0204, E24	0	RA 221	58.05.1201		200R	10%, 0.5W, Cermet
0	R 320	57.60.1821		820R	MF, 1%, 0204, E24	0	RA 222	58.05.1103		10k	10%, 0.5W, Cermet
0	R 321	57.60.1103		10K	MF, 1%, 0204, E24	0	RZ 401	57.88.4103		10k	8*R Resistor-Netw 2% SIP9
0	R 322	57.60.1103		10K	MF, 1%, 0204, E24	0	RZ 501	57.88.4103		10k	8*R Resistor-Netw 2% SIP9
0	R 324	57.92.1221		270mA	PTC 30V 60hm	0	RZ 502	57.88.4103		10k	8*R Resistor-Netw 2% SIP9
0	R 325	57.60.1472		4K7	MF, 1%, 0204, E24	0	S 401	55.11.0202		SPDT	Toggle 1 * on-none-on
0	R 326	57.60.1220		22R	MF, 1%, 0204, E24	0	S 501	55.11.0202		SPDT	Toggle 1 * on-none-on
0	R 327	57.60.1475		4M7	MF, 1%, 0204, E24	0	T 101	1.022.454.00		1:0.175	EINGANGSTRAFO 1:0,175
0	R 328	57.60.1106		10M	MF, 1%, 0204, E24	0	T 121	1.022.454.00		1:0.175	EINGANGSTRAFO 1:0,175
0	R 401	57.60.1222		2K2	MF, 1%, 0204, E24	0	T 201	1.022.454.00		1:0.175	EINGANGSTRAFO 1:0,175
0	R 402	57.60.1220		22R	MF, 1%, 0204, E24	0	T 221	1.022.454.00		1:0.175	EINGANGSTRAFO 1:0,175
0	R 403	57.60.1220		22R	MF, 1%, 0204, E24	0	T 301	1.022.632.00		1:1	DI/DO TRANSFORMER
0	R 404	57.60.1105		1M	MF, 1%, 0204, E24	0	T 401	1.022.647.00		1:1.4	OUTPUT TRAFO AES/EBU
0	R 405	57.60.1104		100K	MF, 1%, 0204, E24	0	T 402	1.022.647.00		1:1.4	OUTPUT TRAFO AES/EBU
0	R 406	57.60.1222		2K2	MF, 1%, 0204, E24	0	T 403	1.022.647.00		1:1.4	OUTPUT TRAFO AES/EBU
0	R 407	57.60.1220		22R	MF, 1%, 0204, E24	0	T 404	1.022.647.00		1:1.4	OUTPUT TRAFO AES/EBU
0	R 408	57.60.1220		22R	MF, 1%, 0204, E24	0	TP 141	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade
0	R 409	57.60.1102		1K	MF, 1%, 0204, E24	0	XDL 301	50.20.2501		Spacer	LED-Sockel
0	R 410	57.60.1000		0R0	MF, 0204	0	XDL 302	50.20.2501		Spacer	LED-Sockel
0	R 411	57.60.1102		1K	MF, 1%, 0204, E24	0	XDL 401	50.20.2501		Spacer	LED-Sockel
0	R 412	57.60.1102		1K	MF, 1%, 0204, E24	0	XDL 403	50.20.2501		Spacer	LED-Sockel
0	R 413	57.60.1102		1K	MF, 1%, 0204, E24	0	XDL 501	50.20.2501		Spacer	LED-Sockel
0	R 414	57.60.1103		10K	MF, 1%, 0204, E24	0	XIC 401	53.03.0168		16p	DIL 0.3", löt, gerade
0	R 415	57.60.1221		220R	MF, 1%, 0204, E24	0	XIC 402	53.03.2284		84p	PLCC-Socket
0	R 416	57.60.1221		220R	MF, 1%, 0204, E24	0	XIC 403	53.03.0168		16p	DIL 0.3", löt, gerade
0	R 417	57.60.1270		27R	MF, 1%, 0204, E24	0	XIC 404	53.03.2232		32p	PLCC-Socket
0	R 418	57.60.1270		27R	MF, 1%, 0204, E24	0	XIC 502	53.03.2232		32p	PLCC-Socket
0	R 419	57.60.1270		27R	MF, 1%, 0204, E24	0	Y 301	89.01.1015		12.288MHz	XTAL HC 49/U
0	R 420	57.60.1270		27R	MF, 1%, 0204, E24	0	Y 302	89.01.0559		11.289MHz	XTAL
0	R 501	57.60.1561		560R	MF, 1%, 0204, E24	End of List					
0	R 502	57.60.1223		22K	MF, 1%, 0204, E24	<u>Comments</u> (21) latch-up problem at AD-converter					
0	R 503	57.60.1105		1M	MF, 1%, 0204, E24						
0	R 504	57.60.1102		1K	MF, 1%, 0204, E24						
0	R 505	57.60.1103		10K	MF, 1%, 0204, E24						
0	R 506	57.60.1103		10K	MF, 1%, 0204, E24						
0	R 507	57.60.1103		10K	MF, 1%, 0204, E24						
0	R 508	57.60.1103		10K	MF, 1%, 0204, E24						
0	R 509	57.60.1103		10K	MF, 1%, 0204, E24						
0	R 510	57.60.1103		10K	MF, 1%, 0204, E24						
0	R 511	57.60.1221		220R	MF, 1%, 0204, E24						

C4AD/24, 24 Bit A/D 1.940.562.20 ( 1); C4AD NS/24, 24 Bit A/D w. Noise Shaping 1.940.563.20 ( 1)



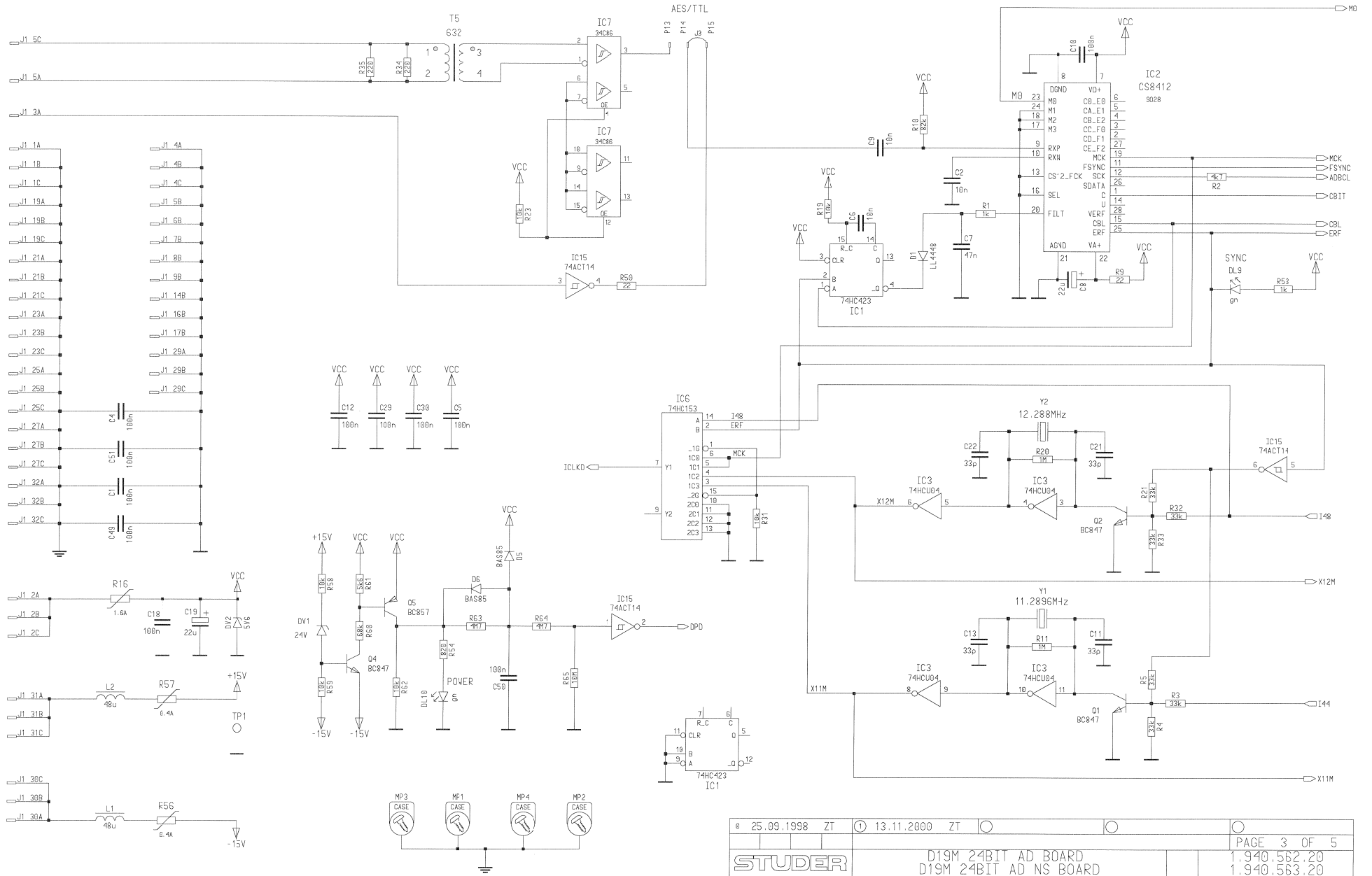
0 25.09.1998 ZT	1 13.11.2000 ZT	PAGE 1 OF 5
STUDER		D19M 24BIT AD BOARD D19M 24BIT AD NS BOARD
		1.940.562.20 1.940.563.20

**C4AD/24, 24 Bit A/D 1.940.562.20 ( 1); C4AD NS/24, 24 Bit A/D w. Noise Shaping 1.940.563.20 ( 1)**



0	25.09.1998	ZT	1	13.11.2000	ZT			
STUDER							PAGE 2 OF 5	
D19M 24BIT AD BOARD							1.940.562.20	
D19M 24BIT AD NS BOARD							1.940.563.20	

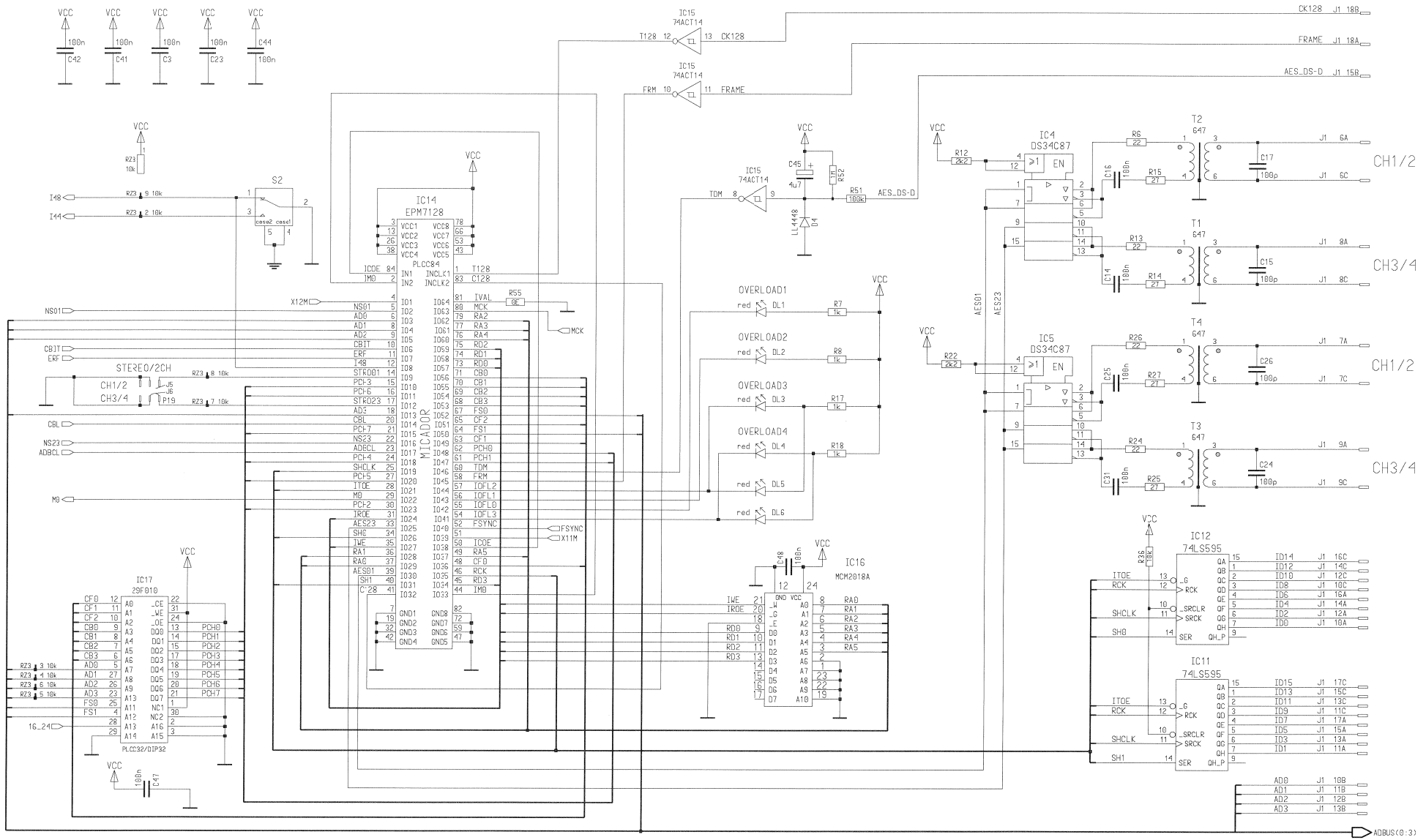
**C4AD/24, 24 Bit A/D 1.940.562.20 ( 1); C4AD NS/24, 24 Bit A/D w. Noise Shaping 1.940.563.20 ( 1)**



25.09.1998	ZT	13.11.2000	ZT				
STUDER				D19M 24BIT AD BOARD		PAGE 3 OF 5	
				D19M 24BIT AD NS BOARD		1.940.562.20	
						1.940.563.20	

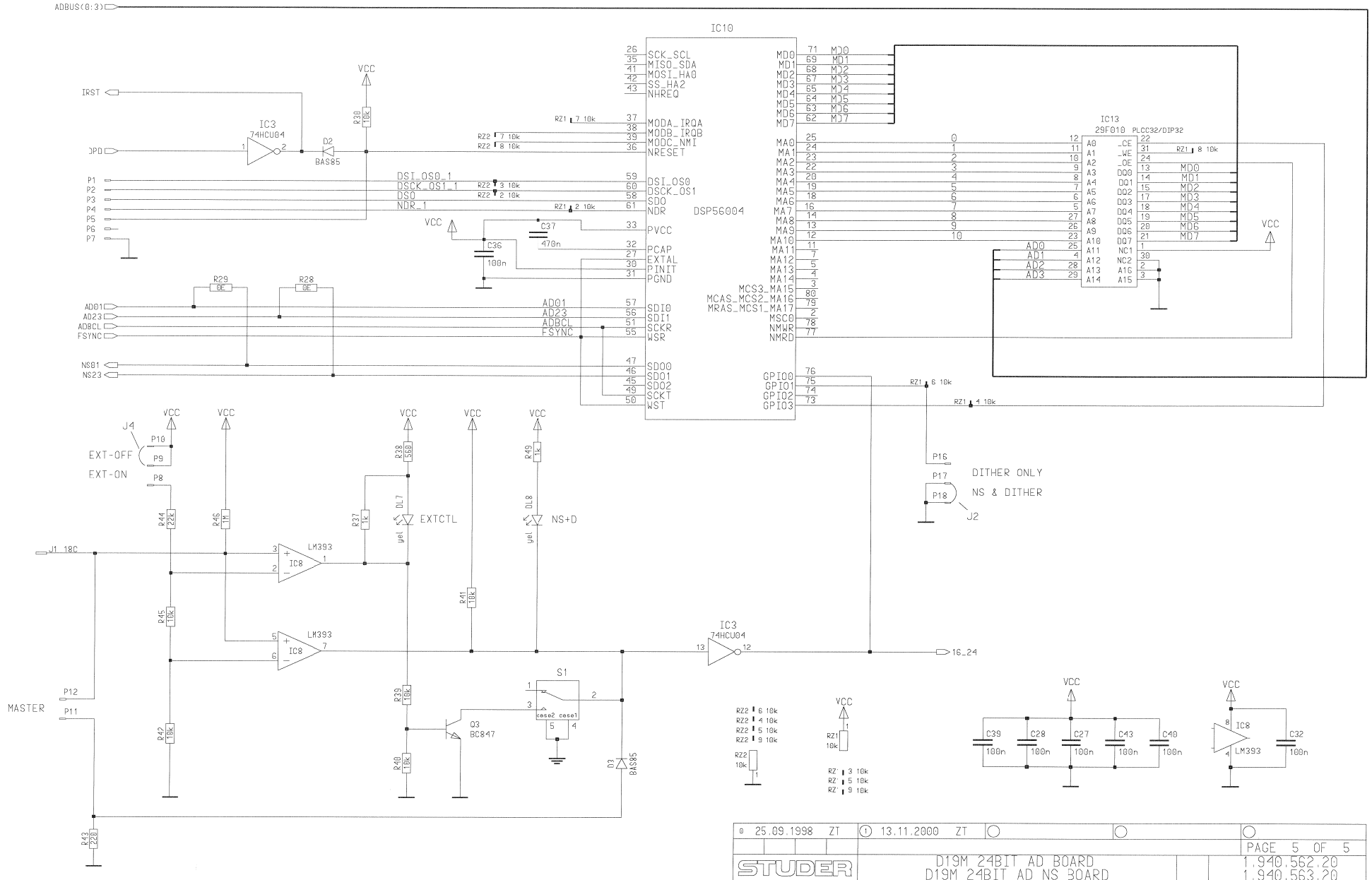


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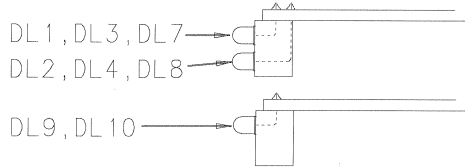
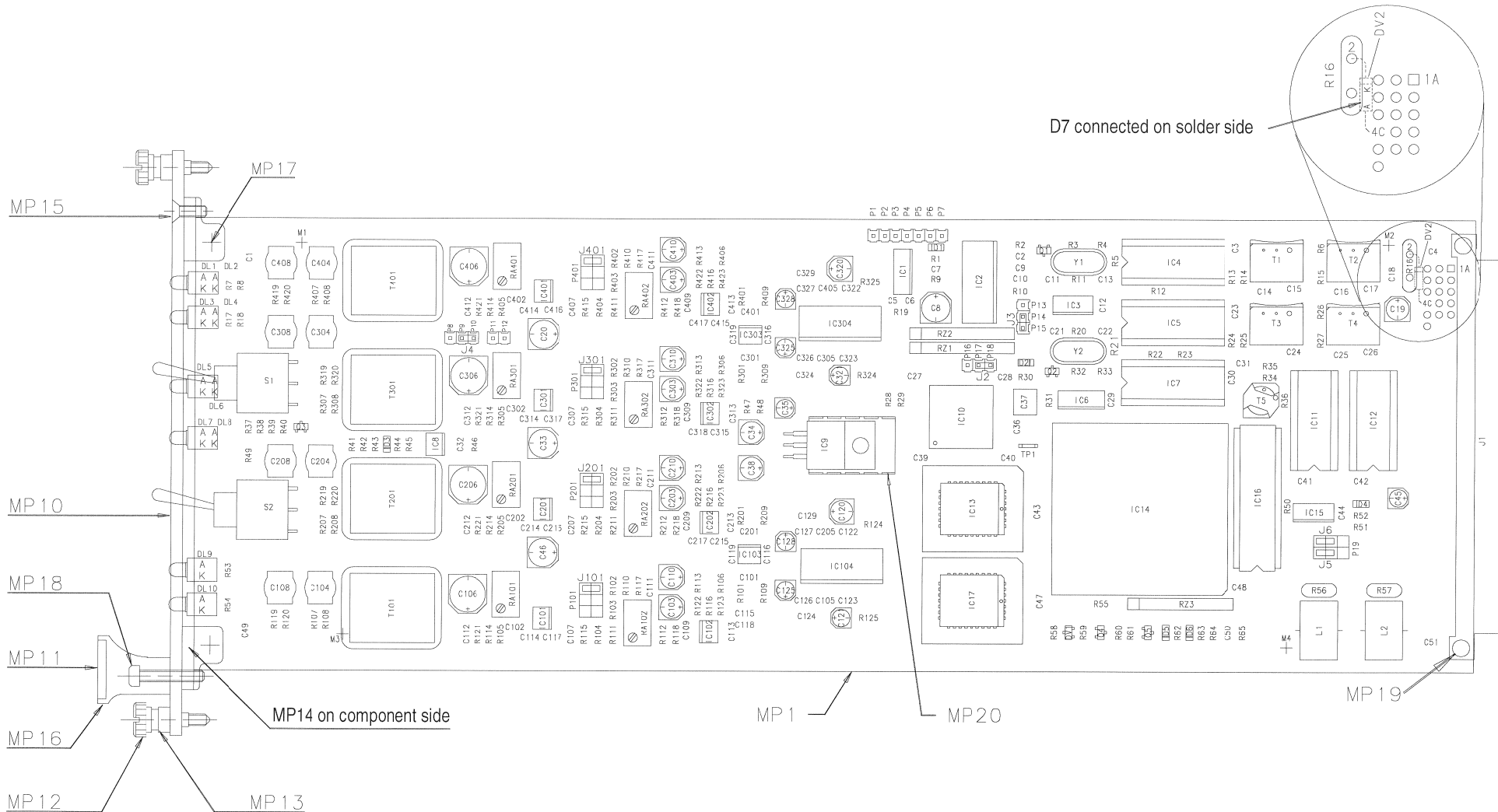
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C4AD/24, 24 Bit A/D 1.940.562.20 ( 1); C4AD NS/24, 24 Bit A/D w. Noise Shaping 1.940.563.20 ( 1)



25.09.1998	ZT	13.11.2000	ZT								
STUDER								D19M 24BIT AD BOARD		PAGE 5 OF 5	
								D19M 24BIT AD NS BOARD		1.940.562.20	
										1.940.563.20	

**C4AD/24, 24 Bit A/D 1.940.562.20 ( 1); C4AD NS/24, 24 Bit A/D w. Noise Shaping 1.940.563.20 ( 1)**



Accompanying documents: Zugehörige Unterlagen: PL, BV640		General tolerance: Freimaßtoleranz:	Scale: Maßstab:	Edition Ausgabe: 13.11.2000	ZT	ML	HM	(1)
Substitute for: Ersatz fuer: 1.940.562/563.20		Index 0		Date Datum: 13.11.2000	Visa Gez.:	Checked Gepr.:	Seen Ges.:	Index
<b>STUDER</b>				Description: Benennung: D19M 24BIT AD BOARD "ESE"		Page: Seite: 1 / 1		Number: Nummer: 1.940.562.20 1.940.563.20
REGENSDORF				Description: Benennung: D19M 24BIT AD NS BOARD "ESE"				

**C4AD/24, 24 Bit AD 1.940.562.20 ( 3)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 208	59.05.1221	220p		PP, 1%, 630V
0 C 2	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 C 209	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 3	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 210	59.68.0067	22u		EL 16V, 5.0*5.7
0 C 4	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 211	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 212	59.60.3315	1n5		CER 50V, 10%, X7R, 0805
0 C 6	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 C 213	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 7	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 C 214	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 8	59.68.0111	22u		EL 35V, 6.3*5.7	0 C 215	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 9	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 C 216	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 10	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 217	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 11	59.60.2237	33p		CER 50V, 5%, COG, 0603	0 C 301	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 12	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 302	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 13	59.60.2237	33p		CER 50V, 5%, COG, 0603	0 C 303	59.68.0027	47u		EL 6V, 5.0*5.7
0 C 14	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 304	59.05.1221	220p		PP, 1%, 630V
0 C 15	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 C 305	59.60.3317	2n2		CER 50V, 10%, X7R, 0805
0 C 16	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 306	59.68.0073	220u		EL 16V, 8.0*10.7
0 C 17	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 C 307	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 18	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 308	59.05.1221	220p		PP, 1%, 630V
0 C 19	59.68.0067	22u		EL 16V, 5.0*5.7	0 C 309	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 20	59.68.0111	22u		EL 35V, 6.3*5.7	0 C 310	59.68.0067	22u		EL 16V, 5.0*5.7
0 C 21	59.60.2237	33p		CER 50V, 5%, COG, 0603	0 C 311	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 22	59.60.2237	33p		CER 50V, 5%, COG, 0603	0 C 312	59.60.3315	1n5		CER 50V, 10%, X7R, 0805
0 C 23	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 313	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 24	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 C 314	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 25	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 315	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 26	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 C 316	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 27	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 317	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 28	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 318	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 29	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 319	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 30	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 320	59.68.0067	22u		EL 16V, 5.0*5.7
0 C 31	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 321	59.68.0065	10u		EL 16V, 4.0*5.7
0 C 32	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 322	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 33	59.68.0111	22u		EL 35V, 6.3*5.7	0 C 323	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 34	59.68.0067	22u		EL 16V, 5.0*5.7	0 C 324	59.60.3441	220n		CER 50V, 10%, X7R, 1206
0 C 35	59.68.0065	10u		EL 16V, 4.0*5.7	0 C 325	59.68.0065	100n		EL 16V, 4.0*5.7
0 C 36	not used	100n		CER 50V, 10%, X7R, 0805	0 C 326	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 37	not used	470n		CER 50V, 10%, X7R, 2220	0 C 327	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 38	59.68.0067	22u		EL 16V, 5.0*5.7	0 C 328	59.68.0065	10u		EL 16V, 4.0*5.7
0 C 39	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 329	59.60.3441	220n		CER 50V, 10%, X7R, 1206
0 C 40	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 401	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 41	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 402	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 42	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 403	59.68.0027	47u		EL 6V, 5.0*5.7
0 C 43	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 404	59.05.1221	220p		PP, 1%, 630V
0 C 44	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 405	59.60.3317	2n2		CER 50V, 10%, X7R, 0805
0 C 45	59.68.0107	4u7		EL 35V, 4.0*5.7	0 C 406	59.68.0073	220u		EL 16V, 8.0*10.7
0 C 46	59.68.0111	22u		EL 35V, 6.3*5.7	0 C 407	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 47	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 408	59.05.1221	220p		PP, 1%, 630V
0 C 48	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 409	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 49	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 410	59.68.0067	22u		EL 16V, 5.0*5.7
0 C 50	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 411	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 51	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 412	59.60.3315	1n5		CER 50V, 10%, X7R, 0805
0 C 101	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 C 413	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 102	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 C 414	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 103	59.68.0027	47u		EL 6V, 5.0*5.7	0 C 415	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 104	59.05.1221	220p		PP, 1%, 630V	0 C 416	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 105	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 C 417	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 106	59.68.0073	220u		EL 16V, 8.0*10.7	0 D 1	50.60.8001	4448		200mA 75V 4ns SOD 80
0 C 107	59.60.2233	22p		CER 50V, 5%, COG, 0603	0 D 2	not used	BAS85		200mA 30V Schottky SOD 80
0 C 108	59.05.1221	220p		PP, 1%, 630V	0 D 3	not used	BAS85		200mA 30V Schottky SOD 80
0 C 109	59.60.2233	22p		CER 50V, 5%, COG, 0603	0 D 4	50.60.8001	4448		200mA 75V 4ns SOD 80
0 C 110	59.68.0067	22u		EL 16V, 5.0*5.7	0 D 5	50.60.8101	BAS85		200mA 30V Schottky SOD 80
0 C 111	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 D 6	50.60.8101	BAS85		200mA 30V Schottky SOD 80
0 C 112	59.60.3315	1n5		CER 50V, 10%, X7R, 0805	0 DL 1	50.04.2200	HLMP1700		DL HLMP - 1700 RT
0 C 113	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 DL 2	50.04.2200	HLMP1700		DL HLMP - 1700 RT
0 C 114	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 3	not used	HLMP1700		DL HLMP - 1700 RT
0 C 115	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 4	not used	HLMP1700		DL HLMP - 1700 RT
0 C 116	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 5	50.04.2200	HLMP1700		DL HLMP - 1700 RT
0 C 117	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 6	50.04.2200	HLMP1700		DL HLMP - 1700 RT
0 C 118	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 7	not used	HLMP1719		DL HLMP - 1719 GB
0 C 119	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 8	not used	HLMP1790		DL HLMP - 1790 GN
0 C 120	59.68.0067	22u		EL 16V, 5.0*5.7	0 DL 9	50.04.2202	HLMP1790		DL HLMP - 1790 GN
0 C 121	59.68.0065	10u		EL 16V, 4.0*5.7	0 DL 10	50.04.2202	HLMP1790		DL HLMP - 1790 GN
0 C 122	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DV 1	50.60.9026	24V		5%, 0.2W, SOT 23
0 C 123	59.60.3337	100n		CER 50V, 10%, X7R, 0805	2 DV 2	50.04.1108	5V6		Zener, 5%, 0.5W, DO-35
0 C 124	59.60.3441	220n		CER 50V, 10%, X7R, 1206	0 IC 1	50.62.1423	74HC423		Dual multivibr monost retrigg
0 C 125	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 2	50.62.0913	CS8412		AES-Receiver
0 C 126	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 3	50.62.1904	74HCU04		Hex inverter unbuffered
0 C 127	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 4	50.15.0127	34C87		IC DS 34 C 87 TN, MC34C87P ,A
0 C 128	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 5	50.15.0127	34C87		IC DS 34 C 87 TN, MC34C87P ,A
0 C 129	59.60.3441	220n		CER 50V, 10%, X7R, 1206	0 IC 6	50.62.1153	74HC153		Dual 4ch multiplexer
0 C 201	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 IC 7	50.15.0128	34C86		IC DS 34 C 86 TN, MC34C86P ,A
0 C 202	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 IC 8	not used	LM393		Dual voltage comp. SO 8
0 C 203	59.68.0027	47u		EL 6V, 5.0*5.7	0 IC 9	50.10.0104	LM317SP		Series regulator 1.5A ...+37V
0 C 204	59.05.1221	220p		PP, 1%, 630V	0 IC 10	not used	56004		DSP 56 004 40MHz
0 C 205	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 IC 11	50.06.0595	74LS595		SN 74 LS 595 N
0 C 206	59.68.0073	220u		EL 16V, 8.0*10.7	0 IC 12	50.06.0595	74LS595		SN 74 LS 595 N
0 C 207	59.60.2233	22p		CER 50V, 5%, COG, 0603	0 IC 13	not used	29F010		Flash Memory 128K*8

C4AD/24, 24 Bit AD 1.940.562.20 ( 3)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	IC 14	1.940.949.20			SW 562 MICADOR (50.63.4205)	0	R 14	57.60.1270		27R	MF, 1%, 0204, E24
0	IC 15	50.62.6014		74ACT 14	Hex inverting Schmitt trigger	0	R 15	57.60.1270		27R	MF, 1%, 0204, E24
0	IC 16	50.14.1009		7C128A	SRAM 2K*8 35ns	0	R 16	57.92.7053		1.6A	PTC 30V
0	IC 17	1.940.948.20			SW 562 ADCBIT 24 (50.63.1303)	0	R 17	57.60.1102		1k0	MF, 1%, 0204, E24
0	IC 101	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 18	57.60.1102		1k0	MF, 1%, 0204, E24
0	IC 102	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 19	57.60.1103		10k	MF, 1%, 0204, E24
0	IC 103	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 20	57.60.1105		1M0	MF, 1%, 0204, E24
3	IC 104	50.61.8108		AK5393	A/D Converter 24bit DS SOP28	0	R 21	57.60.1333		33k	MF, 1%, 0204, E24
0	IC 201	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 22	57.60.1222		2k2	MF, 1%, 0204, E24
0	IC 202	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 23	57.60.1103		10k	MF, 1%, 0204, E24
0	IC 301	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 24	57.60.1220		22R	MF, 1%, 0204, E24
0	IC 302	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 25	57.60.1270		27R	MF, 1%, 0204, E24
0	IC 303	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 26	57.60.1220		22R	MF, 1%, 0204, E24
3	IC 304	50.61.8108		AK5393	A/D Converter 24bit DS SOP28	0	R 27	57.60.1270		27R	MF, 1%, 0204, E24
0	IC 401	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 28	57.60.1000		0R0	MF, 0204
0	IC 402	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 29	57.60.1000		0R0	MF, 0204
0	J 1	54.11.2009		96p	EU-R 3*32p	0	R 30	not used		10k	MF, 1%, 0204, E24
0	J 2	not used		Jumper	0.63*0.63mm, Au	0	R 31	57.60.1103		10k	MF, 1%, 0204, E24
0	J 3	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 32	57.60.1333		33k	MF, 1%, 0204, E24
0	J 4	not used		Jumper	0.63*0.63mm, Au	0	R 33	57.60.1333		33k	MF, 1%, 0204, E24
0	J 5	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 34	57.60.1221		220R	MF, 1%, 0204, E24
0	J 6	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 35	57.60.1221		220R	MF, 1%, 0204, E24
0	J 101	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 36	57.60.1103		10k	MF, 1%, 0204, E24
0	J 201	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 37	not used		1k0	MF, 1%, 0204, E24
0	J 301	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 38	not used		560R	MF, 1%, 0204, E24
0	J 401	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 39	not used		10k	MF, 1%, 0204, E24
0	L 1	62.03.0010		48uH	2A Toroid Chocke	0	R 40	not used		10k	MF, 1%, 0204, E24
0	L 2	62.03.0010		48uH	2A Toroid Chocke	0	R 41	57.60.1103		10k	MF, 1%, 0204, E24
0	MP 1	1.940.562.11			D19M 24 BIT AD BOARD PCB	0	R 42	not used		10k	MF, 1%, 0204, E24
0	MP 2	1.940.562.04			TYPENSCHILD	0	R 43	not used		220R	MF, 1%, 0204, E24
0	MP 3	43.01.0108		Label	ESE-Warnschild	0	R 44	not used		22k	MF, 1%, 0204, E24
0	MP 4	1.101.001.20		Label	TEXT-ETIK. 5*20 HARDWARE -20	0	R 45	not used		10k	MF, 1%, 0204, E24
2	MP 7	50.04.1108		5V6	Zener, 5%, 0.5W, DO-35	0	R 46	not used		1M0	MF, 1%, 0204, E24
0	MP 10	1.940.562.01	1 pce		FRONTPLATTE C4AD 24BIT	0	R 47	57.60.1102		1k0	MF, 1%, 0204, E24
0	MP 11	1.940.600.04	1 pce		GRIFFFEINLAGE 4TE	0	R 48	57.60.1302		3k0	MF, 1%, 0204, E24
0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)	0	R 49	not used		1k0	MF, 1%, 0204, E24
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)	0	R 50	57.60.1220		22R	MF, 1%, 0204, E24
0	MP 14	49.02.0522	2 pcs		Kartenhalter mit Z-Schr	0	R 51	57.60.1104		100k	MF, 1%, 0204, E24
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp	0	R 52	57.60.1105		1M0	MF, 1%, 0204, E24
0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff	0	R 53	57.60.1102		1k0	MF, 1%, 0204, E24
1	MP 17	not used	2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr	0	R 54	57.60.1821		820R	MF, 1%, 0204, E24
					Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten	0	R 55	57.60.1000		0R0	MF, 0204
0	MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr	0	R 56	57.92.7019		0.4A	PTC 60V
0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15" 9	0	R 57	57.92.7019		0.4A	PTC 60V
0	MP 20	50.20.3004			Kühlkörper, TO 220, horizontal	0	R 58	57.60.1103		10k	MF, 1%, 0204, E24
2	MP 21	43.10.0110		A	Revisions-Etikette 5mm h'blau	0	R 59	57.60.1103		10k	MF, 1%, 0204, E24
0	P 1	not used		1p	Pin, 1reihig, gerade	0	R 60	57.60.1683		68k	MF, 1%, 0204, E24
0	P 2	not used		1p	Pin, 1reihig, gerade	0	R 61	57.60.1562		5k6	MF, 1%, 0204, E24
0	P 3	not used		1p	Pin, 1reihig, gerade	0	R 62	57.60.1103		10k	MF, 1%, 0204, E24
0	P 4	not used		1p	Pin, 1reihig, gerade	0	R 63	57.60.1475		4M7	MF, 1%, 0204, E24
0	P 5	not used		1p	Pin, 1reihig, gerade	0	R 64	57.60.1475		4M7	MF, 1%, 0204, E24
0	P 6	not used		1p	Pin, 1reihig, gerade	0	R 65	57.60.1106		10M	MF, 1%, 0204, E24
0	P 7	not used		1p	Pin, 1reihig, gerade	0	R 101	57.60.1152		1k5	MF, 1%, 0204, E24
0	P 8	not used		1p	Pin, 1reihig, gerade	0	R 102	57.60.1272		2k7	MF, 1%, 0204, E24
0	P 9	not used		1p	Pin, 1reihig, gerade	0	R 103	57.60.1122		1k2	MF, 1%, 0204, E24
0	P 10	not used		1p	Pin, 1reihig, gerade	0	R 104	57.60.1272		2k7	MF, 1%, 0204, E24
0	P 11	not used		1p	Pin, 1reihig, gerade	0	R 105	57.60.1821		820R	MF, 1%, 0204, E24
0	P 12	not used		1p	Pin, 1reihig, gerade	0	R 106	57.60.1472		4k7	MF, 1%, 0204, E24
0	P 13	54.01.0020		1p	Pin, 1reihig, gerade	0	R 107	57.60.1332		3k3	MF, 1%, 0204, E24
0	P 14	54.01.0020		1p	Pin, 1reihig, gerade	0	R 108	57.60.1222		2k2	MF, 1%, 0204, E24
0	P 15	54.01.0020		1p	Pin, 1reihig, gerade	0	R 109	57.60.1510		51R	MF, 1%, 0204, E24
0	P 16	not used		1p	Pin, 1reihig, gerade	0	R 110	57.60.1331		330R	MF, 1%, 0204, E24
0	P 17	not used		1p	Pin, 1reihig, gerade	0	R 111	57.60.1681		680R	MF, 1%, 0204, E24
0	P 18	not used		1p	Pin, 1reihig, gerade	0	R 112	57.60.1332		3k3	MF, 1%, 0204, E24
0	P 19	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 113	57.60.1103		10k	MF, 1%, 0204, E24
0	P 101	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 114	57.60.1102		1k0	MF, 1%, 0204, E24
0	P 201	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 115	57.60.1333		33k	MF, 1%, 0204, E24
0	P 301	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 116	57.60.1152		1k5	MF, 1%, 0204, E24
0	P 401	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 117	57.60.1103		10k	MF, 1%, 0204, E24
0	Q 1	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 118	57.60.1332		3k3	MF, 1%, 0204, E24
0	Q 2	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 119	57.60.1332		3k3	MF, 1%, 0204, E24
0	Q 3	not used		BC847B	NPN 45V 100mA SOT 23	0	R 120	57.60.1222		2k2	MF, 1%, 0204, E24
0	Q 4	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 121	57.60.1392		3k9	MF, 1%, 0204, E24
0	Q 5	50.60.1001		BC857B	PNP 45V 100mA SOT 23	0	R 122	57.60.1472		4k7	MF, 1%, 0204, E24
0	R 1	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 123	57.60.1510		51R	MF, 1%, 0204, E24
0	R 2	57.60.1472		4k7	MF, 1%, 0204, E24	0	R 124	57.60.1103		10k	MF, 1%, 0204, E24
0	R 3	57.60.1333		33k	MF, 1%, 0204, E24	0	R 125	57.60.1229		2R2	MF, 1%, 0204, E24
0	R 4	57.60.1333		33k	MF, 1%, 0204, E24	0	R 201	57.60.1152		1k5	MF, 1%, 0204, E24
0	R 5	57.60.1333		33k	MF, 1%, 0204, E24	0	R 202	57.60.1272		2k7	MF, 1%, 0204, E24
0	R 6	57.60.1220		22R	MF, 1%, 0204, E24	0	R 203	57.60.1122		1k2	MF, 1%, 0204, E24
0	R 7	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 204	57.60.1272		2k7	MF, 1%, 0204, E24
0	R 8	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 205	57.60.1821		820R	MF, 1%, 0204, E24
0	R 9	57.60.1220		22R	MF, 1%, 0204, E24	0	R 206	57.60.1472		4k7	MF, 1%, 0204, E24
0	R 10	57.60.1823		82k	MF, 1%, 0204, E24	0	R 207	57.60.1332		3k3	MF, 1%, 0204, E24
0	R 11	57.60.1105		1M0	MF, 1%, 0204, E24	0	R 208	57.60.1222		2k2	MF, 1%, 0204, E24
0	R 12	57.60.1222		2k2	MF, 1%, 0204, E24	0	R 209	57.60.1510		51R	MF, 1%, 0204, E24
0	R 13	57.60.1220		22R	MF, 1%, 0204, E24	0	R 210	57.60.1331		330R	MF, 1%, 0204, E24

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 R 211	57.60.1681		680R	MF, 1%, 0204, E24	0 XDL 7	not used		Spacer	LED-Sockel
0 R 212	57.60.1332		3k3	MF, 1%, 0204, E24	0 XDL 9	50.20.2501		Spacer	LED-Sockel
0 R 213	57.60.1103		10k	MF, 1%, 0204, E24	0 XDL 10	50.20.2501		Spacer	LED-Sockel
0 R 214	57.60.1102		1k0	MF, 1%, 0204, E24	0 XIC 4	53.03.0168		16p	DIL-socket 0.3"
0 R 215	57.60.1333		33k	MF, 1%, 0204, E24	0 XIC 5	53.03.0168		16p	DIL-socket 0.3"
0 R 216	57.60.1152		1k5	MF, 1%, 0204, E24	0 XIC 13	not used		32p	PLCC-Socket
0 R 217	57.60.1103		10k	MF, 1%, 0204, E24	0 XIC 14	53.03.2284		84p	PLCC-Socket
0 R 218	57.60.1332		3k3	MF, 1%, 0204, E24	0 XIC 17	53.03.2232		32p	PLCC-Socket
0 R 219	57.60.1332		3k3	MF, 1%, 0204, E24	0 XT 101	1.022.400.03			ISOLATION
0 R 220	57.60.1222		2k2	MF, 1%, 0204, E24	0 XT 201	1.022.400.03			ISOLATION
0 R 221	57.60.1392		3k9	MF, 1%, 0204, E24	0 XT 301	1.022.400.03			ISOLATION
0 R 222	57.60.1472		4k7	MF, 1%, 0204, E24	0 XT 401	1.022.400.03			ISOLATION
0 R 223	57.60.1510		51R	MF, 1%, 0204, E24	0 XY 1	89.01.1499			QUARZ - ISOLIERPLATTE
0 R 301	57.60.1152		1k5	MF, 1%, 0204, E24	0 XY 2	89.01.1499			QUARZ - ISOLIERPLATTE
0 R 302	57.60.1272		2k7	MF, 1%, 0204, E24	0 Y 1	89.01.0559		11.289MHz	XTAL
0 R 303	57.60.1122		1k2	MF, 1%, 0204, E24	0 Y 2	89.01.1015		12.288MHz	XTAL HC 49/U
0 R 304	57.60.1272		2k7	MF, 1%, 0204, E24					
0 R 305	57.60.1821		820R	MF, 1%, 0204, E24					
0 R 306	57.60.1472		4k7	MF, 1%, 0204, E24					
0 R 307	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 308	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 309	57.60.1510		51R	MF, 1%, 0204, E24					
0 R 310	57.60.1331		330R	MF, 1%, 0204, E24					
0 R 311	57.60.1681		680R	MF, 1%, 0204, E24					
0 R 312	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 313	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 314	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 315	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 316	57.60.1152		1k5	MF, 1%, 0204, E24					
0 R 317	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 318	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 319	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 320	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 321	57.60.1392		3k9	MF, 1%, 0204, E24					
0 R 322	57.60.1472		4k7	MF, 1%, 0204, E24					
0 R 323	57.60.1510		51R	MF, 1%, 0204, E24					
0 R 324	57.60.1229		2R2	MF, 1%, 0204, E24					
0 R 325	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 401	57.60.1152		1k5	MF, 1%, 0204, E24					
0 R 402	57.60.1272		2k7	MF, 1%, 0204, E24					
0 R 403	57.60.1122		1k2	MF, 1%, 0204, E24					
0 R 404	57.60.1272		2k7	MF, 1%, 0204, E24					
0 R 405	57.60.1821		820R	MF, 1%, 0204, E24					
0 R 406	57.60.1472		4k7	MF, 1%, 0204, E24					
0 R 407	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 408	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 409	57.60.1510		51R	MF, 1%, 0204, E24					
0 R 410	57.60.1331		330R	MF, 1%, 0204, E24					
0 R 411	57.60.1681		680R	MF, 1%, 0204, E24					
0 R 412	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 413	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 414	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 415	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 416	57.60.1152		1k5	MF, 1%, 0204, E24					
0 R 417	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 418	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 419	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 420	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 421	57.60.1392		3k9	MF, 1%, 0204, E24					
0 R 422	57.60.1472		4k7	MF, 1%, 0204, E24					
0 R 423	57.60.1510		51R	MF, 1%, 0204, E24					
0 RA 101	58.05.1201		200R	10%, 0.5W, Cermet					
0 RA 102	58.05.1202		2k0	10%, 0.5W, Cermet					
0 RA 201	58.05.1201		200R	10%, 0.5W, Cermet					
0 RA 202	58.05.1202		2k0	10%, 0.5W, Cermet					
0 RA 301	58.05.1201		200R	10%, 0.5W, Cermet					
0 RA 302	58.05.1202		2k0	10%, 0.5W, Cermet					
0 RA 401	58.05.1201		200R	10%, 0.5W, Cermet					
0 RA 402	58.05.1202		2k0	10%, 0.5W, Cermet					
0 RZ 1	not used		10k	8*R Resistor-Netw 2% SIP9					
0 RZ 2	not used		10k	8*R Resistor-Netw 2% SIP9					
0 RZ 3	57.88.4103		10k	8*R Resistor-Netw 2% SIP9					
0 S 1	not used		SPDT	Toggle 1 * on-none-on					
0 S 2	55.11.0202		SPDT	Toggle 1 * on-none-on					
0 T 1	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU					
0 T 2	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU					
0 T 3	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU					
0 T 4	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU					
0 T 5	1.022.632.00		1:1	DI/DO TRANSFORMER					
0 T 101	1.022.454.00		1:0.175	EINGANGSTRAFO 1:0,175					
0 T 201	1.022.454.00		1:0.175	EINGANGSTRAFO 1:0,175					
0 T 301	1.022.454.00		1:0.175	EINGANGSTRAFO 1:0,175					
0 T 401	1.022.454.00		1:0.175	EINGANGSTRAFO 1:0,175					
0 TP 1	54.33.6010		2.8*0.8	PCB-Flachstecker, gerade					
0 XDL 1	50.20.2501		Spacer	LED-Sockel					
0 XDL 3	not used		Spacer	LED-Sockel					
0 XDL 5	50.20.2501		Spacer	LED-Sockel					

End of List

- (1) 12.04.00 MP 17 not used
- (2) 13.11.2000 Additionally D7 and MP21
- (3) 23.09.03 IC104/304 changed to 50.61.8108 (improved price/performance ratio)

**C4AD/24/NS, 24 Bit AD 1.940.563.20 ( 3)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 208	59.05.1221	220p		PP, 1%, 630V
0 C 2	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 C 209	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 3	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 210	59.68.0067	22u		EL 16V, 5.0*5.7
0 C 4	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 211	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 212	59.60.3315	1n5		CER 50V, 10%, X7R, 0805
0 C 6	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 C 213	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 7	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 C 214	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 8	59.68.0111	22u		EL 35V, 6.3*5.7	0 C 215	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 9	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 C 216	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 10	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 217	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 11	59.60.2237	33p		CER 50V, 5%, COG, 0603	0 C 301	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 12	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 302	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 13	59.60.2237	33p		CER 50V, 5%, COG, 0603	0 C 303	59.68.0027	47u		EL 6V, 5.0*5.7
0 C 14	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 304	59.05.1221	220p		PP, 1%, 630V
0 C 15	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 C 305	59.60.3317	2n2		CER 50V, 10%, X7R, 0805
0 C 16	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 306	59.68.0073	220u		EL 16V, 8.0*10.7
0 C 17	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 C 307	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 18	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 308	59.05.1221	220p		PP, 1%, 630V
0 C 19	59.68.0067	22u		EL 16V, 5.0*5.7	0 C 309	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 20	59.68.0111	22u		EL 35V, 6.3*5.7	0 C 310	59.68.0067	22u		EL 16V, 5.0*5.7
0 C 21	59.60.2237	33p		CER 50V, 5%, COG, 0603	0 C 311	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 22	59.60.2237	33p		CER 50V, 5%, COG, 0603	0 C 312	59.60.3315	1n5		CER 50V, 10%, X7R, 0805
0 C 23	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 313	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 24	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 C 314	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 25	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 315	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 26	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 C 316	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 27	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 317	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 28	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 318	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 29	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 319	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 30	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 320	59.68.0067	22u		EL 16V, 5.0*5.7
0 C 31	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 321	59.68.0065	10u		EL 16V, 4.0*5.7
0 C 32	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 322	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 33	59.68.0111	22u		EL 35V, 6.3*5.7	0 C 323	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 34	59.68.0067	22u		EL 16V, 5.0*5.7	0 C 324	59.60.3441	220n		CER 50V, 10%, X7R, 1206
0 C 35	59.68.0065	10u		EL 16V, 4.0*5.7	0 C 325	59.68.0065	10u		EL 16V, 4.0*5.7
0 C 36	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 326	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 37	59.60.3845	470n		CER 50V, 10%, X7R, 2220	0 C 327	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 38	59.68.0067	22u		EL 16V, 5.0*5.7	0 C 328	59.68.0065	10u		EL 16V, 4.0*5.7
0 C 39	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 329	59.60.3441	220n		CER 50V, 10%, X7R, 1206
0 C 40	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 401	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 41	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 402	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 42	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 403	59.68.0027	47u		EL 6V, 5.0*5.7
0 C 43	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 404	59.05.1221	220p		PP, 1%, 630V
0 C 44	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 405	59.60.3317	2n2		CER 50V, 10%, X7R, 0805
0 C 45	59.68.0107	4u7		EL 35V, 4.0*5.7	0 C 406	59.68.0073	220u		EL 16V, 8.0*10.7
0 C 46	59.68.0111	22u		EL 35V, 6.3*5.7	0 C 407	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 47	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 408	59.05.1221	220p		PP, 1%, 630V
0 C 48	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 409	59.60.2233	22p		CER 50V, 5%, COG, 0603
0 C 49	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 410	59.68.0067	22u		EL 16V, 5.0*5.7
0 C 50	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 411	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 51	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 C 412	59.60.3315	1n5		CER 50V, 10%, X7R, 0805
0 C 101	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 C 413	59.60.2257	220p		CER 50V, 5%, COG, 0603
0 C 102	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 C 414	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 103	59.68.0027	47u		EL 6V, 5.0*5.7	0 C 415	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 104	59.05.1221	220p		PP, 1%, 630V	0 C 416	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 105	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 C 417	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0 C 106	59.68.0073	220u		EL 16V, 8.0*10.7	0 D 1	50.60.8001	4448		200mA 75V 4ns SOD 80
0 C 107	59.60.2233	22p		CER 50V, 5%, COG, 0603	0 D 2	50.60.8101	BAS85		200mA 30V Schottky SOD 80
0 C 108	59.05.1221	220p		PP, 1%, 630V	0 D 3	50.60.8101	BAS85		200mA 30V Schottky SOD 80
0 C 109	59.60.2233	22p		CER 50V, 5%, COG, 0603	0 D 4	50.60.8001	4448		200mA 75V 4ns SOD 80
0 C 110	59.68.0067	22u		EL 16V, 5.0*5.7	0 D 5	50.60.8101	BAS85		200mA 30V Schottky SOD 80
0 C 111	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 D 6	50.60.8101	BAS85		200mA 30V Schottky SOD 80
0 C 112	59.60.3315	1n5		CER 50V, 10%, X7R, 0805	0 DL 1	50.04.2200	HLMP1700		DL HLMP - 1700 RT
0 C 113	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 DL 2	50.04.2200	HLMP1700		DL HLMP - 1700 RT
0 C 114	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 3	50.04.2200	HLMP1700		DL HLMP - 1700 RT
0 C 115	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 4	50.04.2200	HLMP1700		DL HLMP - 1700 RT
0 C 116	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 5		not used		DL HLMP - 1700 RT
0 C 117	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 6		not used		DL HLMP - 1700 RT
0 C 118	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 7	50.04.2201	HLMP1719		DL HLMP - 1719 GB
0 C 119	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 8	50.04.2202	HLMP1790		DL HLMP - 1790 GN
0 C 120	59.68.0067	22u		EL 16V, 5.0*5.7	0 DL 9	50.04.2202	HLMP1790		DL HLMP - 1790 GN
0 C 121	59.68.0065	10u		EL 16V, 4.0*5.7	0 DL 10	50.04.2202	HLMP1790		DL HLMP - 1790 GN
0 C 122	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DV 1	50.60.9026	24V		5%, 0.2W, SOT 23
0 C 123	59.60.3337	100n		CER 50V, 10%, X7R, 0805	2 DV 2	50.04.1108	5V6		Zener, 5%, 0.5W, DO-35
0 C 124	59.60.3441	220n		CER 50V, 10%, X7R, 1206	0 IC 1	50.62.1423	74HC423		Dual multivibr monost retrigg
0 C 125	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 2	50.62.0913	CS8412		AES-Receiver
0 C 126	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 3	50.62.1904	74HCU04		Hex inverter unbuffered
0 C 127	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 4	50.15.0127	34C87		IC DS 34 C 87 TN, MC34C87P ,A
0 C 128	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 5	50.15.0127	34C87		IC DS 34 C 87 TN, MC34C87P ,A
0 C 129	59.60.3441	220n		CER 50V, 10%, X7R, 1206	0 IC 6	50.62.1153	74HC153		Dual 4ch multiplexer
0 C 201	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 IC 7	50.15.0128	34C86		IC DS 34 C 86 TN, MC34C86P ,A
0 C 202	59.60.2257	220p		CER 50V, 5%, COG, 0603	0 IC 8	50.61.9001	LM393		Dual voltage comp. SO 8
0 C 203	59.68.0027	47u		EL 6V, 5.0*5.7	0 IC 9	50.10.0104	LM317SP		Series regulator 1.5A ...+37V
0 C 204	59.05.1221	220p		PP, 1%, 630V	0 IC 10	50.63.0404	56004		DSP 56 004 40MHz
0 C 205	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 IC 11	50.06.0595	74LS595		SN 74 LS 595 N
0 C 206	59.68.0073	220u		EL 16V, 8.0*10.7	0 IC 12	50.06.0595	74LS595		SN 74 LS 595 N
0 C 207	59.60.2233	22p		CER 50V, 5%, COG, 0603	0 IC 13	1.940.978.20			SW 561 Dither+NS (50.63.1303)

**C4AD/24/NS, 24 Bit AD 1.940.563.20 ( 3)**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	IC 14	1.940.949.20			SW 562 MICADOR (50.63.4205)	0	R 15	57.60.1270		27R	MF, 1%, 0204, E24
0	IC 15	50.62.6014		74ACT 14	Hex inverting Schmitt trigger	0	R 16	57.92.7053		1.6A	PTC 30V
0	IC 16	50.14.1009		7C128A	SRAM 2K*8 35ns	0	R 17	57.60.1102		1k0	MF, 1%, 0204, E24
0	IC 17	1.940.948.20			SW 562 ADCBIT 24 (50.63.1303)	0	R 18	57.60.1102		1k0	MF, 1%, 0204, E24
0	IC 101	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 19	57.60.1103		10k	MF, 1%, 0204, E24
0	IC 102	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 20	57.60.1105		1M0	MF, 1%, 0204, E24
0	IC 103	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 21	57.60.1333		33k	MF, 1%, 0204, E24
3	IC 104	50.61.8108		AK5393	A/D Converter 24bit DS SOP28	0	R 22	57.60.1222		2k2	MF, 1%, 0204, E24
0	IC 201	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 23	57.60.1103		10k	MF, 1%, 0204, E24
0	IC 202	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 24	57.60.1220		22R	MF, 1%, 0204, E24
0	IC 301	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 25	57.60.1270		27R	MF, 1%, 0204, E24
0	IC 302	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 26	57.60.1220		22R	MF, 1%, 0204, E24
0	IC 303	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 27	57.60.1270		27R	MF, 1%, 0204, E24
3	IC 304	50.61.8108		AK5393	A/D Converter 24bit DS SOP28	0	R 28	not used		0R0	MF, 0204
0	IC 401	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 29	not used		0R0	MF, 0204
0	IC 402	50.61.0204		MC33078	Dual Op-Amp low noise	0	R 30	57.60.1103		10k	MF, 1%, 0204, E24
0	J 1	54.11.2009		96p	EU-R 3*32p	0	R 31	57.60.1103		10k	MF, 1%, 0204, E24
0	J 2	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 32	57.60.1333		33k	MF, 1%, 0204, E24
0	J 3	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 33	57.60.1333		33k	MF, 1%, 0204, E24
0	J 4	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 34	57.60.1221		220R	MF, 1%, 0204, E24
0	J 5	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 35	57.60.1221		220R	MF, 1%, 0204, E24
0	J 6	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 36	57.60.1103		10k	MF, 1%, 0204, E24
0	J 101	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 37	57.60.1102		1k0	MF, 1%, 0204, E24
0	J 201	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 38	57.60.1561		560R	MF, 1%, 0204, E24
0	J 301	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 39	57.60.1103		10k	MF, 1%, 0204, E24
0	J 401	54.01.0021		Jumper	0.63*0.63mm, Au	0	R 40	57.60.1103		10k	MF, 1%, 0204, E24
0	L 1	62.03.0010		48uH	2A Toroid Chocke	0	R 41	57.60.1103		10k	MF, 1%, 0204, E24
0	L 2	62.03.0010		48uH	2A Toroid Chocke	0	R 42	57.60.1103		10k	MF, 1%, 0204, E24
0	MP 1	1.940.562.11			D19M 24 BIT AD BOARD PCB	0	R 43	57.60.1221		220R	MF, 1%, 0204, E24
0	MP 2	1.940.563.04			TYPENSCHILD	0	R 44	57.60.1223		22k	MF, 1%, 0204, E24
0	MP 3	43.01.0108		Label	ESE-Warnschild	0	R 45	57.60.1103		10k	MF, 1%, 0204, E24
0	MP 4	1.101.001.20		Label	TEXT-ETIK. 5*20 HARDWARE -20	0	R 46	57.60.1105		1M0	MF, 1%, 0204, E24
0	MP 10	1.940.563.01	1 pce		FRONTPLATTE C4AD NS 24BIT	0	R 47	57.60.1102		1k0	MF, 1%, 0204, E24
0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE	0	R 48	57.60.1302		3k0	MF, 1%, 0204, E24
0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)	0	R 49	57.60.1102		1k0	MF, 1%, 0204, E24
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)	0	R 50	57.60.1220		22R	MF, 1%, 0204, E24
0	MP 14	49.02.0522	2 pcs		Kartenhalter mit Z-Schr	0	R 51	57.60.1104		100k	MF, 1%, 0204, E24
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp	0	R 52	57.60.1105		1M0	MF, 1%, 0204, E24
0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff	0	R 53	57.60.1102		1k0	MF, 1%, 0204, E24
1	MP 17	not used	2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr	0	R 54	57.60.1821		820R	MF, 1%, 0204, E24
					<i>Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten</i>	0	R 55	57.60.1000		0R0	MF, 0204
0	MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr	0	R 56	57.92.7019		0.4A	PTC 60V
0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15' 9	0	R 57	57.92.7019		0.4A	PTC 60V
0	MP 20	50.20.3004			Kühlkörper, TO 220, horizontal	0	R 58	57.60.1103		10k	MF, 1%, 0204, E24
2	MP 21	43.10.0110		A	Revisions-Etikette 5mm h/blau	0	R 59	57.60.1103		10k	MF, 1%, 0204, E24
0	P 1	not used		1p	Pin, 1reihig, gerade	0	R 60	57.60.1683		68k	MF, 1%, 0204, E24
0	P 2	not used		1p	Pin, 1reihig, gerade	0	R 61	57.60.1562		5k6	MF, 1%, 0204, E24
0	P 3	not used		1p	Pin, 1reihig, gerade	0	R 62	57.60.1103		10k	MF, 1%, 0204, E24
0	P 4	not used		1p	Pin, 1reihig, gerade	0	R 63	57.60.1475		4M7	MF, 1%, 0204, E24
0	P 5	not used		1p	Pin, 1reihig, gerade	0	R 64	57.60.1475		4M7	MF, 1%, 0204, E24
0	P 6	not used		1p	Pin, 1reihig, gerade	0	R 65	57.60.1106		10M	MF, 1%, 0204, E24
0	P 7	not used		1p	Pin, 1reihig, gerade	0	R 101	57.60.1152		1k5	MF, 1%, 0204, E24
0	P 8	54.01.0020		1p	Pin, 1reihig, gerade	0	R 102	57.60.1272		2k7	MF, 1%, 0204, E24
0	P 9	54.01.0020		1p	Pin, 1reihig, gerade	0	R 103	57.60.1122		1k2	MF, 1%, 0204, E24
0	P 10	54.01.0020		1p	Pin, 1reihig, gerade	0	R 104	57.60.1272		2k7	MF, 1%, 0204, E24
0	P 11	54.01.0020		1p	Pin, 1reihig, gerade	0	R 105	57.60.1821		820R	MF, 1%, 0204, E24
0	P 12	54.01.0020		1p	Pin, 1reihig, gerade	0	R 106	57.60.1472		4k7	MF, 1%, 0204, E24
0	P 13	54.01.0020		1p	Pin, 1reihig, gerade	0	R 107	57.60.1332		3k3	MF, 1%, 0204, E24
0	P 14	54.01.0020		1p	Pin, 1reihig, gerade	0	R 108	57.60.1222		2k2	MF, 1%, 0204, E24
0	P 15	54.01.0020		1p	Pin, 1reihig, gerade	0	R 109	57.60.1510		51R	MF, 1%, 0204, E24
0	P 16	54.01.0020		1p	Pin, 1reihig, gerade	0	R 110	57.60.1331		330R	MF, 1%, 0204, E24
0	P 17	54.01.0020		1p	Pin, 1reihig, gerade	0	R 111	57.60.1681		680R	MF, 1%, 0204, E24
0	P 18	54.01.0020		1p	Pin, 1reihig, gerade	0	R 112	57.60.1332		3k3	MF, 1%, 0204, E24
0	P 19	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 113	57.60.1103		10k	MF, 1%, 0204, E24
0	P 101	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 114	57.60.1102		1k0	MF, 1%, 0204, E24
0	P 201	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 115	57.60.1333		33k	MF, 1%, 0204, E24
0	P 301	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 116	57.60.1152		1k5	MF, 1%, 0204, E24
0	P 401	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54	0	R 117	57.60.1103		10k	MF, 1%, 0204, E24
0	Q 1	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 118	57.60.1332		3k3	MF, 1%, 0204, E24
0	Q 2	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 119	57.60.1332		3k3	MF, 1%, 0204, E24
0	Q 3	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 120	57.60.1222		2k2	MF, 1%, 0204, E24
0	Q 4	50.60.0001		BC847B	NPN 45V 100mA SOT 23	0	R 121	57.60.1392		3k9	MF, 1%, 0204, E24
0	Q 5	50.60.1001		BC857B	PNP 45V 100mA SOT 23	0	R 122	57.60.1472		4k7	MF, 1%, 0204, E24
0	R 1	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 123	57.60.1510		51R	MF, 1%, 0204, E24
0	R 2	57.60.1472		4k7	MF, 1%, 0204, E24	0	R 124	57.60.1103		10k	MF, 1%, 0204, E24
0	R 3	57.60.1333		33k	MF, 1%, 0204, E24	0	R 125	57.60.1229		2R2	MF, 1%, 0204, E24
0	R 4	57.60.1333		33k	MF, 1%, 0204, E24	0	R 201	57.60.1152		1k5	MF, 1%, 0204, E24
0	R 5	57.60.1333		33k	MF, 1%, 0204, E24	0	R 202	57.60.1272		2k7	MF, 1%, 0204, E24
0	R 6	57.60.1220		22R	MF, 1%, 0204, E24	0	R 203	57.60.1122		1k2	MF, 1%, 0204, E24
0	R 7	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 204	57.60.1272		2k7	MF, 1%, 0204, E24
0	R 8	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 205	57.60.1821		820R	MF, 1%, 0204, E24
0	R 9	57.60.1220		22R	MF, 1%, 0204, E24	0	R 206	57.60.1472		4k7	MF, 1%, 0204, E24
0	R 10	57.60.1823		82k	MF, 1%, 0204, E24	0	R 207	57.60.1332		3k3	MF, 1%, 0204, E24
0	R 11	57.60.1105		1M0	MF, 1%, 0204, E24	0	R 208	57.60.1222		2k2	MF, 1%, 0204, E24
0	R 12	57.60.1222		2k2	MF, 1%, 0204, E24	0	R 209	57.60.1510		51R	MF, 1%, 0204, E24
0	R 13	57.60.1220		22R	MF, 1%, 0204, E24	0	R 210	57.60.1331		330R	MF, 1%, 0204, E24
0	R 14	57.60.1270		27R	MF, 1%, 0204, E24	0	R 211	57.60.1681		680R	MF, 1%, 0204, E24



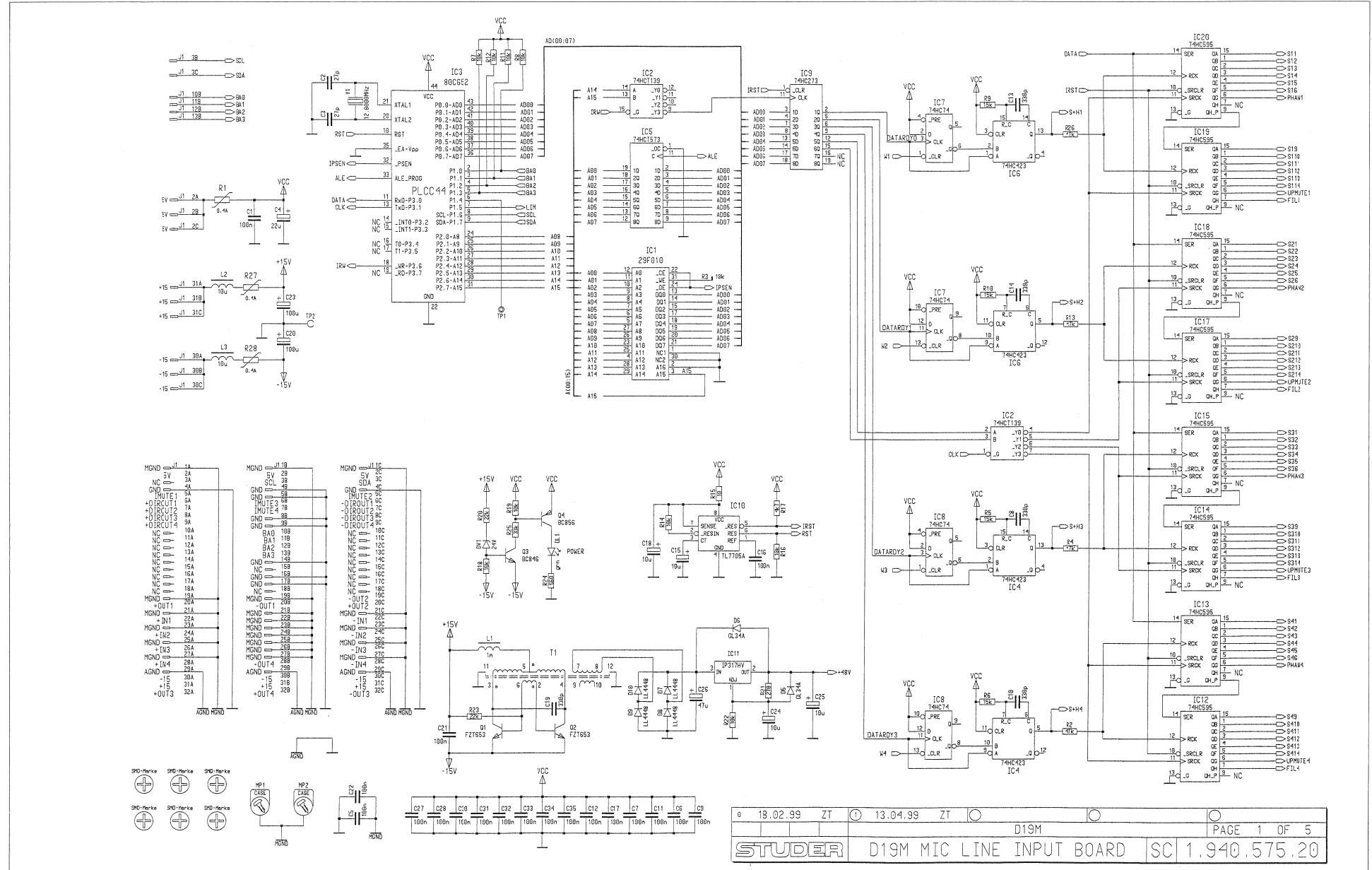
**C4AD/24/NS, 24 Bit AD 1.940.563.20 ( 3)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	R 212	57.60.1332	3k3	MF, 1%, 0204, E24	0	XDL 9	50.20.2501	Spacer	LED-Sockel
0	R 213	57.60.1103	10k	MF, 1%, 0204, E24	0	XDL 10	50.20.2501	Spacer	LED-Sockel
0	R 214	57.60.1102	1k0	MF, 1%, 0204, E24	0	XIC 4	53.03.0168	16p	DIL-socket 0.3"
0	R 215	57.60.1333	33k	MF, 1%, 0204, E24	0	XIC 5	53.03.0168	16p	DIL-socket 0.3"
0	R 216	57.60.1152	1k5	MF, 1%, 0204, E24	0	XIC 13	53.03.2232	32p	PLCC-Socket
0	R 217	57.60.1103	10k	MF, 1%, 0204, E24	0	XIC 14	53.03.2284	84p	PLCC-Socket
0	R 218	57.60.1332	3k3	MF, 1%, 0204, E24	0	XIC 17	53.03.2232	32p	PLCC-Socket
0	R 219	57.60.1332	3k3	MF, 1%, 0204, E24	0	XT 101	1.022.400.03		ISOLATION
0	R 220	57.60.1222	2k2	MF, 1%, 0204, E24	0	XT 201	1.022.400.03		ISOLATION
0	R 221	57.60.1392	3k9	MF, 1%, 0204, E24	0	XT 301	1.022.400.03		ISOLATION
0	R 222	57.60.1472	4k7	MF, 1%, 0204, E24	0	XT 401	1.022.400.03		ISOLATION
0	R 223	57.60.1510	51R	MF, 1%, 0204, E24	0	XY 1	89.01.1499		QUARZ - ISOLIERPLATTE
0	R 301	57.60.1152	1k5	MF, 1%, 0204, E24	0	XY 2	89.01.1499		QUARZ - ISOLIERPLATTE
0	R 302	57.60.1272	2k7	MF, 1%, 0204, E24	0	Y 1	89.01.0559	11.289MHz	XTAL
0	R 303	57.60.1122	1k2	MF, 1%, 0204, E24	0	Y 2	89.01.1015	12.288MHz	XTAL HC 49/U
0	R 304	57.60.1272	2k7	MF, 1%, 0204, E24					
0	R 305	57.60.1821	820R	MF, 1%, 0204, E24					
0	R 306	57.60.1472	4k7	MF, 1%, 0204, E24					
0	R 307	57.60.1332	3k3	MF, 1%, 0204, E24					
0	R 308	57.60.1222	2k2	MF, 1%, 0204, E24					
0	R 309	57.60.1510	51R	MF, 1%, 0204, E24					
0	R 310	57.60.1331	330R	MF, 1%, 0204, E24					
0	R 311	57.60.1681	680R	MF, 1%, 0204, E24					
0	R 312	57.60.1332	3k3	MF, 1%, 0204, E24					
0	R 313	57.60.1103	10k	MF, 1%, 0204, E24					
0	R 314	57.60.1102	1k0	MF, 1%, 0204, E24					
0	R 315	57.60.1333	33k	MF, 1%, 0204, E24					
0	R 316	57.60.1152	1k5	MF, 1%, 0204, E24					
0	R 317	57.60.1103	10k	MF, 1%, 0204, E24					
0	R 318	57.60.1332	3k3	MF, 1%, 0204, E24					
0	R 319	57.60.1332	3k3	MF, 1%, 0204, E24					
0	R 320	57.60.1222	2k2	MF, 1%, 0204, E24					
0	R 321	57.60.1392	3k9	MF, 1%, 0204, E24					
0	R 322	57.60.1472	4k7	MF, 1%, 0204, E24					
0	R 323	57.60.1510	51R	MF, 1%, 0204, E24					
0	R 324	57.60.1229	2R2	MF, 1%, 0204, E24					
0	R 325	57.60.1103	10k	MF, 1%, 0204, E24					
0	R 401	57.60.1152	1k5	MF, 1%, 0204, E24					
0	R 402	57.60.1272	2k7	MF, 1%, 0204, E24					
0	R 403	57.60.1122	1k2	MF, 1%, 0204, E24					
0	R 404	57.60.1272	2k7	MF, 1%, 0204, E24					
0	R 405	57.60.1821	820R	MF, 1%, 0204, E24					
0	R 406	57.60.1472	4k7	MF, 1%, 0204, E24					
0	R 407	57.60.1332	3k3	MF, 1%, 0204, E24					
0	R 408	57.60.1222	2k2	MF, 1%, 0204, E24					
0	R 409	57.60.1510	51R	MF, 1%, 0204, E24					
0	R 410	57.60.1331	330R	MF, 1%, 0204, E24					
0	R 411	57.60.1681	680R	MF, 1%, 0204, E24					
0	R 412	57.60.1332	3k3	MF, 1%, 0204, E24					
0	R 413	57.60.1103	10k	MF, 1%, 0204, E24					
0	R 414	57.60.1102	1k0	MF, 1%, 0204, E24					
0	R 415	57.60.1333	33k	MF, 1%, 0204, E24					
0	R 416	57.60.1152	1k5	MF, 1%, 0204, E24					
0	R 417	57.60.1103	10k	MF, 1%, 0204, E24					
0	R 418	57.60.1332	3k3	MF, 1%, 0204, E24					
0	R 419	57.60.1332	3k3	MF, 1%, 0204, E24					
0	R 420	57.60.1222	2k2	MF, 1%, 0204, E24					
0	R 421	57.60.1392	3k9	MF, 1%, 0204, E24					
0	R 422	57.60.1472	4k7	MF, 1%, 0204, E24					
0	R 423	57.60.1510	51R	MF, 1%, 0204, E24					
0	RA 101	58.05.1201	200R	10%, 0.5W, Cermet					
0	RA 102	58.05.1202	2k0	10%, 0.5W, Cermet					
0	RA 201	58.05.1201	200R	10%, 0.5W, Cermet					
0	RA 202	58.05.1202	2k0	10%, 0.5W, Cermet					
0	RA 301	58.05.1201	200R	10%, 0.5W, Cermet					
0	RA 302	58.05.1202	2k0	10%, 0.5W, Cermet					
0	RA 401	58.05.1201	200R	10%, 0.5W, Cermet					
0	RA 402	58.05.1202	2k0	10%, 0.5W, Cermet					
0	RZ 1	57.88.4103	10k	8*R Resistor-Netw 2% SIP9					
0	RZ 2	57.88.4103	10k	8*R Resistor-Netw 2% SIP9					
0	RZ 3	57.88.4103	10k	8*R Resistor-Netw 2% SIP9					
0	S 1	55.11.0202	SPDT	Toggle 1 * on-none-on					
0	S 2	55.11.0202	SPDT	Toggle 1 * on-none-on					
0	T 1	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU					
0	T 2	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU					
0	T 3	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU					
0	T 4	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU					
0	T 5	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 101	1.022.454.00	1:0.175	EINGANGSTRAFO 1:0,175					
0	T 201	1.022.454.00	1:0.175	EINGANGSTRAFO 1:0,175					
0	T 301	1.022.454.00	1:0.175	EINGANGSTRAFO 1:0,175					
0	T 401	1.022.454.00	1:0.175	EINGANGSTRAFO 1:0,175					
0	TP 1	54.33.6010	2.8*0.8	PCB-Flachstecker, gerade					
0	XDL 1	50.20.2501	Spacer	LED-Sockel					
0	XDL 3	50.20.2501	Spacer	LED-Sockel					
0	XDL 5	not used	Spacer	LED-Sockel					
0	XDL 7	50.20.2501	Spacer	LED-Sockel					

End of List

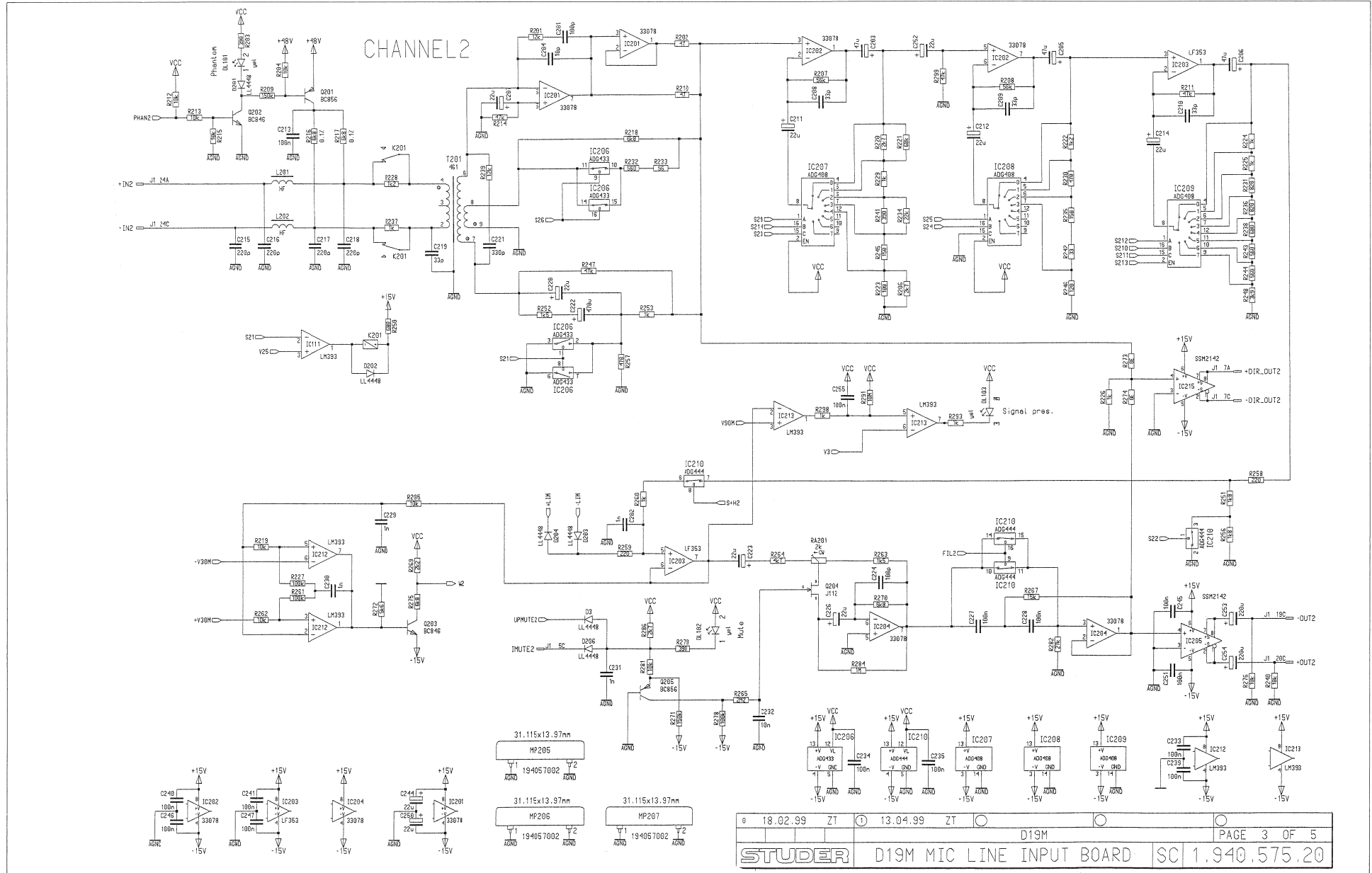
- (1) 12.04.00 MP 17 not used
- (2) 13.11.00 Additionally D7 and MP21
- (3) 23.09.03 IC104/304 changed to 50.61.8108 (improved price/performance ratio)

D19m Mic Line Input Board 1.940.575.20



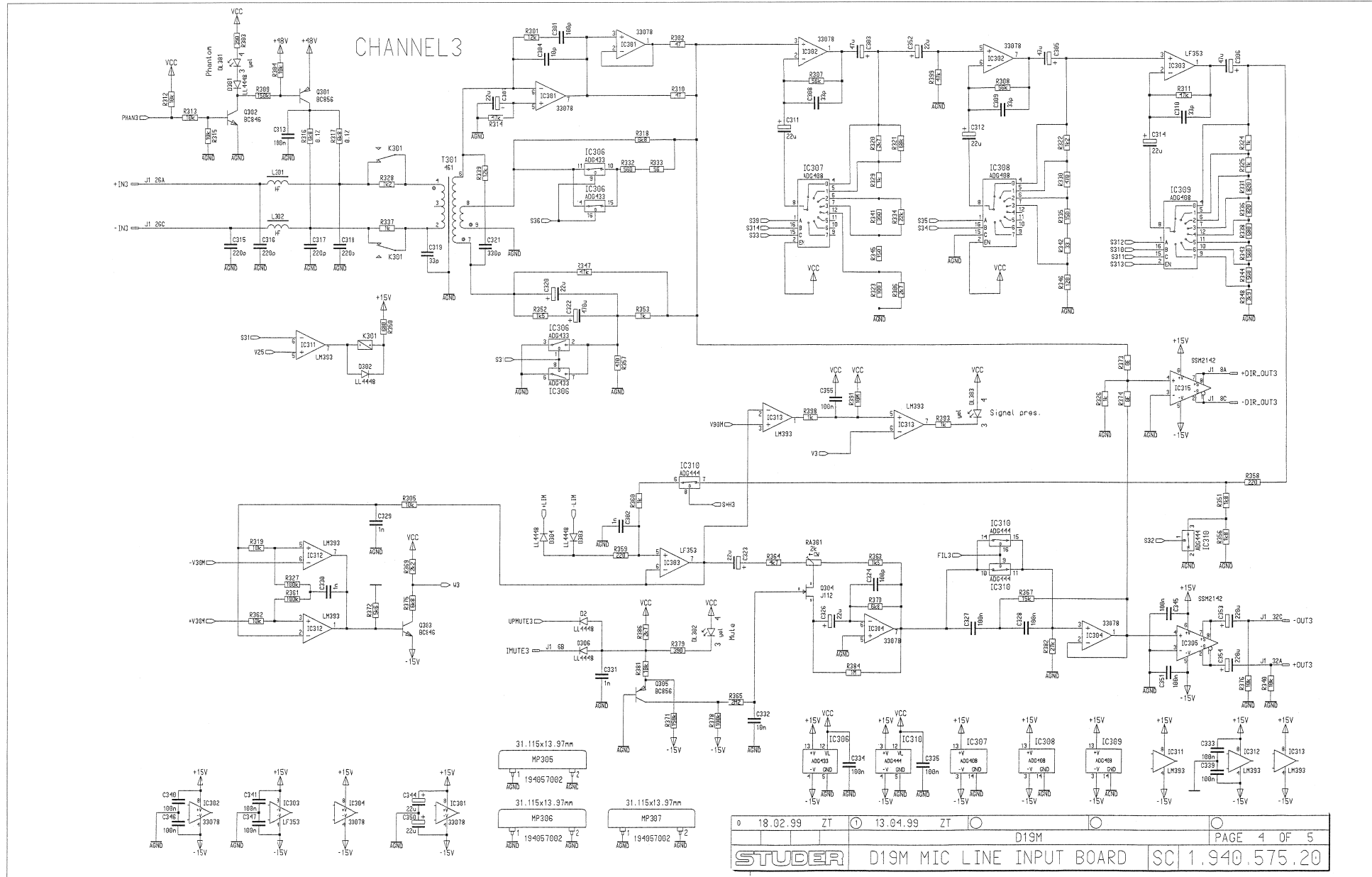


D19m Mic Line Input Board 1.940.575.20



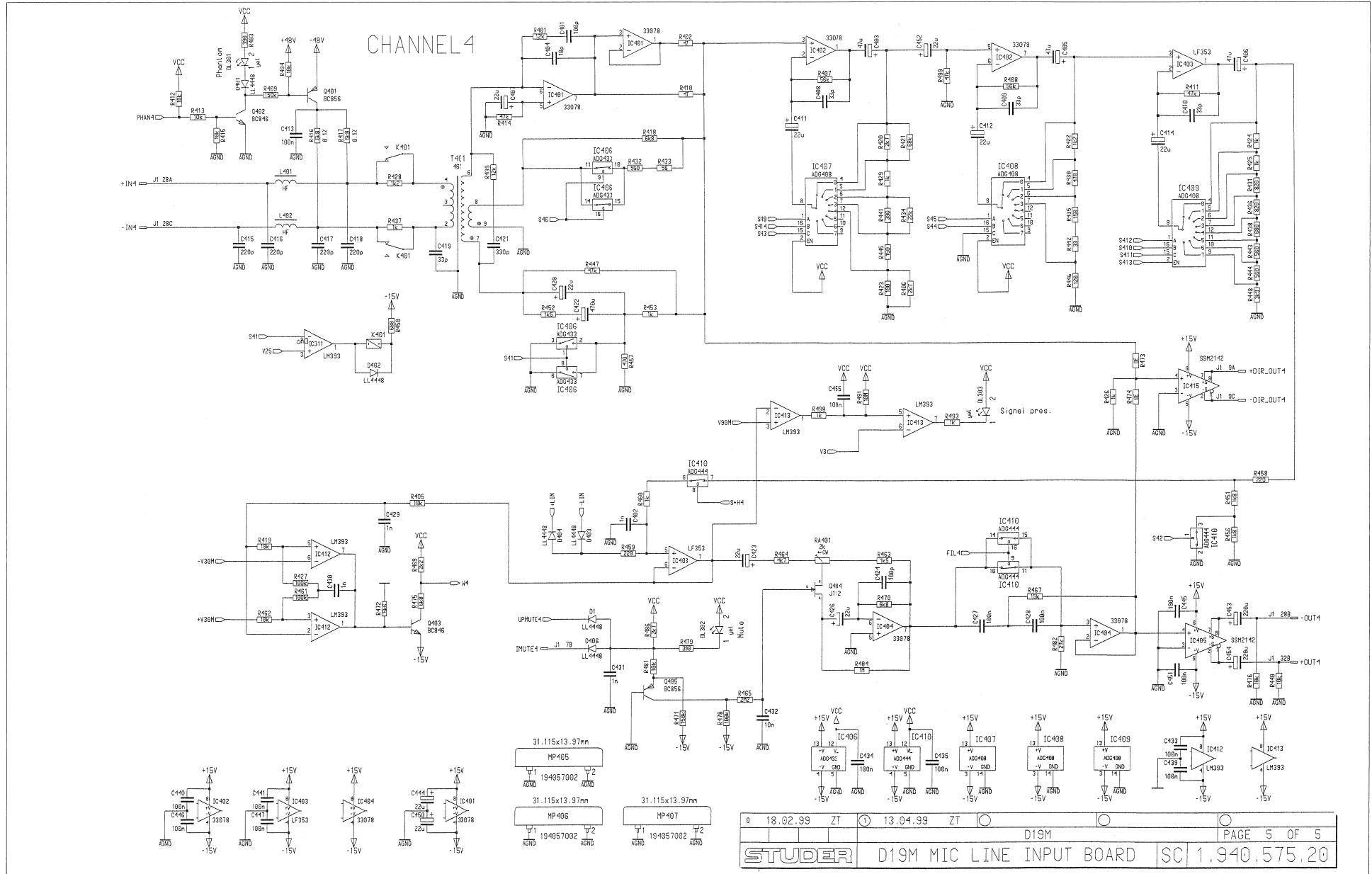


D19m Mic Line Input Board 1.940.575.20



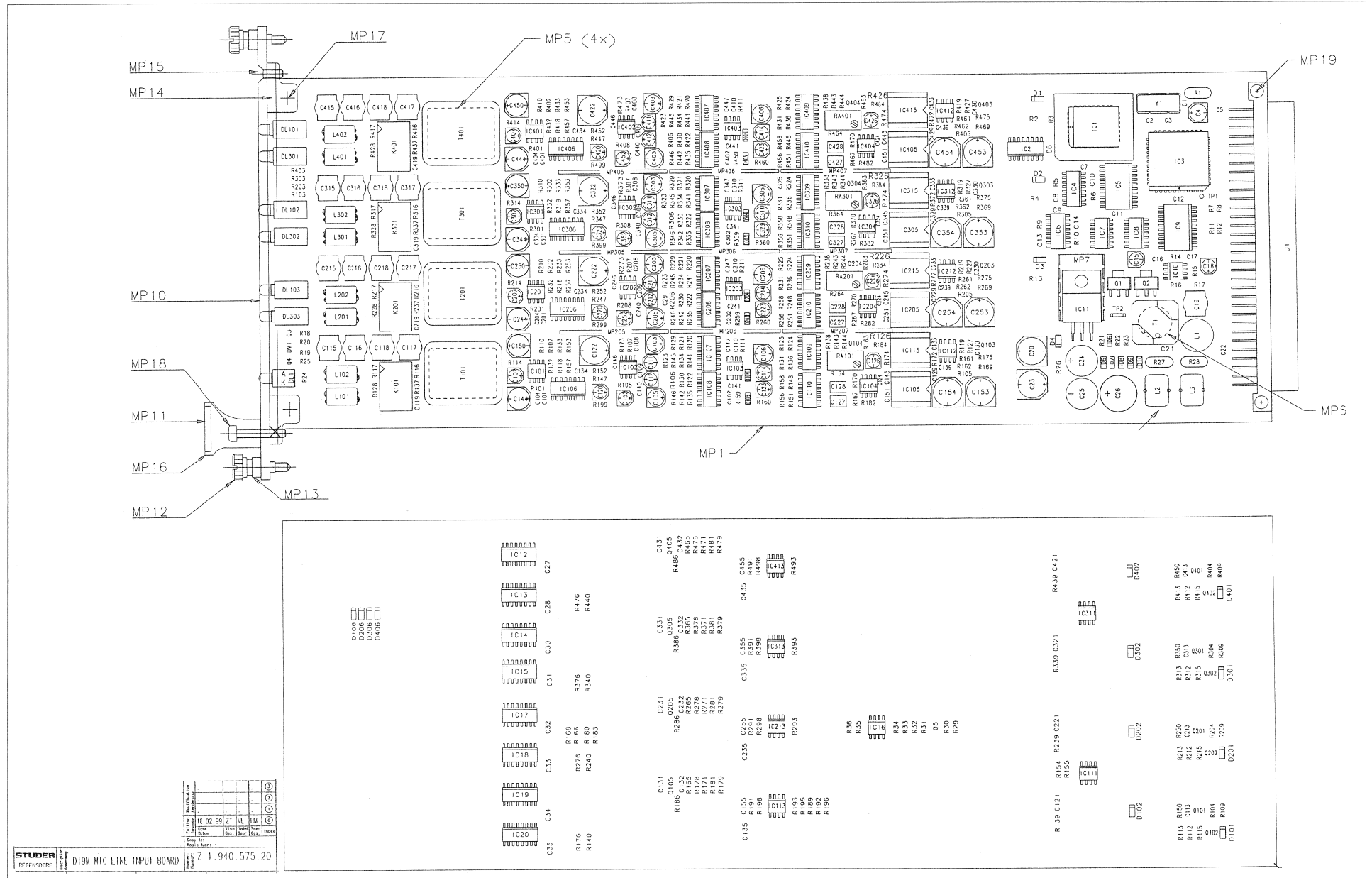


D19m Mic Line Input Board 1.940.575.20





D19m Mic Line Input Board I.940.575.20



Part No.	Qty	Part No.	Qty
IC1	1	IC19	1
IC2	1	IC20	1
IC3	1		
IC4	1		
IC5	1		
IC6	1		
IC7	1		
IC8	1		
IC9	1		
IC10	1		
IC11	1		
IC12	1		
IC13	1		
IC14	1		
IC15	1		
IC16	1		
IC17	1		
IC18	1		
IC19	1		
IC20	1		

C106	C107	C108	C109	C110	C111	C112	C113	C114	C115	C116	C117	C118	C119	C120	C121	C122	C123	C124	C125	C126	C127	C128	C129	C130	C131	C132	C133	C134	C135	C136	C137	C138	C139	C140	C141	C142	C143	C144	C145	C146	C147	C148	C149	C150	C151	C152	C153	C154	C155	C156	C157	C158	C159	C160	C161	C162	C163	C164	C165	C166	C167	C168	C169	C170	C171	C172	C173	C174	C175	C176	C177	C178	C179	C180	C181	C182	C183	C184	C185	C186	C187	C188	C189	C190	C191	C192	C193	C194	C195	C196	C197	C198	C199	C200	C201	C202	C203	C204	C205	C206	C207	C208	C209	C210	C211	C212	C213	C214	C215	C216	C217	C218	C219	C220	C221	C222	C223	C224	C225	C226	C227	C228	C229	C230	C231	C232	C233	C234	C235	C236	C237	C238	C239	C240	C241	C242	C243	C244	C245	C246	C247	C248	C249	C250	C251	C252	C253	C254	C255	C256	C257	C258	C259	C260	C261	C262	C263	C264	C265	C266	C267	C268	C269	C270	C271	C272	C273	C274	C275	C276	C277	C278	C279	C280	C281	C282	C283	C284	C285	C286	C287	C288	C289	C290	C291	C292	C293	C294	C295	C296	C297	C298	C299	C300	C301	C302	C303	C304	C305	C306	C307	C308	C309	C310	C311	C312	C313	C314	C315	C316	C317	C318	C319	C320	C321	C322	C323	C324	C325	C326	C327	C328	C329	C330	C331	C332	C333	C334	C335	C336	C337	C338	C339	C340	C341	C342	C343	C344	C345	C346	C347	C348	C349	C350	C351	C352	C353	C354	C355	C356	C357	C358	C359	C360	C361	C362	C363	C364	C365	C366	C367	C368	C369	C370	C371	C372	C373	C374	C375	C376	C377	C378	C379	C380	C381	C382	C383	C384	C385	C386	C387	C388	C389	C390	C391	C392	C393	C394	C395	C396	C397	C398	C399	C400	C401	C402	C403	C404	C405	C406	C407	C408	C409	C410	C411	C412	C413	C414	C415	C416	C417	C418	C419	C420	C421	C422	C423	C424	C425	C426	C427	C428	C429	C430	C431	C432	C433	C434	C435	C436	C437	C438	C439	C440	C441	C442	C443	C444	C445	C446	C447	C448	C449	C450	C451	C452	C453	C454	C455	C456	C457	C458	C459	C460	C461	C462	C463	C464	C465	C466	C467	C468	C469	C470	C471	C472	C473	C474	C475	C476	C477	C478	C479	C480	C481	C482	C483	C484	C485	C486	C487	C488	C489	C490	C491	C492	C493	C494	C495	C496	C497	C498	C499	C500	C501	C502	C503	C504	C505	C506	C507	C508	C509	C510	C511	C512	C513	C514	C515	C516	C517	C518	C519	C520	C521	C522	C523	C524	C525	C526	C527	C528	C529	C530	C531	C532	C533	C534	C535	C536	C537	C538	C539	C540	C541	C542	C543	C544	C545	C546	C547	C548	C549	C550	C551	C552	C553	C554	C555	C556	C557	C558	C559	C560	C561	C562	C563	C564	C565	C566	C567	C568	C569	C570	C571	C572	C573	C574	C575	C576	C577	C578	C579	C580	C581	C582	C583	C584	C585	C586	C587	C588	C589	C590	C591	C592	C593	C594	C595	C596	C597	C598	C599	C600	C601	C602	C603	C604	C605	C606	C607	C608	C609	C610	C611	C612	C613	C614	C615	C616	C617	C618	C619	C620	C621	C622	C623	C624	C625	C626	C627	C628	C629	C630	C631	C632	C633	C634	C635	C636	C637	C638	C639	C640	C641	C642	C643	C644	C645	C646	C647	C648	C649	C650	C651	C652	C653	C654	C655	C656	C657	C658	C659	C660	C661	C662	C663	C664	C665	C666	C667	C668	C669	C670	C671	C672	C673	C674	C675	C676	C677	C678	C679	C680	C681	C682	C683	C684	C685	C686	C687	C688	C689	C690	C691	C692	C693	C694	C695	C696	C697	C698	C699	C700	C701	C702	C703	C704	C705	C706	C707	C708	C709	C710	C711	C712	C713	C714	C715	C716	C717	C718	C719	C720	C721	C722	C723	C724	C725	C726	C727	C728	C729	C730	C731	C732	C733	C734	C735	C736	C737	C738	C739	C740	C741	C742	C743	C744	C745	C746	C747	C748	C749	C750	C751	C752	C753	C754	C755	C756	C757	C758	C759	C760	C761	C762	C763	C764	C765	C766	C767	C768	C769	C770	C771	C772	C773	C774	C775	C776	C777	C778	C779	C780	C781	C782	C783	C784	C785	C786	C787	C788	C789	C790	C791	C792	C793	C794	C795	C796	C797	C798	C799	C800	C801	C802	C803	C804	C805	C806	C807	C808	C809	C810	C811	C812	C813	C814	C815	C816	C817	C818	C819	C820	C821	C822	C823	C824	C825	C826	C827	C828	C829	C830	C831	C832	C833	C834	C835	C836	C837	C838	C839	C840	C841	C842	C843	C844	C845	C846	C847	C848	C849	C850	C851	C852	C853	C854	C855	C856	C857	C858	C859	C860	C861	C862	C863	C864	C865	C866	C867	C868	C869	C870	C871	C872	C873	C874	C875	C876	C877	C878	C879	C880	C881	C882	C883	C884	C885	C886	C887	C888	C889	C890	C891	C892	C893	C894	C895	C896	C897	C898	C899	C900	C901	C902	C903	C904	C905	C906	C907	C908	C909	C910	C911	C912	C913	C914	C915	C916	C917	C918	C919	C920	C921	C922	C923	C924	C925	C926	C927	C928	C929	C930	C931	C932	C933	C934	C935	C936	C937	C938	C939	C940	C941	C942	C943	C944	C945	C946	C947	C948	C949	C950	C951	C952	C953	C954	C955	C956	C957	C958	C959	C960	C961	C962	C963	C964	C965	C966	C967	C968	C969	C970	C971	C972	C973	C974	C975	C976	C977	C978	C979	C980	C981	C982	C983	C984	C985	C986	C987	C988	C989	C990	C991	C992	C993	C994	C995	C996	C997	C998	C999	C1000
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**D19m Mic Line Input Board 1.940.575.22 ( 3)**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 206	59.68.0027	47u		EL 6V, 5.0*5.7
0	C 2	59.60.2235	27p		CER 50V, 5%, C0G, 0603	0	C 207	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 3	59.60.2235	27p		CER 50V, 5%, C0G, 0603	0	C 208	59.60.2237	33p		CER 50V, 5%, C0G, 0603
0	C 4	59.68.0067	22u		EL 16V, 5.0*5.7	0	C 209	59.60.2237	33p		CER 50V, 5%, C0G, 0603
0	C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 210	59.60.2237	33p		CER 50V, 5%, C0G, 0603
0	C 6	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 211	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 7	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 212	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 8	59.60.2361	330p		CER 50V, 5%, C0G, 0805	0	C 213	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 9	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 214	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 10	59.60.2361	330p		CER 50V, 5%, C0G, 0805	0	C 215	59.05.1221	220p		PP, 1%, 630V
0	C 11	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 216	59.05.1221	220p		PP, 1%, 630V
0	C 12	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 217	59.05.1221	220p		PP, 1%, 630V
0	C 13	59.60.2361	330p		CER 50V, 5%, C0G, 0805	0	C 218	59.05.1221	220p		PP, 1%, 630V
0	C 14	59.60.2361	330p		CER 50V, 5%, C0G, 0805	0	C 219	59.60.2237	33p		CER 50V, 5%, C0G, 0603
0	C 15	59.68.0065	10u		EL 16V, 4.0*5.7	0	C 220	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 16	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 221	59.60.2361	330p		CER 50V, 5%, C0G, 0805
0	C 17	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 222	59.68.0033	470u		EL 6V, 8.0*10.7
0	C 18	59.68.0065	10u		EL 16V, 4.0*5.7	0	C 223	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 19	59.05.2331	330p		PP, 2.5%, 630V	0	C 224	59.60.2249	100p		CER 50V, 5%, C0G, 0603
0	C 20	59.68.0115	100u		EL 35V, 8.0*10.7	0	C 226	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 21	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 227	59.63.0125	100n		PEN 50V, 5%, 1812
0	C 22	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 228	59.63.0125	100n		PEN 50V, 5%, 1812
0	C 23	59.68.0115	100u		EL 35V, 8.0*10.7	0	C 229	59.60.2373	1n0		CER 50V, 5%, C0G, 0805
0	C 24	59.22.8100	10u		EL 63V 20% RM5	0	C 230	59.60.2373	1n0		CER 50V, 5%, C0G, 0805
0	C 25	59.22.8100	10u		EL 63V 20% RM5	0	C 231	59.60.2373	1n0		CER 50V, 5%, C0G, 0805
0	C 26	59.22.8470	47u		EL 63V 20% RM5	0	C 232	59.60.3325	10n		CER 50V, 10%, X7R, 0805
0	C 27	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 233	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 28	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 234	not used	100n		CER 50V, 10%, X7R, 0805
0	C 29	59.60.2237	33p		CER 50V, 5%, C0G, 0603	0	C 235	not used	100n		CER 50V, 10%, X7R, 0805
0	C 30	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 239	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 31	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 240	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 32	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 241	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 33	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 244	59.68.0111	22u		EL 35V, 6.3*5.7
0	C 34	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 245	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 35	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 246	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 101	59.60.2249	100p		CER 50V, 5%, C0G, 0603	0	C 247	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 102	59.60.2373	1n0		CER 50V, 5%, C0G, 0805	0	C 250	59.68.0111	22u		EL 35V, 6.3*5.7
0	C 103	59.68.0027	47u		EL 6V, 5.0*5.7	0	C 251	59.60.3337	100n		CER 50V, 10%, X7R, 0805
1	C 104	59.60.2233	22p		CER 50V, 5%, C0G, 0603	0	C 252	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 105	59.68.0027	47u		EL 6V, 5.0*5.7	0	C 253	59.68.0031	220u		EL 6V, 8.0*6.3
0	C 106	59.68.0027	47u		EL 6V, 5.0*5.7	0	C 254	59.68.0031	220u		EL 6V, 8.0*6.3
0	C 107	59.68.0025	22u		EL 6V, 4.0*5.7	0	C 255	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 108	59.60.2237	33p		CER 50V, 5%, C0G, 0603	0	C 301	59.60.2249	100p		CER 50V, 5%, C0G, 0603
0	C 109	59.60.2237	33p		CER 50V, 5%, C0G, 0603	0	C 302	59.60.2373	1n0		CER 50V, 5%, C0G, 0805
0	C 110	59.60.2237	33p		CER 50V, 5%, C0G, 0603	0	C 303	59.68.0027	47u		EL 6V, 5.0*5.7
0	C 111	59.68.0025	22u		EL 6V, 4.0*5.7	1	C 304	59.60.2233	22p		CER 50V, 5%, C0G, 0603
0	C 112	59.68.0025	22u		EL 6V, 4.0*5.7	0	C 305	59.68.0027	47u		EL 6V, 5.0*5.7
0	C 113	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 306	59.68.0027	47u		EL 6V, 5.0*5.7
0	C 114	59.68.0025	22u		EL 6V, 4.0*5.7	0	C 307	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 115	59.05.1221	220p		PP, 1%, 630V	0	C 308	59.60.2237	33p		CER 50V, 5%, C0G, 0603
0	C 116	59.05.1221	220p		PP, 1%, 630V	0	C 309	59.60.2237	33p		CER 50V, 5%, C0G, 0603
0	C 117	59.05.1221	220p		PP, 1%, 630V	0	C 310	59.60.2237	33p		CER 50V, 5%, C0G, 0603
0	C 118	59.05.1221	220p		PP, 1%, 630V	0	C 311	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 119	59.60.2237	33p		CER 50V, 5%, C0G, 0603	0	C 312	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 120	59.68.0025	22u		EL 6V, 4.0*5.7	0	C 313	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 121	59.60.2361	330p		CER 50V, 5%, C0G, 0805	0	C 314	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 122	59.68.0033	470u		EL 6V, 8.0*10.7	0	C 315	59.05.1221	220p		PP, 1%, 630V
0	C 123	59.68.0025	22u		EL 6V, 4.0*5.7	0	C 316	59.05.1221	220p		PP, 1%, 630V
0	C 124	59.60.2249	100p		CER 50V, 5%, C0G, 0603	0	C 317	59.05.1221	220p		PP, 1%, 630V
0	C 126	59.68.0025	22u		EL 6V, 4.0*5.7	0	C 318	59.05.1221	220p		PP, 1%, 630V
0	C 127	59.63.0125	100n		PEN 50V, 5%, 1812	0	C 319	59.60.2237	33p		CER 50V, 5%, C0G, 0603
0	C 128	59.63.0125	100n		PEN 50V, 5%, 1812	0	C 320	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 129	59.60.2373	1n0		CER 50V, 5%, C0G, 0805	0	C 321	59.60.2361	330p		CER 50V, 5%, C0G, 0805
0	C 130	59.60.2373	1n0		CER 50V, 5%, C0G, 0805	0	C 322	59.68.0033	470u		EL 6V, 8.0*10.7
0	C 131	59.60.2373	1n0		CER 50V, 5%, C0G, 0805	0	C 323	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 132	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	C 324	59.60.2249	100p		CER 50V, 5%, C0G, 0603
0	C 133	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 326	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 134	not used	100n		CER 50V, 10%, X7R, 0805	0	C 327	59.63.0125	100n		PEN 50V, 5%, 1812
0	C 135	not used	100n		CER 50V, 10%, X7R, 0805	0	C 328	59.63.0125	100n		PEN 50V, 5%, 1812
0	C 139	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 329	59.60.2373	1n0		CER 50V, 5%, C0G, 0805
0	C 140	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 330	59.60.2373	1n0		CER 50V, 5%, C0G, 0805
0	C 141	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 331	59.60.2373	1n0		CER 50V, 5%, C0G, 0805
0	C 144	59.68.0111	22u		EL 35V, 6.3*5.7	0	C 332	59.60.3325	10n		CER 50V, 10%, X7R, 0805
0	C 145	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 333	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 146	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 334	not used	100n		CER 50V, 10%, X7R, 0805
0	C 147	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 335	not used	100n		CER 50V, 10%, X7R, 0805
0	C 150	59.68.0111	22u		EL 35V, 6.3*5.7	0	C 339	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 151	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 340	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 152	59.68.0025	22u		EL 6V, 4.0*5.7	0	C 341	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 153	59.68.0031	220u		EL 6V, 8.0*6.3	0	C 344	59.68.0111	22u		EL 35V, 6.3*5.7
0	C 154	59.68.0031	220u		EL 6V, 8.0*6.3	0	C 345	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 155	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	C 346	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 201	59.60.2249	100p		CER 50V, 5%, C0G, 0603	0	C 347	59.60.3337	100n		CER 50V, 10%, X7R, 0805
0	C 202	59.60.2373	1n0		CER 50V, 5%, C0G, 0805	0	C 350	59.68.0111	22u		EL 35V, 6.3*5.7
0	C 203	59.68.0027	47u		EL 6V, 5.0*5.7	0	C 351	59.60.3337	100n		CER 50V, 10%, X7R, 0805
1	C 204	59.60.2233	22p		CER 50V, 5%, C0G, 0603	0	C 352	59.68.0025	22u		EL 6V, 4.0*5.7
0	C 205	59.68.0027	47u		EL 6V, 5.0*5.7	0	C 353	59.68.0031	220u		EL 6V, 8.0*6.3



D19m Mic Line Input Board 1.940.575.22 ( 3)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 354	59.68.0031	220u		EL 6V, 8.0*6.3	0	IC 1	1.940.984.21			SW 575 Preamp (50.63.1303)
0	C 355	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 2	50.62.3139		74HCT139	Dual 2 to 4 line decoder
0	C 401	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 3	50.63.0009		80C652	MPU 8bit
0	C 402	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0	IC 4	50.62.1423		74HC423	Dual multivibr monost retrigg
0	C 403	59.68.0027	47u		EL 6V, 5.0*5.7	0	IC 5	50.62.3573		74HCT573	Octal D-type latch
1	C 404	59.60.2233	22p		CER 50V, 5%, COG, 0603	0	IC 6	50.62.1423		74HC423	Dual multivibr monost retrigg
0	C 405	59.68.0027	47u		EL 6V, 5.0*5.7	0	IC 7	50.62.1074		74HC 74	Dual D-type FF, preset clear
0	C 406	59.68.0027	47u		EL 6V, 5.0*5.7	0	IC 8	50.62.1074		74HC 74	Dual D-type FF, preset clear
0	C 407	59.68.0025	22u		EL 6V, 4.0*5.7	0	IC 9	50.62.1273		74HC273	Octal D-FF with reset
0	C 408	59.60.2237	33p		CER 50V, 5%, COG, 0603	0	IC 10	50.63.2001		7705B	Reset Generator
0	C 409	59.60.2237	33p		CER 50V, 5%, COG, 0603	0	IC 11	50.10.0116		LM317HV	IC IP 317 HVT, LM 317 HVT
0	C 410	59.60.2237	33p		CER 50V, 5%, COG, 0603	0	IC 12	50.62.1595		74HC595	8bit shift/output register
0	C 411	59.68.0025	22u		EL 6V, 4.0*5.7	0	IC 13	50.62.1595		74HC595	8bit shift/output register
0	C 412	59.68.0025	22u		EL 6V, 4.0*5.7	0	IC 14	50.62.1595		74HC595	8bit shift/output register
0	C 413	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 15	50.62.1595		74HC595	8bit shift/output register
0	C 414	59.68.0025	22u		EL 6V, 4.0*5.7	0	IC 16	50.61.0204		MC33078	Dual Op-Amp low noise
0	C 415	59.05.1221	220p		PP, 1%, 630V	0	IC 17	50.62.1595		74HC595	8bit shift/output register
0	C 416	59.05.1221	220p		PP, 1%, 630V	0	IC 18	50.62.1595		74HC595	8bit shift/output register
0	C 417	59.05.1221	220p		PP, 1%, 630V	0	IC 19	50.62.1595		74HC595	8bit shift/output register
0	C 418	59.05.1221	220p		PP, 1%, 630V	0	IC 20	50.62.1595		74HC595	8bit shift/output register
0	C 419	59.60.2237	33p		CER 50V, 5%, COG, 0603	0	IC 101	50.61.0204		MC33078	Dual Op-Amp low noise
0	C 420	59.68.0025	22u		EL 6V, 4.0*5.7	0	IC 102	50.61.0204		MC33078	Dual Op-Amp low noise
0	C 421	59.60.2361	330p		CER 50V, 5%, COG, 0805	0	IC 103	50.61.0207		LF353	Dual Op-Amp JFET SO 8
0	C 422	59.68.0033	470u		EL 6V, 8.0*10.7	0	IC 104	50.61.0204		MC33078	Dual Op-Amp low noise
0	C 423	59.68.0025	22u		EL 6V, 4.0*5.7	0	IC 105	50.09.0124		2142	Audio balanced line driver
0	C 424	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 106	50.61.8202		ADG433	Quad SPST SO 16
0	C 426	59.68.0025	22u		EL 6V, 4.0*5.7	0	IC 107	50.61.8201		DG408	8Ch analog Mux SO 16
0	C 427	59.63.0125	100n		PEN 50V, 5%, 1812	0	IC 108	50.61.8201		DG408	8Ch analog Mux SO 16
0	C 428	59.63.0125	100n		PEN 50V, 5%, 1812	0	IC 109	50.61.8201		DG408	8Ch analog Mux SO 16
0	C 429	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0	IC 110	50.61.8204		ADG444	Quad SPST low charge inj SO 16
0	C 430	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0	IC 111	50.61.9001		LM393	Dual voltage comp. SO 8
0	C 431	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0	IC 112	50.61.9001		LM393	Dual voltage comp. SO 8
0	C 432	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	IC 113	50.61.9001		LM393	Dual voltage comp. SO 8
0	C 433	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 115	50.09.0124		2142	Audio balanced line driver
0	C 434	not used	100n		CER 50V, 10%, X7R, 0805	0	IC 201	50.61.0204		MC33078	Dual Op-Amp low noise
0	C 435	not used	100n		CER 50V, 10%, X7R, 0805	0	IC 202	50.61.0204		MC33078	Dual Op-Amp low noise
0	C 439	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 203	50.61.0207		LF353	Dual Op-Amp JFET SO 8
0	C 440	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 204	50.61.0204		MC33078	Dual Op-Amp low noise
0	C 441	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 205	50.09.0124		2142	Audio balanced line driver
0	C 444	59.68.0111	22u		EL 35V, 6.3*5.7	0	IC 206	50.61.8202		ADG433	Quad SPST SO 16
0	C 445	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 207	50.61.8201		DG408	8Ch analog Mux SO 16
0	C 446	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 208	50.61.8201		DG408	8Ch analog Mux SO 16
0	C 447	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 209	50.61.8201		DG408	8Ch analog Mux SO 16
0	C 450	59.68.0111	22u		EL 35V, 6.3*5.7	0	IC 210	50.61.8204		ADG444	Quad SPST low charge inj SO 16
0	C 451	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 212	50.61.9001		LM393	Dual voltage comp. SO 8
0	C 452	59.68.0025	22u		EL 6V, 4.0*5.7	0	IC 213	50.61.9001		LM393	Dual voltage comp. SO 8
0	C 453	59.68.0031	220u		EL 6V, 8.0*6.3	0	IC 215	50.09.0124		2142	Audio balanced line driver
0	C 454	59.68.0031	220u		EL 6V, 8.0*6.3	0	IC 301	50.61.0204		MC33078	Dual Op-Amp low noise
0	C 455	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 302	50.61.0204		MC33078	Dual Op-Amp low noise
0	D 1	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 303	50.61.0207		LF353	Dual Op-Amp JFET SO 8
0	D 2	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 304	50.61.0204		MC33078	Dual Op-Amp low noise
0	D 3	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 305	50.09.0124		2142	Audio balanced line driver
0	D 4	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 306	50.61.8202		ADG433	Quad SPST SO 16
0	D 5	50.60.8002	GL34A		500mA 50V DO 213	0	IC 307	50.61.8201		DG408	8Ch analog Mux SO 16
0	D 6	50.60.8002	GL34A		500mA 50V DO 213	0	IC 308	50.61.8201		DG408	8Ch analog Mux SO 16
0	D 7	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 309	50.61.8201		DG408	8Ch analog Mux SO 16
0	D 8	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 310	50.61.8204		ADG444	Quad SPST low charge inj SO 16
0	D 9	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 311	50.61.9001		LM393	Dual voltage comp. SO 8
0	D 10	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 312	50.61.9001		LM393	Dual voltage comp. SO 8
0	D 101	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 313	50.61.9001		LM393	Dual voltage comp. SO 8
0	D 102	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 315	50.09.0124		2142	Audio balanced line driver
0	D 103	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 401	50.61.0204		MC33078	Dual Op-Amp low noise
0	D 104	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 402	50.61.0204		MC33078	Dual Op-Amp low noise
0	D 106	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 403	50.61.0207		LF353	Dual Op-Amp JFET SO 8
0	D 201	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 404	50.61.0204		MC33078	Dual Op-Amp low noise
0	D 202	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 405	50.09.0124		2142	Audio balanced line driver
0	D 203	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 406	50.61.8202		ADG433	Quad SPST SO 16
0	D 204	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 407	50.61.8201		DG408	8Ch analog Mux SO 16
0	D 206	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 408	50.61.8201		DG408	8Ch analog Mux SO 16
0	D 301	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 409	50.61.8201		DG408	8Ch analog Mux SO 16
0	D 302	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 410	50.61.8204		ADG444	Quad SPST low charge inj SO 16
0	D 303	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 412	50.61.9001		LM393	Dual voltage comp. SO 8
0	D 304	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 413	50.61.9001		LM393	Dual voltage comp. SO 8
0	D 306	50.60.8001	4448		200mA 75V 4ns SOD 80	0	IC 415	50.09.0124		2142	Audio balanced line driver
0	D 401	50.60.8001	4448		200mA 75V 4ns SOD 80	0	J 1	54.11.2009		96p	EU-R 3*32p
0	D 402	50.60.8001	4448		200mA 75V 4ns SOD 80	0	K 101	56.04.0197		2*u	24V 125V 2A Ag/Au
0	D 403	50.60.8001	4448		200mA 75V 4ns SOD 80	0	K 201	56.04.0197		2*u	24V 125V 2A Ag/Au
0	D 404	50.60.8001	4448		200mA 75V 4ns SOD 80	0	K 301	56.04.0197		2*u	24V 125V 2A Ag/Au
0	D 406	50.60.8001	4448		200mA 75V 4ns SOD 80	0	K 401	56.04.0197		2*u	24V 125V 2A Ag/Au
0	DL 1	50.04.2202	HLMP1790		DL HLMP - 1790 GN	0	L 1	62.02.3102		1mH	10%, radial RM 5
0	DL 101	50.04.2772	2*yel		Dual-LED mit Halter	0	L 2	62.03.0001		10uH	1A Toroid Chocke
0	DL 102	50.04.2772	2*yel		Dual-LED mit Halter	0	L 3	62.03.0001		10uH	1A Toroid Chocke
0	DL 103	50.04.2772	2*yel		Dual-LED mit Halter	0	L 101	62.60.0902			SMD Wideband choke
0	DL 301	50.04.2772	2*yel		Dual-LED mit Halter	0	L 102	62.60.0902			SMD Wideband choke
0	DL 302	50.04.2772	2*yel		Dual-LED mit Halter	0	L 201	62.60.0902			SMD Wideband choke
0	DL 303	50.04.2772	2*yel		Dual-LED mit Halter	0	L 202	62.60.0902			SMD Wideband choke
0	DV 1	50.60.9026	24V		5%, 0.2W, SOT 23	0	L 301	62.60.0902			SMD Wideband choke

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Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	L 302	62.60.0902			SMD Wideband choke	3	R 32	57.60.1123	12k		MF, 1%, 0204, E24
0	L 401	62.60.0902			SMD Wideband choke	0	R 33	57.60.1103	10k		MF, 1%, 0204, E24
0	L 402	62.60.0902			SMD Wideband choke	0	R 34	57.60.1103	10k		MF, 1%, 0204, E24
0	MP 1	1.940.575.13			D19M MIC LINE Input PCB	0	R 35	57.60.1124	120k		MF, 1%, 0204, E24
0	MP 2	1.940.575.04			TYPENSCHILD	0	R 36	57.60.1103	10k		MF, 1%, 0204, E24
0	MP 3	1.101.001.22			TEXT-ETIK. 5*20 HARDWARE -22	0	R 101	57.60.1123	12k		MF, 1%, 0204, E24
0	MP 4	43.01.0108		Label	ESE-WARNSCHILD	0	R 102	57.60.1470	47R		MF, 1%, 0204, E24
0	MP 5	1.022.400.03	4 pcs		ISOLATION	0	R 103	57.60.1391	390R		MF, 1%, 0204, E24
0	MP 6	1.010.004.61		RM5	Isolierscheibe d=10	0	R 104	57.60.1103	10k		MF, 1%, 0204, E24
0	MP 7	50.20.3004			Kühlkörper, TO 220, horizontal	0	R 105	57.60.1103	10k		MF, 1%, 0204, E24
0	MP 10	1.940.575.01	1 pce		FRONTPLATTE MP4RC	0	R 106	57.60.1272	2k7		MF, 1%, 0204, E24
0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE	0	R 107	57.60.1563	56k		MF, 1%, 0204, E24
0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)	0	R 108	57.60.1563	56k		MF, 1%, 0204, E24
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)	0	R 109	57.60.1154	150k		MF, 1%, 0204, E24
0	MP 14	49.02.0522	2 pcs		Kartenhalter mit Z-Schr	0	R 110	57.60.1470	47R		MF, 1%, 0204, E24
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp	0	R 111	57.60.1473	47k		MF, 1%, 0204, E24
0	MP 16	49.02.0504	2 pcs	4TE	Frontplatten-Griff	0	R 112	57.60.1103	10k		MF, 1%, 0204, E24
2	MP 17	not used	4 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr	0	R 113	57.60.1103	10k		MF, 1%, 0204, E24
					<i>Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten</i>	0	R 114	57.60.1473	47k		MF, 1%, 0204, E24
0	MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr	0	R 115	57.60.1103	10k		MF, 1%, 0204, E24
0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9	0	R 116	57.69.2002	6k8		MF 0.1% 25ppm 0204
3	MP 20	43.10.0111	1 pce	B	Revisions-Etikette 5mm h/blau	0	R 117	57.69.2002	6k8		MF 0.1% 25ppm 0204
0	MP 205	not used			Abschirmblech	0	R 118	57.60.1682	6k8		MF, 1%, 0204, E24
0	MP 206	not used			Abschirmblech	0	R 119	57.60.1103	10k		MF, 1%, 0204, E24
0	MP 207	not used			Abschirmblech	0	R 120	57.60.1272	2k7		MF, 1%, 0204, E24
0	MP 305	not used			Abschirmblech	0	R 121	57.60.1683	68k		MF, 1%, 0204, E24
0	MP 306	not used			Abschirmblech	0	R 122	57.60.1122	1k2		MF, 1%, 0204, E24
0	MP 307	not used			Abschirmblech	0	R 123	57.60.1101	100R		MF, 1%, 0204, E24
0	MP 405	not used			Abschirmblech	0	R 124	57.60.1102	1k0		MF, 1%, 0204, E24
0	MP 406	not used			Abschirmblech	0	R 125	57.60.1102	1k0		MF, 1%, 0204, E24
0	MP 407	not used			Abschirmblech	0	R 126	not used	1k0		MF, 1%, 0204, E24
0	Q 1	50.60.0150		FZT653	NPN 100V 2.0A SOT 223	0	R 127	57.60.1104	100k		MF, 1%, 0204, E24
0	Q 2	50.60.0150		FZT653	NPN 100V 2.0A SOT 223	0	R 128	57.60.1122	1k2		MF, 1%, 0204, E24
0	Q 3	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 129	57.60.1102	1k0		MF, 1%, 0204, E24
0	Q 4	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 130	57.60.1471	470R		MF, 1%, 0204, E24
0	Q 5	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 131	57.60.1821	820R		MF, 1%, 0204, E24
0	Q 101	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 132	57.60.1561	560R		MF, 1%, 0204, E24
0	Q 102	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 133	57.60.1560	56R		MF, 1%, 0204, E24
0	Q 103	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 134	57.60.1223	22k		MF, 1%, 0204, E24
0	Q 104	50.60.2001		J112	JFET N-Channel	0	R 135	57.60.1151	150R		MF, 1%, 0204, E24
0	Q 105	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 136	57.60.1821	820R		MF, 1%, 0204, E24
0	Q 201	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 137	57.60.1102	1k0		MF, 1%, 0204, E24
0	Q 202	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 138	57.60.1681	680R		MF, 1%, 0204, E24
0	Q 203	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 139	57.60.1123	12k		MF, 1%, 0204, E24
0	Q 204	50.60.2001		J112	JFET N-Channel	0	R 140	57.60.1103	10k		MF, 1%, 0204, E24
0	Q 205	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 141	57.60.1391	390R		MF, 1%, 0204, E24
0	Q 301	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 142	57.60.1330	33R		MF, 1%, 0204, E24
0	Q 302	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 143	57.60.1561	560R		MF, 1%, 0204, E24
0	Q 303	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 144	57.60.1561	560R		MF, 1%, 0204, E24
0	Q 304	50.60.2001		J112	JFET N-Channel	0	R 145	57.60.1151	150R		MF, 1%, 0204, E24
0	Q 305	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 146	57.60.1121	120R		MF, 1%, 0204, E24
0	Q 401	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 147	57.60.1473	47k		MF, 1%, 0204, E24
0	Q 402	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 148	57.60.1392	3k9		MF, 1%, 0204, E24
0	Q 403	50.60.0003		BC846B	NPN 65V 100mA SOT 23	0	R 150	57.60.1681	680R		MF, 1%, 0204, E24
0	Q 404	50.60.2001		J112	JFET N-Channel	0	R 151	57.60.1182	1k8		MF, 1%, 0204, E24
0	Q 405	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 152	57.60.1152	1k5		MF, 1%, 0204, E24
0	R 1	57.92.7019		0.4A	PTC 60V	0	R 153	57.60.1102	1k0		MF, 1%, 0204, E24
0	R 2	57.60.1473		47k	MF, 1%, 0204, E24	0	R 154	57.60.1103	10k		MF, 1%, 0204, E24
0	R 3	57.69.1097		10k	CF 5% 0603	0	R 155	57.60.1103	10k		MF, 1%, 0204, E24
0	R 4	57.60.1473		47k	MF, 1%, 0204, E24	0	R 156	57.60.1182	1k8		MF, 1%, 0204, E24
0	R 5	57.60.1153		15k	MF, 1%, 0204, E24	0	R 157	57.60.1471	470R		MF, 1%, 0204, E24
0	R 6	57.60.1153		15k	MF, 1%, 0204, E24	0	R 158	57.60.1221	220R		MF, 1%, 0204, E24
0	R 7	57.60.1103		10k	MF, 1%, 0204, E24	0	R 159	57.60.1221	220R		MF, 1%, 0204, E24
0	R 8	57.60.1103		10k	MF, 1%, 0204, E24	0	R 160	57.60.1102	1k0		MF, 1%, 0204, E24
0	R 9	57.60.1153		15k	MF, 1%, 0204, E24	0	R 161	57.60.1104	100k		MF, 1%, 0204, E24
0	R 10	57.60.1153		15k	MF, 1%, 0204, E24	0	R 162	57.60.1103	10k		MF, 1%, 0204, E24
0	R 11	57.60.1103		10k	MF, 1%, 0204, E24	0	R 163	57.60.1152	1k5		MF, 1%, 0204, E24
0	R 12	57.60.1103		10k	MF, 1%, 0204, E24	0	R 164	57.60.1472	4k7		MF, 1%, 0204, E24
0	R 13	57.60.1473		47k	MF, 1%, 0204, E24	0	R 165	57.60.1225	2M2		MF, 1%, 0204, E24
0	R 14	57.60.1103		10k	MF, 1%, 0204, E24	0	R 166	57.60.1473	47k		MF, 1%, 0204, E24
0	R 15	57.60.1100		10R	MF, 1%, 0204, E24	0	R 167	57.60.1153	15k		MF, 1%, 0204, E24
0	R 16	57.60.1103		10k	MF, 1%, 0204, E24	0	R 168	57.60.1102	1k0		MF, 1%, 0204, E24
0	R 17	57.60.1472		4k7	MF, 1%, 0204, E24	0	R 169	57.60.1222	2k2		MF, 1%, 0204, E24
0	R 18	57.60.1103		10k	MF, 1%, 0204, E24	0	R 170	57.60.1682	6k8		MF, 1%, 0204, E24
0	R 19	57.60.1103		10k	MF, 1%, 0204, E24	0	R 171	57.60.1154	150k		MF, 1%, 0204, E24
0	R 20	57.60.1223		22k	MF, 1%, 0204, E24	0	R 172	57.60.1562	5k6		MF, 1%, 0204, E24
0	R 21	57.60.1271		270R	MF, 1%, 0204, E24	0	R 173	57.60.1000	0R0		MF, 0204
0	R 22	57.60.1103		10k	MF, 1%, 0204, E24	0	R 174	not used	0R0		MF, 0204
0	R 23	57.60.1223		22k	MF, 1%, 0204, E24	0	R 175	57.60.1682	6k8		MF, 1%, 0204, E24
0	R 24	57.60.1561		560R	MF, 1%, 0204, E24	0	R 176	57.60.1103	10k		MF, 1%, 0204, E24
0	R 25	57.60.1333		33k	MF, 1%, 0204, E24	0	R 178	57.60.1104	100k		MF, 1%, 0204, E24
0	R 26	57.60.1473		47k	MF, 1%, 0204, E24	0	R 179	57.60.1391	390R		MF, 1%, 0204, E24
0	R 27	57.92.7019		0.4A	PTC 60V	0	R 180	57.60.1102	1k0		MF, 1%, 0204, E24
0	R 28	57.92.7019		0.4A	PTC 60V	0	R 181	57.60.1103	10k		MF, 1%, 0204, E24
0	R 29	57.60.1473		47k	MF, 1%, 0204, E24	0	R 182	57.60.1273	27k		MF, 1%, 0204, E24
0	R 30	57.60.1473		47k	MF, 1%, 0204, E24	0	R 183	57.60.1473	47k		MF, 1%, 0204, E24
0	R 31	57.60.1473		47k	MF, 1%, 0204, E24	0	R 184	57.60.1105	1M		MF, 1%, 0204, E24

**D19m Mic Line Input Board 1.940.575.22 ( 3)**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 186	57.60.1272		2k7	MF, 1%, 0204, E24	0	R 293	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 189	57.60.1473		47k	MF, 1%, 0204, E24	0	R 298	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 191	57.60.1106		10M	MF, 1%, 0204, E24	0	R 299	57.60.1473		47k	MF, 1%, 0204, E24
0	R 192	57.60.1473		47k	MF, 1%, 0204, E24	0	R 301	57.60.1123		12k	MF, 1%, 0204, E24
0	R 193	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 302	57.60.1470		47R	MF, 1%, 0204, E24
0	R 195	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 303	57.60.1391		390R	MF, 1%, 0204, E24
0	R 196	57.60.1473		47k	MF, 1%, 0204, E24	0	R 304	57.60.1103		10k	MF, 1%, 0204, E24
0	R 198	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 305	57.60.1103		10k	MF, 1%, 0204, E24
0	R 199	57.60.1473		47k	MF, 1%, 0204, E24	0	R 306	57.60.1272		2k7	MF, 1%, 0204, E24
0	R 201	57.60.1123		12k	MF, 1%, 0204, E24	0	R 307	57.60.1563		56k	MF, 1%, 0204, E24
0	R 202	57.60.1470		47R	MF, 1%, 0204, E24	0	R 308	57.60.1563		56k	MF, 1%, 0204, E24
0	R 203	57.60.1391		390R	MF, 1%, 0204, E24	0	R 309	57.60.1154		150k	MF, 1%, 0204, E24
0	R 204	57.60.1103		10k	MF, 1%, 0204, E24	0	R 310	57.60.1470		47R	MF, 1%, 0204, E24
0	R 205	57.60.1103		10k	MF, 1%, 0204, E24	0	R 311	57.60.1473		47k	MF, 1%, 0204, E24
0	R 206	57.60.1272		2k7	MF, 1%, 0204, E24	0	R 312	57.60.1103		10k	MF, 1%, 0204, E24
0	R 207	57.60.1563		56k	MF, 1%, 0204, E24	0	R 313	57.60.1103		10k	MF, 1%, 0204, E24
0	R 208	57.60.1563		56k	MF, 1%, 0204, E24	0	R 314	57.60.1473		47k	MF, 1%, 0204, E24
0	R 209	57.60.1154		150k	MF, 1%, 0204, E24	0	R 315	57.60.1103		10k	MF, 1%, 0204, E24
0	R 210	57.60.1470		47R	MF, 1%, 0204, E24	0	R 316	57.69.2002		6k8	MF 0.1% 25ppm 0204
0	R 211	57.60.1473		47k	MF, 1%, 0204, E24	0	R 317	57.69.2002		6k8	MF 0.1% 25ppm 0204
0	R 212	57.60.1103		10k	MF, 1%, 0204, E24	0	R 318	57.60.1682		6k8	MF, 1%, 0204, E24
0	R 213	57.60.1103		10k	MF, 1%, 0204, E24	0	R 319	57.60.1103		10k	MF, 1%, 0204, E24
0	R 214	57.60.1473		47k	MF, 1%, 0204, E24	0	R 320	57.60.1272		2k7	MF, 1%, 0204, E24
0	R 215	57.60.1103		10k	MF, 1%, 0204, E24	0	R 321	57.60.1683		68k	MF, 1%, 0204, E24
0	R 216	57.69.2002		6k8	MF 0.1% 25ppm 0204	0	R 322	57.60.1122		1k2	MF, 1%, 0204, E24
0	R 217	57.69.2002		6k8	MF 0.1% 25ppm 0204	0	R 323	57.60.1101		100R	MF, 1%, 0204, E24
0	R 218	57.60.1682		6k8	MF, 1%, 0204, E24	0	R 324	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 219	57.60.1103		10k	MF, 1%, 0204, E24	0	R 325	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 220	57.60.1272		2k7	MF, 1%, 0204, E24	0	R 326	not used		1k0	MF, 1%, 0204, E24
0	R 221	57.60.1683		68k	MF, 1%, 0204, E24	0	R 327	57.60.1104		100k	MF, 1%, 0204, E24
0	R 222	57.60.1122		1k2	MF, 1%, 0204, E24	0	R 328	57.60.1122		1k2	MF, 1%, 0204, E24
0	R 223	57.60.1101		100R	MF, 1%, 0204, E24	0	R 329	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 224	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 330	57.60.1471		470R	MF, 1%, 0204, E24
0	R 225	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 331	57.60.1821		820R	MF, 1%, 0204, E24
0	R 226	not used		1k0	MF, 1%, 0204, E24	0	R 332	57.60.1561		560R	MF, 1%, 0204, E24
0	R 227	57.60.1104		100k	MF, 1%, 0204, E24	0	R 333	57.60.1560		56R	MF, 1%, 0204, E24
0	R 228	57.60.1122		1k2	MF, 1%, 0204, E24	0	R 334	57.60.1223		22k	MF, 1%, 0204, E24
0	R 229	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 335	57.60.1151		150R	MF, 1%, 0204, E24
0	R 230	57.60.1471		470R	MF, 1%, 0204, E24	0	R 336	57.60.1821		820R	MF, 1%, 0204, E24
0	R 231	57.60.1821		820R	MF, 1%, 0204, E24	0	R 337	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 232	57.60.1561		560R	MF, 1%, 0204, E24	0	R 338	57.60.1681		680R	MF, 1%, 0204, E24
0	R 233	57.60.1560		56R	MF, 1%, 0204, E24	0	R 339	57.60.1123		12k	MF, 1%, 0204, E24
0	R 234	57.60.1223		22k	MF, 1%, 0204, E24	0	R 340	57.60.1103		10k	MF, 1%, 0204, E24
0	R 235	57.60.1151		150R	MF, 1%, 0204, E24	0	R 341	57.60.1391		390R	MF, 1%, 0204, E24
0	R 236	57.60.1821		820R	MF, 1%, 0204, E24	0	R 342	57.60.1330		33R	MF, 1%, 0204, E24
0	R 237	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 343	57.60.1561		560R	MF, 1%, 0204, E24
0	R 238	57.60.1681		680R	MF, 1%, 0204, E24	0	R 344	57.60.1561		560R	MF, 1%, 0204, E24
0	R 239	57.60.1123		12k	MF, 1%, 0204, E24	0	R 345	57.60.1151		150R	MF, 1%, 0204, E24
0	R 240	57.60.1103		10k	MF, 1%, 0204, E24	0	R 346	57.60.1121		120R	MF, 1%, 0204, E24
0	R 241	57.60.1391		390R	MF, 1%, 0204, E24	0	R 347	57.60.1473		47k	MF, 1%, 0204, E24
0	R 242	57.60.1330		33R	MF, 1%, 0204, E24	0	R 348	57.60.1392		3k9	MF, 1%, 0204, E24
0	R 243	57.60.1561		560R	MF, 1%, 0204, E24	0	R 350	57.60.1681		680R	MF, 1%, 0204, E24
0	R 244	57.60.1561		560R	MF, 1%, 0204, E24	0	R 351	57.60.1182		1k8	MF, 1%, 0204, E24
0	R 245	57.60.1151		150R	MF, 1%, 0204, E24	0	R 352	57.60.1152		1k5	MF, 1%, 0204, E24
0	R 246	57.60.1121		120R	MF, 1%, 0204, E24	0	R 353	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 247	57.60.1473		47k	MF, 1%, 0204, E24	0	R 356	57.60.1182		1k8	MF, 1%, 0204, E24
0	R 248	57.60.1392		390R	MF, 1%, 0204, E24	0	R 357	57.60.1471		470R	MF, 1%, 0204, E24
0	R 250	57.60.1681		680R	MF, 1%, 0204, E24	0	R 358	57.60.1221		220R	MF, 1%, 0204, E24
0	R 251	57.60.1182		1k8	MF, 1%, 0204, E24	0	R 359	57.60.1221		220R	MF, 1%, 0204, E24
0	R 252	57.60.1152		1k5	MF, 1%, 0204, E24	0	R 360	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 253	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 361	57.60.1104		100k	MF, 1%, 0204, E24
0	R 256	57.60.1182		1k8	MF, 1%, 0204, E24	0	R 362	57.60.1103		10k	MF, 1%, 0204, E24
0	R 257	57.60.1471		470R	MF, 1%, 0204, E24	0	R 363	57.60.1152		1k5	MF, 1%, 0204, E24
0	R 258	57.60.1221		220R	MF, 1%, 0204, E24	0	R 364	57.60.1472		4k7	MF, 1%, 0204, E24
0	R 259	57.60.1221		220R	MF, 1%, 0204, E24	0	R 365	57.60.1225		2M2	MF, 1%, 0204, E24
0	R 260	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 367	57.60.1153		15k	MF, 1%, 0204, E24
0	R 261	57.60.1104		100k	MF, 1%, 0204, E24	0	R 369	57.60.1222		2k2	MF, 1%, 0204, E24
0	R 262	57.60.1103		10k	MF, 1%, 0204, E24	0	R 370	57.60.1682		6k8	MF, 1%, 0204, E24
0	R 263	57.60.1152		1k5	MF, 1%, 0204, E24	0	R 371	57.60.1154		150k	MF, 1%, 0204, E24
0	R 264	57.60.1472		4k7	MF, 1%, 0204, E24	0	R 372	57.60.1562		5k6	MF, 1%, 0204, E24
0	R 265	57.60.1225		2M2	MF, 1%, 0204, E24	0	R 373	57.60.1000		0R0	MF, 0204
0	R 267	57.60.1153		15k	MF, 1%, 0204, E24	0	R 374	not used		0R0	MF, 0204
0	R 269	57.60.1222		2k2	MF, 1%, 0204, E24	0	R 375	57.60.1682		6k8	MF, 1%, 0204, E24
0	R 270	57.60.1682		6k8	MF, 1%, 0204, E24	0	R 376	57.60.1103		10k	MF, 1%, 0204, E24
0	R 271	57.60.1154		150k	MF, 1%, 0204, E24	0	R 378	57.60.1104		100k	MF, 1%, 0204, E24
0	R 272	57.60.1562		5k6	MF, 1%, 0204, E24	0	R 379	57.60.1391		390R	MF, 1%, 0204, E24
0	R 273	57.60.1000		0R0	MF, 0204	0	R 381	57.60.1103		10k	MF, 1%, 0204, E24
0	R 274	not used		0R0	MF, 0204	0	R 382	57.60.1273		27k	MF, 1%, 0204, E24
0	R 275	57.60.1682		6k8	MF, 1%, 0204, E24	0	R 384	57.60.1105		1M	MF, 1%, 0204, E24
0	R 276	57.60.1103		10k	MF, 1%, 0204, E24	0	R 386	57.60.1272		2k7	MF, 1%, 0204, E24
0	R 278	57.60.1104		100k	MF, 1%, 0204, E24	0	R 391	57.60.1106		10M	MF, 1%, 0204, E24
0	R 279	57.60.1391		390R	MF, 1%, 0204, E24	0	R 393	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 281	57.60.1103		10k	MF, 1%, 0204, E24	0	R 398	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 282	57.60.1273		27k	MF, 1%, 0204, E24	0	R 399	57.60.1473		47k	MF, 1%, 0204, E24
0	R 284	57.60.1105		1M	MF, 1%, 0204, E24	0	R 401	57.60.1123		12k	MF, 1%, 0204, E24
0	R 286	57.60.1272		2k7	MF, 1%, 0204, E24	0	R 402	57.60.1470		47R	MF, 1%, 0204, E24
0	R 291	57.60.1106		10M	MF, 1%, 0204, E24	0	R 403	57.60.1391		390R	MF, 1%, 0204, E24

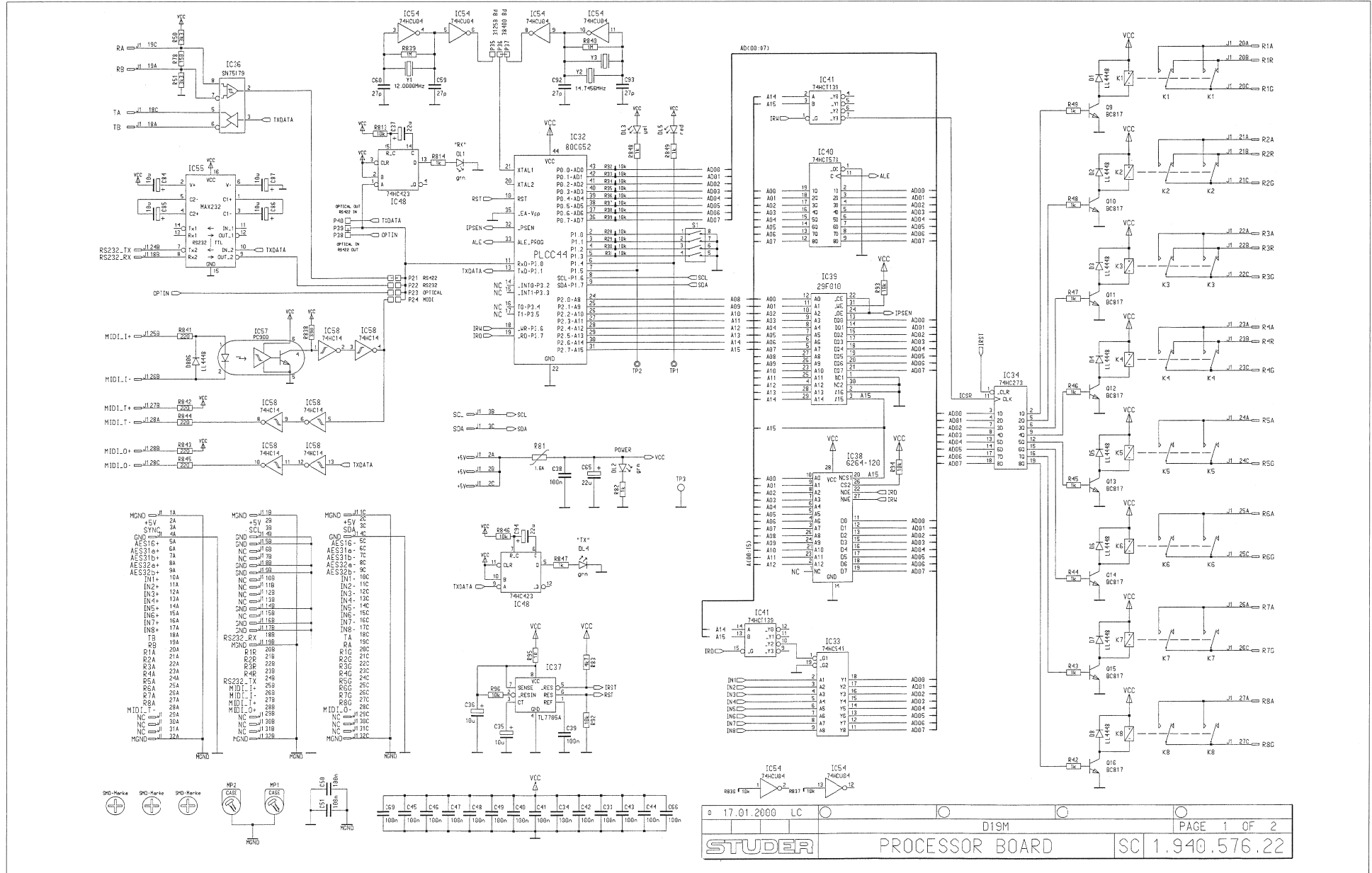
**D19m Mic Line Input Board 1.940.575.22 ( 3)**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 404	57.60.1103		10k	MF, 1%, 0204, E24	0	TP 2	54.33.6010		2.8*0.8	PCB-Flachstecker, gerade
0	R 405	57.60.1103		10k	MF, 1%, 0204, E24	0	XDL 1	50.20.2501		Spacer	LED-Socket
0	R 406	57.60.1272		2k7	MF, 1%, 0204, E24	0	XIC 1	53.03.2232		32p	PLCC-Socket
0	R 407	57.60.1563		56k	MF, 1%, 0204, E24	0	XIC 10	53.03.0166		8p	DIL 0.3", lot, gerade
0	R 408	57.60.1563		56k	MF, 1%, 0204, E24	0	XIC 11	53.03.0166		8p	DIL 0.3", lot, gerade
0	R 409	57.60.1154		150k	MF, 1%, 0204, E24	0	XIC 20	53.03.0166		8p	DIL 0.3", lot, gerade
0	R 410	57.60.1470		47R	MF, 1%, 0204, E24	0	XIC 21	53.03.0166		8p	DIL 0.3", lot, gerade
0	R 411	57.60.1473		47k	MF, 1%, 0204, E24	0	XIC 30	53.03.0166		8p	DIL 0.3", lot, gerade
0	R 412	57.60.1103		10k	MF, 1%, 0204, E24	0	XIC 31	53.03.0166		8p	DIL 0.3", lot, gerade
0	R 413	57.60.1103		10k	MF, 1%, 0204, E24	0	XIC 40	53.03.0166		8p	DIL 0.3", lot, gerade
0	R 414	57.60.1473		47k	MF, 1%, 0204, E24	0	XIC 41	53.03.0166		8p	DIL 0.3", lot, gerade
0	R 415	57.60.1103		10k	MF, 1%, 0204, E24	0	Y 1	89.60.1003		12.000MHz	SMD Quartz
0	R 416	57.69.2002		6k8	MF 0.1% 25ppm 0204						
0	R 417	57.69.2002		6k8	MF 0.1% 25ppm 0204						
0	R 418	57.60.1682		6k8	MF, 1%, 0204, E24						
0	R 419	57.60.1103		10k	MF, 1%, 0204, E24						
0	R 420	57.60.1272		2k7	MF, 1%, 0204, E24						
0	R 421	57.60.1683		68k	MF, 1%, 0204, E24						
0	R 422	57.60.1122		1k2	MF, 1%, 0204, E24						
0	R 423	57.60.1101		100R	MF, 1%, 0204, E24						
0	R 424	57.60.1102		1k0	MF, 1%, 0204, E24						
0	R 425	57.60.1102		1k0	MF, 1%, 0204, E24						
0	R 426	not used		1k0	MF, 1%, 0204, E24						
0	R 427	57.60.1104		100k	MF, 1%, 0204, E24						
0	R 428	57.60.1122		1k2	MF, 1%, 0204, E24						
0	R 429	57.60.1102		1k0	MF, 1%, 0204, E24						
0	R 430	57.60.1471		470R	MF, 1%, 0204, E24						
0	R 431	57.60.1821		820R	MF, 1%, 0204, E24						
0	R 432	57.60.1561		560R	MF, 1%, 0204, E24						
0	R 433	57.60.1560		56R	MF, 1%, 0204, E24						
0	R 434	57.60.1223		22k	MF, 1%, 0204, E24						
0	R 435	57.60.1151		150R	MF, 1%, 0204, E24						
0	R 436	57.60.1821		820R	MF, 1%, 0204, E24						
0	R 437	57.60.1102		1k0	MF, 1%, 0204, E24						
0	R 438	57.60.1681		680R	MF, 1%, 0204, E24						
0	R 439	57.60.1123		12k	MF, 1%, 0204, E24						
0	R 440	57.60.1103		10k	MF, 1%, 0204, E24						
0	R 441	57.60.1391		390R	MF, 1%, 0204, E24						
0	R 442	57.60.1330		33R	MF, 1%, 0204, E24						
0	R 443	57.60.1561		560R	MF, 1%, 0204, E24						
0	R 444	57.60.1561		560R	MF, 1%, 0204, E24						
0	R 445	57.60.1151		150R	MF, 1%, 0204, E24						
0	R 446	57.60.1121		120R	MF, 1%, 0204, E24						
0	R 447	57.60.1473		47k	MF, 1%, 0204, E24						
0	R 448	57.60.1392		3k9	MF, 1%, 0204, E24						
0	R 450	57.60.1681		680R	MF, 1%, 0204, E24						
0	R 451	57.60.1182		1k8	MF, 1%, 0204, E24						
0	R 452	57.60.1152		1k5	MF, 1%, 0204, E24						
0	R 453	57.60.1102		1k0	MF, 1%, 0204, E24						
0	R 456	57.60.1182		1k8	MF, 1%, 0204, E24						
0	R 457	57.60.1471		470R	MF, 1%, 0204, E24						
0	R 458	57.60.1221		220R	MF, 1%, 0204, E24						
0	R 459	57.60.1221		220R	MF, 1%, 0204, E24						
0	R 460	57.60.1102		1k0	MF, 1%, 0204, E24						
0	R 461	57.60.1104		100k	MF, 1%, 0204, E24						
0	R 462	57.60.1103		10k	MF, 1%, 0204, E24						
0	R 463	57.60.1152		1k5	MF, 1%, 0204, E24						
0	R 464	57.60.1472		4k7	MF, 1%, 0204, E24						
0	R 465	57.60.1225		2M2	MF, 1%, 0204, E24						
0	R 467	57.60.1153		15k	MF, 1%, 0204, E24						
0	R 469	57.60.1222		2k2	MF, 1%, 0204, E24						
0	R 470	57.60.1682		6k8	MF, 1%, 0204, E24						
0	R 471	57.60.1154		150k	MF, 1%, 0204, E24						
0	R 472	57.60.1562		5k6	MF, 1%, 0204, E24						
0	R 473	57.60.1000		0R0	MF, 0204						
0	R 474	not used		0R0	MF, 0204						
0	R 475	57.60.1682		6k8	MF, 1%, 0204, E24						
0	R 476	57.60.1103		10k	MF, 1%, 0204, E24						
0	R 478	57.60.1104		100k	MF, 1%, 0204, E24						
0	R 479	57.60.1391		390R	MF, 1%, 0204, E24						
0	R 481	57.60.1103		10k	MF, 1%, 0204, E24						
0	R 482	57.60.1273		27k	MF, 1%, 0204, E24						
0	R 484	57.60.1105		1M	MF, 1%, 0204, E24						
0	R 486	57.60.1272		2k7	MF, 1%, 0204, E24						
0	R 491	57.60.1106		10M	MF, 1%, 0204, E24						
0	R 493	57.60.1102		1k0	MF, 1%, 0204, E24						
0	R 498	57.60.1102		1k0	MF, 1%, 0204, E24						
0	R 499	57.60.1473		47k	MF, 1%, 0204, E24						
0	RA 101	58.05.1202		2k0	10%, 0.5W, Cermet						
0	RA 201	58.05.1202		2k0	10%, 0.5W, Cermet						
0	RA 301	58.05.1202		2k0	10%, 0.5W, Cermet						
0	RA 401	58.05.1202		2k0	10%, 0.5W, Cermet						
0	T 1	1.022.653.00			TRAFO VF-DISPLAY						
0	T 101	1.022.461.00			HIGH-LEVEL MIC INPUT						
0	T 201	1.022.461.00			HIGH-LEVEL MIC INPUT						
0	T 301	1.022.461.00			HIGH-LEVEL MIC INPUT						
0	T 401	1.022.461.00			HIGH-LEVEL MIC INPUT						

End of List

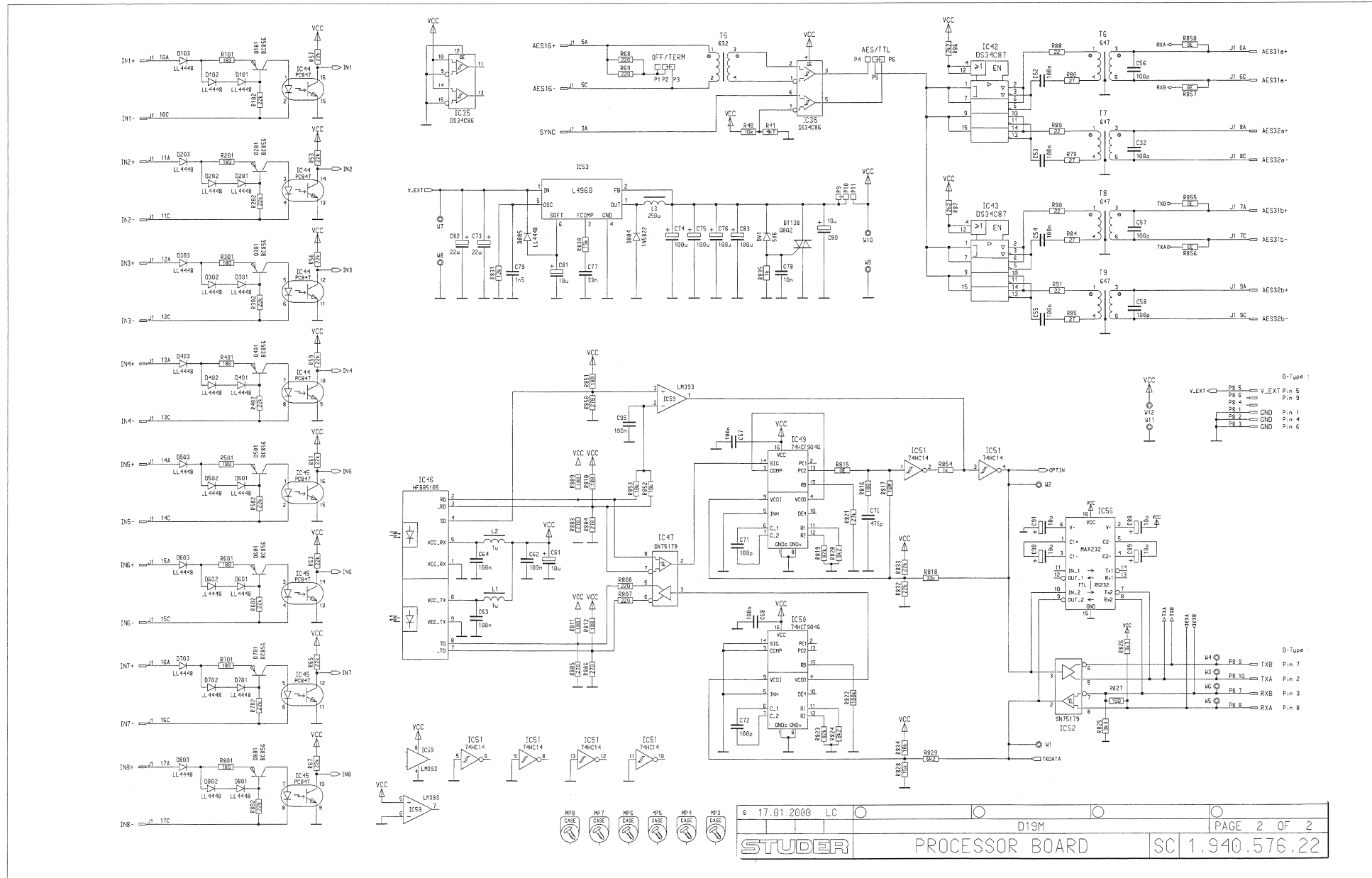
- (1) C104,C204,C304,C404 changed to 22pF  
Additional:MP20
- (2) 12.04.00 MP 17 not used
- (3) Improved limiter performance: R32 changed to 12k

Processor Board 1.940.576.22





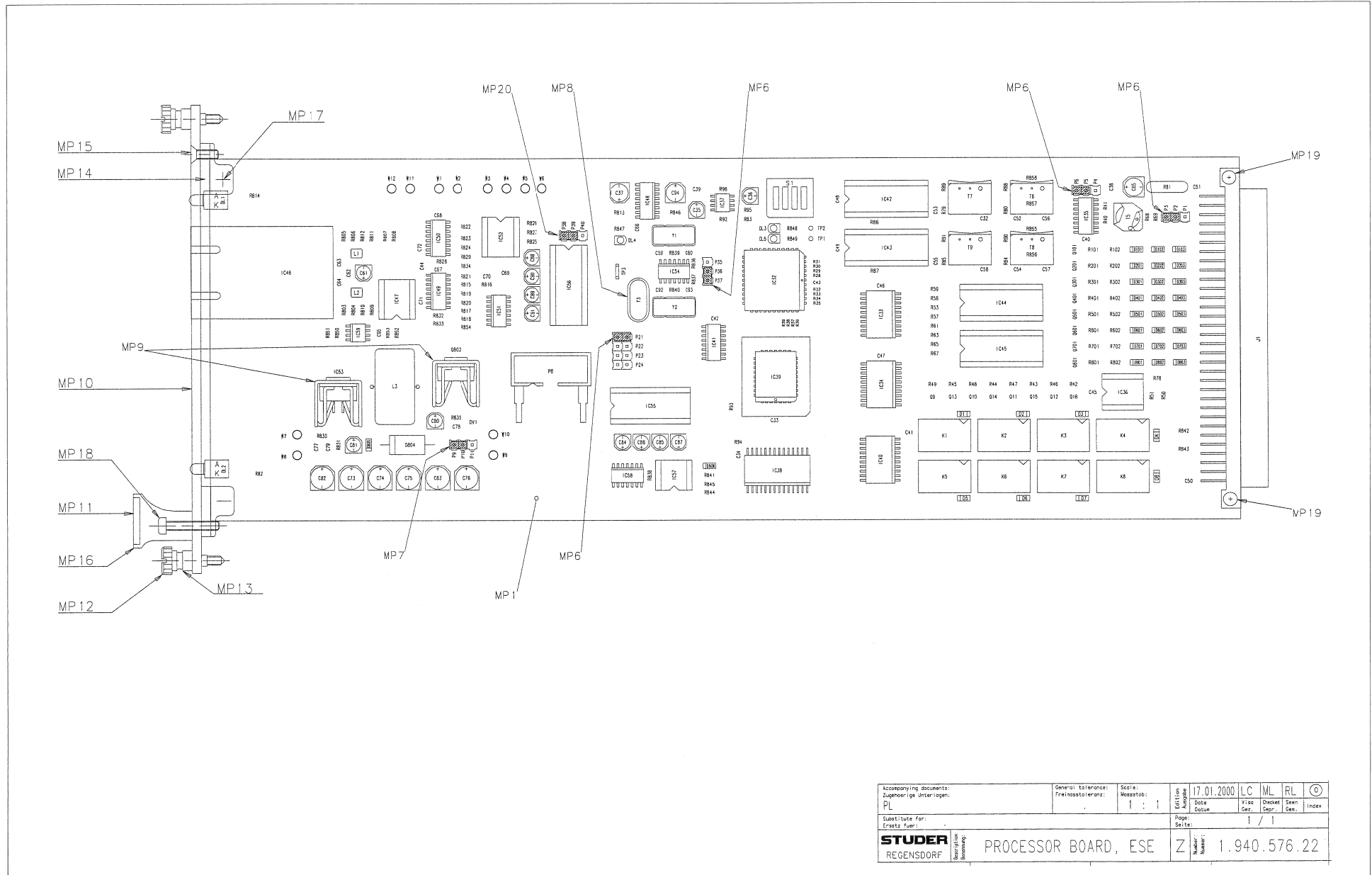
Processor Board 1.940.576.22



17.01.2000	LC	D19M	PAGE 2 OF 2
STUDER		PROCESSOR BOARD	SC 1.940.576.22



Processor Board 1.940.576.22



Accessories documents: Zugehörige Unterlagen: PL	General tolerances: Freiinstoleranzen:	Scale: Maßstab: 1 : 1	Ed./Rev. Ausgabe 17.01.2000	LC	ML	RL	Ⓢ
Substitute for: Ersatz fuer:			Date Datum	Vis Cex.	Checked Gepr.	Seen Geseh.	Index
<b>STUDER</b> REGENSDORF			Processor Board, ESE		Page Seite: 1 / 1		
Number: Nummer: 1.940.576.22							

Processor Board 1.940.576.24 ( 0)

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 32	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	D 601	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 33	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	D 602	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 34	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	D 603	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 35	59.68.0065	10u		EL 16V, 4.0*5.7	0	D 701	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 36	59.68.0065	10u		EL 16V, 4.0*5.7	0	D 702	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 37	59.68.0067	22u		EL 16V, 5.0*5.7	0	D 703	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 38	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	D 801	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 39	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	D 802	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 40	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	D 803	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 41	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	D 804	not used	1N5822		3A, Schottky
0	C 42	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	D 805	not used	4448		200mA 75V 4ns SOD 80
0	C 43	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	D 806	50.60.8001	4448		200mA 75V 4ns SOD 80
0	C 44	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	DL 1	50.04.2202	HLMP1790		DL HLMP - 1790 GN
0	C 45	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	DL 2	50.04.2202	HLMP1790		DL HLMP - 1790 GN
0	C 46	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	DL 3	not used	TLUY 2401		DL TLUY 2401 GB MATT
0	C 47	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	DL 4	not used	TLUG 2401		DL TLUG 2401 GN MATT
0	C 48	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	DL 5	not used	TLUR 2401		DL TLUR 2401 RT MATT
0	C 49	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	DV 1	not used	5V6		5%, 0.2W, SOT 23
0	C 50	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 32	50.63.0009	80C652		MPU 8bit
0	C 51	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 33	50.62.1541	74HC541		Octal buffer/line driver tri
0	C 52	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 34	50.62.1273	74HC273		Octal D-FF with clear
0	C 53	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 35	50.62.0463	DS34C86		4*RS 422 Line Receiver
0	C 54	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 36	50.15.0126	75179B		IC SN 75179B P
0	C 55	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 37	50.63.2001	7705B		Reset Generator
0	C 56	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 38	50.63.1502	6264		SRAM 8K*8, 120ns
0	C 57	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 39	1.940.982.23			SW 576 Control (50.63.1303)
0	C 58	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 40	50.62.3573	74HCT573		Octal D-type latch
0	C 59	59.60.2235	27p		CER 50V, 5%, COG, 0603	0	IC 41	50.62.3139	74HCT139		Dual 2 to 4 line decoder
0	C 60	59.60.2235	27p		CER 50V, 5%, COG, 0603	0	IC 42	50.15.0127	34C87		IC DS 34 C 87 TN, MC34C87P ,A
0	C 61	59.68.0065	10u		EL 16V, 4.0*5.7	0	IC 43	50.15.0127	34C87		IC DS 34 C 87 TN, MC34C87P ,A
0	C 62	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 44	50.04.2138	ILQ615		DLQ 4*LED/Transistor
0	C 63	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 45	50.04.2138	ILQ615		DLQ 4*LED/Transistor
0	C 64	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 46	89.10.0021	HFBR5103		LWL Transceiver FDDI/MADI
0	C 65	59.68.0067	22u		EL 16V, 5.0*5.7	0	IC 47	50.15.0126	75179B		IC SN 75179B P
0	C 66	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 48	50.62.1423	74HC423		Dual multivibr monost retrigg
0	C 67	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 49	50.62.4946	74HCT9046		PLL with bandgap contr VCO
0	C 68	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 50	50.62.4946	74HCT9046		PLL with bandgap contr VCO
0	C 69	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 51	50.62.1014	74HC 14		Hex Schmitt trigger inverter
0	C 70	59.60.2365	470p		CER 50V, 5%, COG, 0805	0	IC 52	not used	75179B		IC SN 75179B P
0	C 71	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 53	not used	L4960		L 4960,
0	C 72	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 54	50.62.1904	74HCU04		Hex inverter unbuffered
0	C 73	not used	22u		EL 35V, 6.3*5.7	0	IC 55	50.15.0120	MAX232		IC MAX 232 CPE
0	C 74	not used	100u		EL 6V, 6.3*5.7	0	IC 56	not used	MAX232		IC MAX 232 CPE
0	C 75	not used	100u		EL 6V, 6.3*5.7	0	IC 57	50.04.4501	PC900V		DLQ PC 900 V
0	C 76	not used	100u		EL 6V, 6.3*5.7	0	IC 58	50.62.1014	74HC 14		Hex Schmitt trigger inverter
0	C 77	not used	33n		CER 50V, 10%, X7R, 0805	0	IC 59	50.61.9001	LM393		Dual voltage comp. SO 8
0	C 78	not used	10n		CER 50V, 10%, X7R, 0805	0	J 1	54.11.2009	96p		EU-R 3*32p
0	C 79	not used	1n5		CER 50V, 10%, X7R, 0805	0	K 1	56.04.0195	2*u		6V 125V 2A Ag/Au
0	C 80	not used	10u		EL 16V, 4.0*5.7	0	K 2	56.04.0195	2*u		6V 125V 2A Ag/Au
0	C 81	not used	10u		EL 16V, 4.0*5.7	0	K 3	56.04.0195	2*u		6V 125V 2A Ag/Au
0	C 82	not used	22u		EL 35V, 6.3*5.7	0	K 4	56.04.0195	2*u		6V 125V 2A Ag/Au
0	C 83	not used	100u		EL 6V, 6.3*5.7	0	K 5	56.04.0195	2*u		6V 125V 2A Ag/Au
0	C 84	59.68.0065	10u		EL 16V, 4.0*5.7	0	K 6	56.04.0195	2*u		6V 125V 2A Ag/Au
0	C 85	59.68.0065	10u		EL 16V, 4.0*5.7	0	K 7	56.04.0195	2*u		6V 125V 2A Ag/Au
0	C 86	59.68.0065	10u		EL 16V, 4.0*5.7	0	K 8	56.04.0195	2*u		6V 125V 2A Ag/Au
0	C 87	59.68.0065	10u		EL 16V, 4.0*5.7	0	L 1	62.60.0101	1u0		SMD 10% 1210
0	C 88	not used	10u		EL 16V, 4.0*5.7	0	L 2	62.60.0101	1u0		SMD 10% 1210
0	C 89	not used	10u		EL 16V, 4.0*5.7	0	L 3	not used	250uH		2A Toroid Chocke
0	C 90	not used	10u		EL 16V, 4.0*5.7	0	MP 1	1.940.576.12			Processor Board PCB
0	C 91	not used	10u		EL 16V, 4.0*5.7	0	MP 2	1.940.576.04			Typenschild
0	C 92	59.60.2235	27p		CER 50V, 5%, COG, 0603	0	MP 3	43.01.0108	Label		ESE-Warnschild
0	C 93	59.60.2235	27p		CER 50V, 5%, COG, 0603	0	MP 6	54.01.0021 4 pcs	Jumper		0.63*0.63mm, Au
0	C 94	59.68.0067	22u		EL 16V, 5.0*5.7	0	MP 7	not used 1 pce	Jumper		0.63*0.63mm, Au
0	C 95	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 8	not used 1 pce			QUARZ - ISOLIERPLATTE
0	D 1	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 9	not used 2 pcs			Kühlkörper, TO 220, vertikal
0	D 2	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 10	1.940.576.01 1 pce			FRONTPLATTE RCC
0	D 3	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 11	1.940.600.04 1 pce			GRIFFEINLAGE 4TE
0	D 4	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 12	49.02.0520 2 pcs	M2.5*12		Rändelschraube (Rack)
0	D 5	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 13	49.02.0521 2 pcs			Metall-Buchse (Rack)
0	D 6	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 14	49.02.0522 2 pcs			Kartenhalter mit Z-Schr
0	D 7	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 15	49.02.0523 1 pce	M2.5*7		Senk-Schr, KS, Senkripp
0	D 8	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 16	49.02.0504 1 pce	4TE		Frontplatten-Griff
0	D 101	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 17	not used 2 pcs	M2.5*6		Z-Schraube Inbus Zn gb chr
0	D 102	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 18	21.53.0284 1 pce	M2.5*16		Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten
0	D 103	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 19	28.99.0119 2 pcs			Z-Schraube Inbus Zn gb chr
0	D 201	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 20	not used	Jumper		ROHRNIETE D 2.5*0.15* 9
0	D 202	50.60.8001	4448		200mA 75V 4ns SOD 80	0	MP 21	1.101.001.22			0.63*0.63mm, Au
0	D 203	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 1	54.01.0020	1p		TEXT-ETIK. 5*20 HARDWARE -22
0	D 301	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 2	54.01.0020	1p		Pin, 1reihig, gerade
0	D 302	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 3	54.01.0020	1p		Pin, 1reihig, gerade
0	D 303	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 4	54.01.0020	1p		Pin, 1reihig, gerade
0	D 401	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 5	54.01.0020	1p		Pin, 1reihig, gerade
0	D 402	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 6	54.01.0020	1p		Pin, 1reihig, gerade
0	D 403	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 8	not used	10p		1/20" Au, gerade, Verrieg
0	D 501	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 9	not used	1p		Pin, 1reihig, gerade
0	D 502	50.60.8001	4448		200mA 75V 4ns SOD 80	0	P 10	not used	1p		Pin, 1reihig, gerade
0	D 503	50.60.8001	4448		200mA 75V 4ns SOD 80						



**Processor Board 1.940.576.24 ( 0)**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	P 11	not used		1p	Pin, 1reihiig, gerade	0	R 401	57.60.1181		180R	MF, 1%, 0204, E24
0	P 21	54.01.0020	2 pcs	1p	Pin, 1reihiig, gerade	0	R 402	57.60.1223		22k	MF, 1%, 0204, E24
0	P 22	54.01.0020	2 pcs	1p	Pin, 1reihiig, gerade	0	R 501	57.60.1181		180R	MF, 1%, 0204, E24
0	P 23	54.01.0020	2 pcs	1p	Pin, 1reihiig, gerade	0	R 502	57.60.1223		22k	MF, 1%, 0204, E24
0	P 24	54.01.0020	2 pcs	1p	Pin, 1reihiig, gerade	0	R 601	57.60.1181		180R	MF, 1%, 0204, E24
0	P 35	54.01.0020		1p	Pin, 1reihiig, gerade	0	R 602	57.60.1223		22k	MF, 1%, 0204, E24
0	P 36	54.01.0020		1p	Pin, 1reihiig, gerade	0	R 701	57.60.1181		180R	MF, 1%, 0204, E24
0	P 37	54.01.0020		1p	Pin, 1reihiig, gerade	0	R 702	57.60.1223		22k	MF, 1%, 0204, E24
0	P 38	not used		1p	Pin, 1reihiig, gerade	0	R 801	57.60.1181		180R	MF, 1%, 0204, E24
0	P 39	not used		1p	Pin, 1reihiig, gerade	0	R 802	57.60.1223		22k	MF, 1%, 0204, E24
0	P 40	not used		1p	Pin, 1reihiig, gerade	0	R 803	57.60.1271		270R	MF, 1%, 0204, E24
0	Q 9	50.60.0050		BC817-25	NPN 45V 800mA SOT 23	0	R 804	57.60.1271		270R	MF, 1%, 0204, E24
0	Q 10	50.60.0050		BC817-25	NPN 45V 800mA SOT 23	0	R 805	57.60.1271		270R	MF, 1%, 0204, E24
0	Q 11	50.60.0050		BC817-25	NPN 45V 800mA SOT 23	0	R 806	57.60.1271		270R	MF, 1%, 0204, E24
0	Q 12	50.60.0050		BC817-25	NPN 45V 800mA SOT 23	0	R 807	57.60.1221		220R	MF, 1%, 0204, E24
0	Q 13	50.60.0050		BC817-25	NPN 45V 800mA SOT 23	0	R 808	57.60.1221		220R	MF, 1%, 0204, E24
0	Q 14	50.60.0050		BC817-25	NPN 45V 800mA SOT 23	0	R 809	57.60.1181		180R	MF, 1%, 0204, E24
0	Q 15	50.60.0050		BC817-25	NPN 45V 800mA SOT 23	0	R 810	57.60.1181		180R	MF, 1%, 0204, E24
0	Q 16	50.60.0050		BC817-25	NPN 45V 800mA SOT 23	0	R 811	57.60.1181		180R	MF, 1%, 0204, E24
0	Q 101	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 812	57.60.1181		180R	MF, 1%, 0204, E24
0	Q 201	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 813	57.60.1103		10k	MF, 1%, 0204, E24
0	Q 301	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 814	57.60.1102		1k0	MF, 1%, 0204, E24
0	Q 401	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 815	57.60.1000		0R0	MF, 0204
0	Q 501	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 816	57.60.1101		100R	MF, 1%, 0204, E24
0	Q 601	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 817	57.60.1106		10M	MF, 1%, 0204, E24
0	Q 701	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 818	57.60.1333		33k	MF, 1%, 0204, E24
0	Q 801	50.60.1003		BC856B	PNP 65V 100mA SOT 23	0	R 819	57.60.1823		82k	MF, 1%, 0204, E24
0	Q 802	not used		BT138	TRIAC 400V, 8A	0	R 820	57.60.1822		8k2	MF, 1%, 0204, E24
0	R 28	57.69.1097		10k	CF 5% 0603	0	R 821	57.60.1273		27k	MF, 1%, 0204, E24
0	R 29	57.69.1097		10k	CF 5% 0603	0	R 822	57.60.1104		100k	MF, 1%, 0204, E24
0	R 30	57.69.1097		10k	CF 5% 0603	0	R 823	57.60.1823		82k	MF, 1%, 0204, E24
0	R 31	57.69.1097		10k	CF 5% 0603	0	R 824	57.60.1822		8k2	MF, 1%, 0204, E24
0	R 32	57.69.1097		10k	CF 5% 0603	0	R 825	not used		3k3	MF, 1%, 0204, E24
0	R 33	57.69.1097		10k	CF 5% 0603	0	R 826	not used		3k3	MF, 1%, 0204, E24
0	R 34	57.69.1097		10k	CF 5% 0603	0	R 827	not used		150R	MF, 1%, 0204, E24
0	R 35	57.69.1097		10k	CF 5% 0603	0	R 828	57.60.1153		15k	MF, 1%, 0204, E24
0	R 36	57.69.1097		10k	CF 5% 0603	0	R 829	57.60.1622		6k2	MF, 1%, 0204, E24
0	R 37	57.69.1097		10k	CF 5% 0603	0	R 830	not used		15k	MF, 1%, 0204, E24
0	R 38	57.69.1097		10k	CF 5% 0603	0	R 831	not used		12k	MF, 1%, 0204, E24
0	R 39	57.69.1097		10k	CF 5% 0603	0	R 832	57.60.1223		22k	MF, 1%, 0204, E24
0	R 40	57.69.1097		10k	CF 5% 0603	0	R 833	57.60.1223		22k	MF, 1%, 0204, E24
0	R 41	57.60.1472		4k7	MF, 1%, 0204, E24	0	R 834	57.60.1103		10k	MF, 1%, 0204, E24
0	R 42	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 835	not used		1k0	MF, 1%, 0204, E24
0	R 43	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 836	57.69.1097		10k	CF 5% 0603
0	R 44	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 837	57.69.1097		10k	CF 5% 0603
0	R 45	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 838	57.60.1391		390R	MF, 1%, 0204, E24
0	R 46	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 839	57.60.1105		1M0	MF, 1%, 0204, E24
0	R 47	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 840	57.60.1105		1M0	MF, 1%, 0204, E24
0	R 48	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 841	57.60.1221		220R	MF, 1%, 0204, E24
0	R 49	57.60.1102		1k0	MF, 1%, 0204, E24	0	R 842	57.60.1221		220R	MF, 1%, 0204, E24
0	R 50	57.60.1332		3k3	MF, 1%, 0204, E24	0	R 843	57.60.1221		220R	MF, 1%, 0204, E24
0	R 51	57.60.1332		3k3	MF, 1%, 0204, E24	0	R 844	57.60.1221		220R	MF, 1%, 0204, E24
0	R 53	57.60.1223		22k	MF, 1%, 0204, E24	0	R 845	57.60.1221		220R	MF, 1%, 0204, E24
0	R 56	57.60.1223		22k	MF, 1%, 0204, E24	0	R 846	57.60.1103		10k	MF, 1%, 0204, E24
0	R 57	57.60.1223		22k	MF, 1%, 0204, E24	0	R 847	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 59	57.60.1223		22k	MF, 1%, 0204, E24	0	R 848	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 61	57.60.1223		22k	MF, 1%, 0204, E24	0	R 849	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 63	57.60.1223		22k	MF, 1%, 0204, E24	0	R 850	57.60.1271		270R	MF, 1%, 0204, E24
0	R 65	57.60.1223		22k	MF, 1%, 0204, E24	0	R 851	57.60.1181		180R	MF, 1%, 0204, E24
0	R 67	57.60.1223		22k	MF, 1%, 0204, E24	0	R 852	57.60.1103		10k	MF, 1%, 0204, E24
0	R 68	57.60.1221		220R	MF, 1%, 0204, E24	0	R 853	57.60.1103		10k	MF, 1%, 0204, E24
0	R 69	57.60.1221		220R	MF, 1%, 0204, E24	0	R 854	57.60.1102		1k0	MF, 1%, 0204, E24
0	R 78	57.60.1151		150R	MF, 1%, 0204, E24	0	R 855	not used		0R0	MF, 0204
0	R 79	57.60.1270		27R	MF, 1%, 0204, E24	0	R 856	not used		0R0	MF, 0204
0	R 80	57.60.1270		27R	MF, 1%, 0204, E24	0	R 857	not used		0R0	MF, 0204
0	R 81	57.92.7053		1.6A	PTC 30V	0	R 858	not used		0R0	MF, 0204
0	R 82	57.60.1102		1k0	MF, 1%, 0204, E24	0	S 1	55.01.0164		4*a	DIL-Switch, PCB
0	R 83	57.60.1472		4k7	MF, 1%, 0204, E24	0	T 5	1.022.632.00		1:1	DI/DO TRANSFORMER
0	R 84	57.60.1270		27R	MF, 1%, 0204, E24	0	T 6	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU
0	R 85	57.60.1270		27R	MF, 1%, 0204, E24	0	T 7	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU
0	R 86	57.60.1222		2k2	MF, 1%, 0204, E24	0	T 8	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU
0	R 87	57.60.1222		2k2	MF, 1%, 0204, E24	0	T 9	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU
0	R 88	57.60.1220		22R	MF, 1%, 0204, E24	0	TP 3	54.33.6010		2.8*0.8	PCB-Flachstecker, gerade
0	R 89	57.60.1220		22R	MF, 1%, 0204, E24	0	XDL 1	50.20.2501		Spacer	LED-Sockel
0	R 90	57.60.1220		22R	MF, 1%, 0204, E24	0	XDL 2	50.20.2501		Spacer	LED-Sockel
0	R 91	57.60.1220		22R	MF, 1%, 0204, E24	0	XIC 36	53.03.0166		8p	DIL-socket 0.3"
0	R 92	57.60.1103		10k	MF, 1%, 0204, E24	0	XIC 39	53.03.2232		32p	PLCC-Socket
0	R 93	57.60.1103		10k	MF, 1%, 0204, E24	0	XIC 52	not used		8p	DIL-socket 0.3"
0	R 94	57.60.1103		10k	MF, 1%, 0204, E24	0	XIC 55	53.03.0168		16p	DIL-socket 0.3"
0	R 95	57.60.1100		10R	MF, 1%, 0204, E24	0	XIC 56	not used		16p	DIL-socket 0.3"
0	R 96	57.60.1103		10k	MF, 1%, 0204, E24	0	Y 1	89.60.1003		12.000MHz	SMD Quartz
0	R 101	57.60.1181		180R	MF, 1%, 0204, E24	0	Y 2	89.60.1007		14.7456MHz	SMD Quartz
0	R 102	57.60.1223		22k	MF, 1%, 0204, E24	0	Y 3	not used		12.000MHz	XTAL HC 49/U
0	R 201	57.60.1181		180R	MF, 1%, 0204, E24						
0	R 202	57.60.1223		22k	MF, 1%, 0204, E24						
0	R 301	57.60.1181		180R	MF, 1%, 0204, E24						
0	R 302	57.60.1223		22k	MF, 1%, 0204, E24						

**Processor Board 1.940.576.24 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
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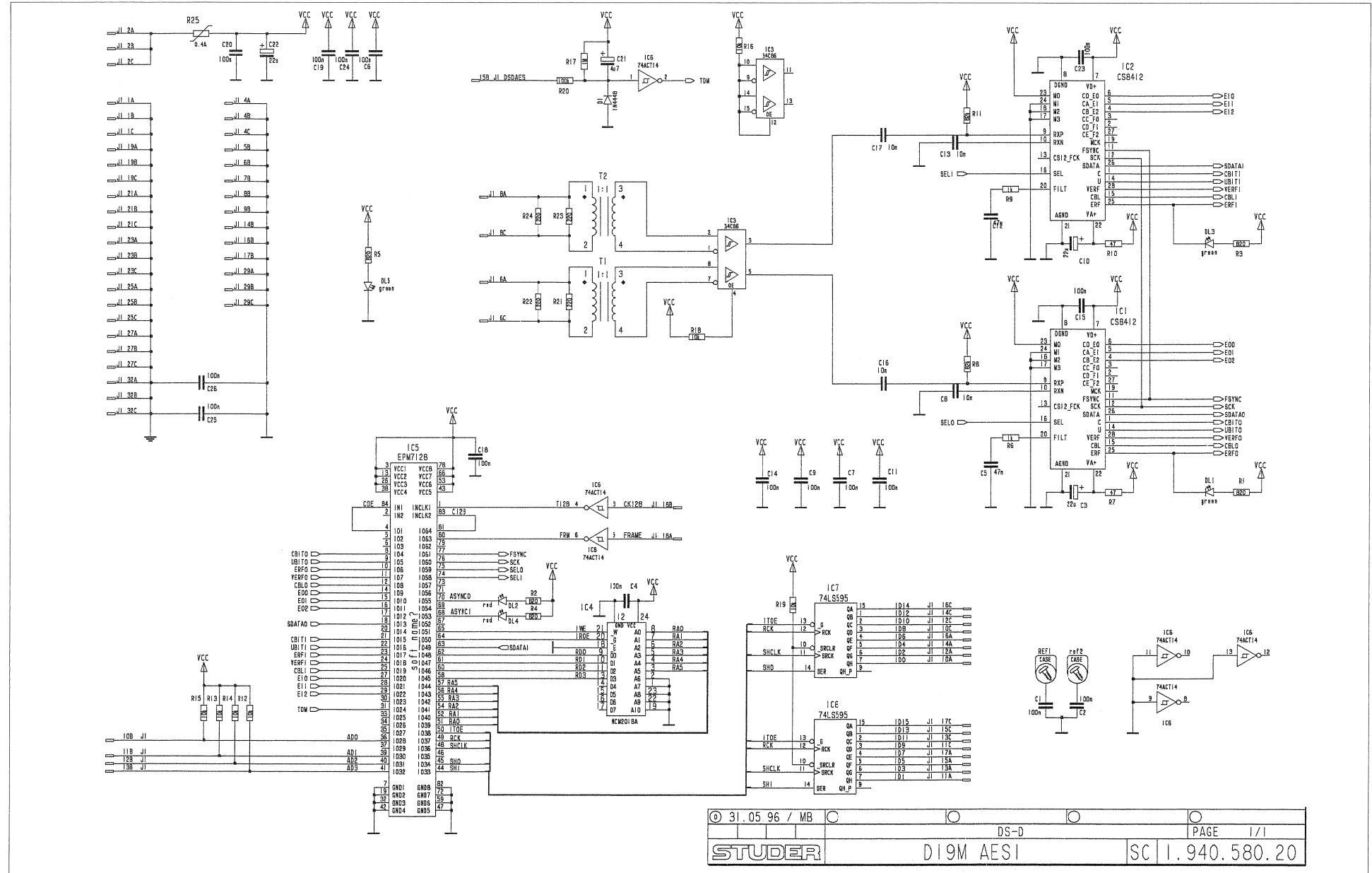
Idx. Pos.	Part No.	Qty.	Type/Val.	Description
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End of List

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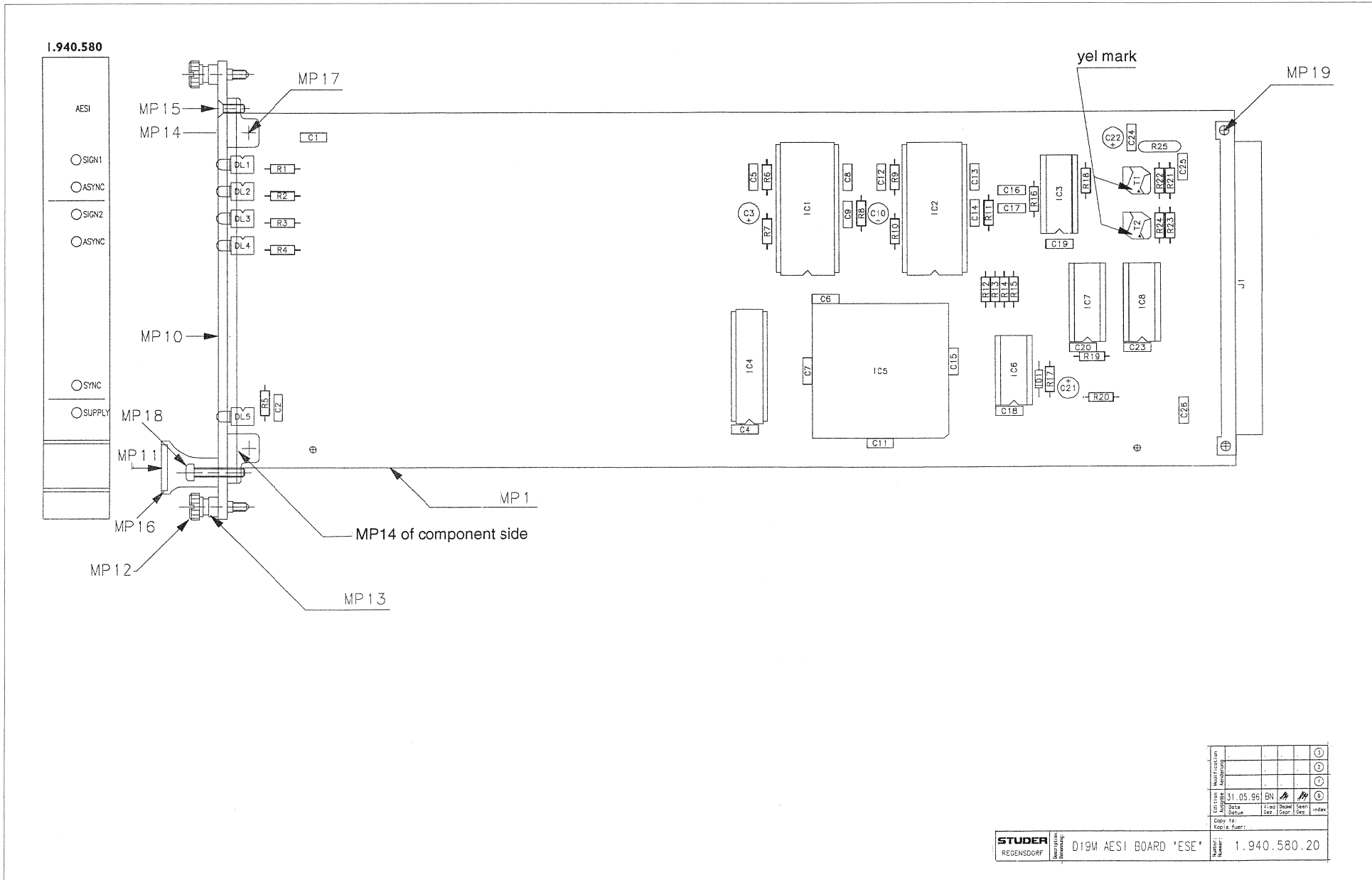
[24] New RCC firmware

D19M AESI Board 1.940.580.20





D19M AESI Board 1.940.580.20



ECI No.	31.05.96	BN	BN	BN	BN	BN	BN	BN	BN
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State									
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STUDER REGENSDORF D19M AESI BOARD 'ESE' 1.940.580.20



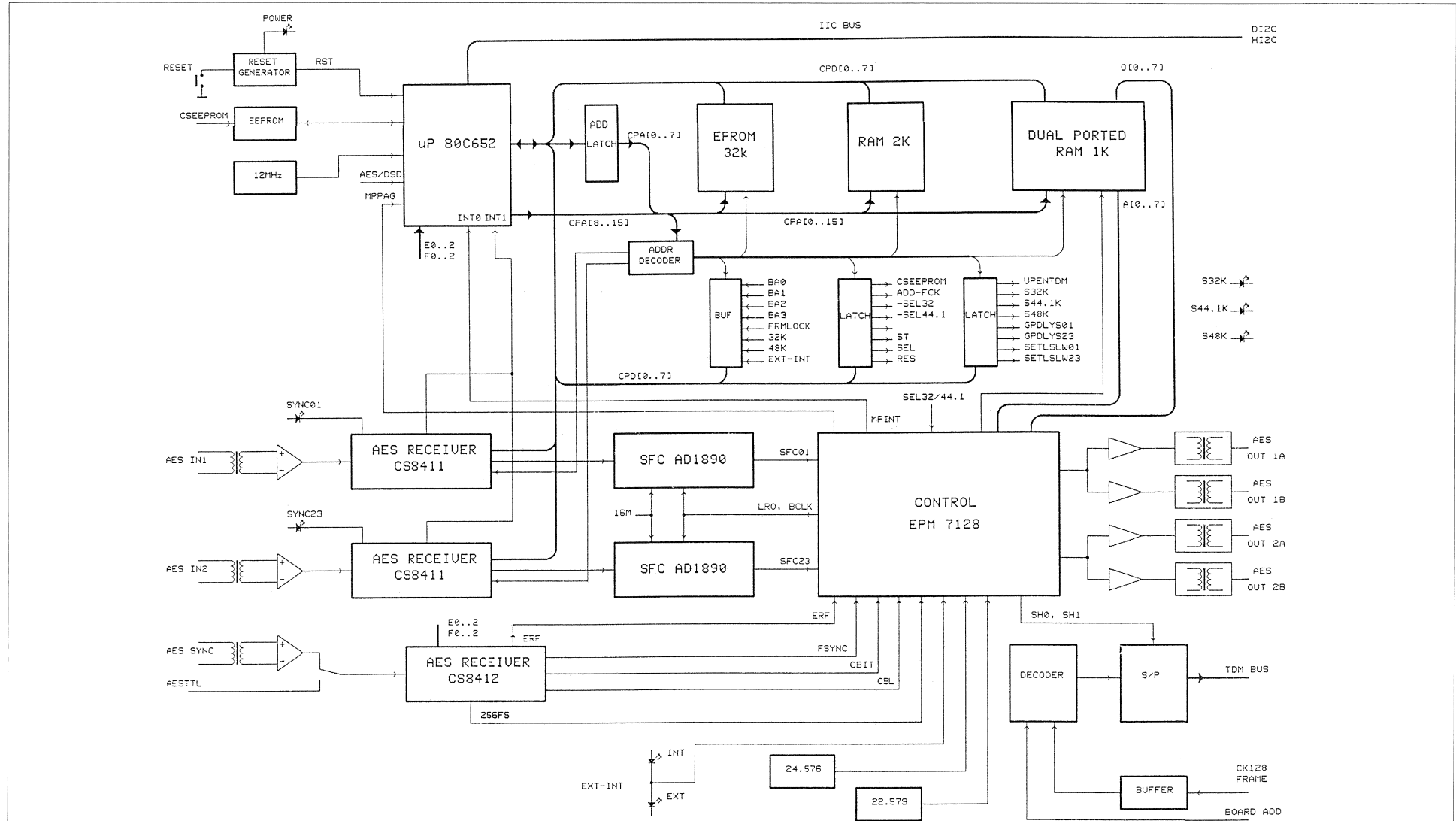
D19m AESI Board I.940.580.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104		100n	PETP, 10%, 63V	0	R 16	57.11.3103		10k	MF, 1%, 0207
0	C 2	59.06.0104		100n	PETP, 10%, 63V	0	R 17	57.11.3105		1M0	MF, 1%, 0207
0	C 3	59.22.5220		22u	EL 25V, 20%, rad RM5	0	R 18	57.11.3103		10k	MF, 1%, 0207
0	C 4	59.06.0104		100n	PETP, 10%, 63V	0	R 19	57.11.3103		10k	MF, 1%, 0207
0	C 5	59.06.0473		47n	PETP, 10%, 63V	0	R 20	57.11.3104		100k	MF, 1%, 0207
0	C 6	59.06.0104		100n	PETP, 10%, 63V	0	R 21	57.11.3221		220R	MF, 1%, 0207
0	C 7	59.06.0104		100n	PETP, 10%, 63V	0	R 22	57.11.3221		220R	MF, 1%, 0207
0	C 8	59.06.0103		10n	PETP, 10%, 63V	0	R 23	57.11.3221		220R	MF, 1%, 0207
0	C 9	59.06.0104		100n	PETP, 10%, 63V	0	R 24	57.11.3221		220R	MF, 1%, 0207
0	C 10	59.22.5220		22u	EL 25V, 20%, rad RM5	0	R 25	57.92.7053		1.6A	RT 1.6 A „POLY- PTC 30V
0	C 11	59.06.0104		100n	PETP, 10%, 63V						
0	C 12	59.06.0473		47n	PETP, 10%, 63V	0	T 1	1.022.632.00		1.022.632.00	DI/DO TRANSFORMER
0	C 13	59.06.0103		10n	PETP, 10%, 63V	0	T 2	1.022.632.00		1.022.632.00	DI/DO TRANSFORMER
0	C 14	59.06.0104		100n	PETP, 10%, 63V						
0	C 15	59.06.0104		100n	PETP, 10%, 63V	0	XDL 1	50.20.2501		Spacer	LED-Socket
0	C 16	59.06.0103		10n	PETP, 10%, 63V	0	XDL 2	50.20.2501		Spacer	LED-Socket
0	C 17	59.06.0103		10n	PETP, 10%, 63V	0	XDL 3	50.20.2501		Spacer	LED-Socket
0	C 18	59.06.0104		100n	PETP, 10%, 63V	0	XDL 4	50.20.2501		Spacer	LED-Socket
0	C 19	59.06.0104		100n	PETP, 10%, 63V	0	XDL 5	50.20.2501		Spacer	LED-Socket
0	C 20	59.06.0104		100n	PETP, 10%, 63V						
0	C 21	59.22.8479		4u7	EL 50V, 20%, rad RM5	0	XIC 5	53.03.2284		XIC PLCC84	XIC PLCC 84 PIN
0	C 22	59.22.5220		22u	EL 25V, 20%, rad RM5						
0	C 23	59.06.0104		100n	PETP, 10%, 63V						
0	C 24	59.06.0104		100n	PETP, 10%, 63V						
0	C 25	59.06.0104		100n	PETP, 10%, 63V						
0	C 26	59.06.0104		100n	PETP, 10%, 63V						
0	D 1	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN <i>gesockelt mit 50.20.2501</i>						
0	DL 2	50.04.2200		HLMP1700	DL HLMP - 1700 RT <i>gesockelt mit 50.20.2501</i>						
0	DL 3	50.04.2202		HLMP1790	DL HLMP - 1790 GN <i>gesockelt mit 50.20.2501</i>						
0	DL 4	50.04.2200		HLMP1700	DL HLMP - 1700 RT <i>gesockelt mit 50.20.2501</i>						
0	DL 5	50.04.2202		HLMP1790	DL HLMP - 1790 GN <i>gesockelt mit 50.20.2501</i>						
0	IC 1	50.13.0202		CS8412	IC CS 8412-CP ,A						
0	IC 2	50.13.0202		CS8412	IC CS 8412-CP ,A						
0	IC 3	50.15.0128		34C86	IC DS 34 C 86 TN, MC34C86P ,A						
0	IC 4	50.14.1009		CY7C128-35	IC MCM 2018 A - 35 ,A						
0	IC 5	1.940.960.21			SW 580 DSDAI (50.63.4205) <i>gesockelt mit 53.03.2284</i>						
0	IC 6	50.17.7014		ACT14	.. 74 ACT 14 .						
0	IC 7	50.06.0595		74LS595	IC SN 74 LS 595 N						
0	IC 8	50.06.0595		74LS595	IC SN 74 LS 595 N						
0	J 1	54.11.2009			J EU-R 3 * 32						
0	MP 1	1.940.580.11			D19M AESI BOARD PCB						
0	MP 2	1.940.580.04			TYPENSCHILD						
0	MP 3	43.01.0108		Label	ESE-WARNSCHILD						
0	MP 4	not used		Label	TEXT-ETIK. 5*20 HARDWARE -20						
0	MP 10	1.940.580.01	1 pce		FRONTPLATTE						
0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE						
0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)						
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)						
0	MP 14	49.02.0522	2 pcs		Kartenhalter (Rack)						
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp						
0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff						
0	MP 17	21.53.0279	2 pcs		Z - SCHR. IS , ZN , M2.5 * 6						
0	MP 18	21.53.0284	1 pce		Z - SCHR. IS , ZN , M2.5 * 16						
0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9						
0	R 1	57.11.3821		820R	MF, 1%, 0207						
0	R 2	57.11.3821		820R	MF, 1%, 0207						
0	R 3	57.11.3821		820R	MF, 1%, 0207						
0	R 4	57.11.3821		820R	MF, 1%, 0207						
0	R 5	57.11.3821		820R	MF, 1%, 0207						
0	R 6	57.11.3102		1k0	MF, 1%, 0207						
0	R 7	57.11.3470		47R	MF, 1%, 0207						
0	R 8	57.11.3823		82k	MF, 1%, 0207						
0	R 9	57.11.3102		1k0	MF, 1%, 0207						
0	R 10	57.11.3470		47R	MF, 1%, 0207						
0	R 11	57.11.3823		82k	MF, 1%, 0207						
0	R 12	57.11.3103		10k	MF, 1%, 0207						
0	R 13	57.11.3103		10k	MF, 1%, 0207						
0	R 14	57.11.3103		10k	MF, 1%, 0207						
0	R 15	57.11.3103		10k	MF, 1%, 0207						

End of List

Comments

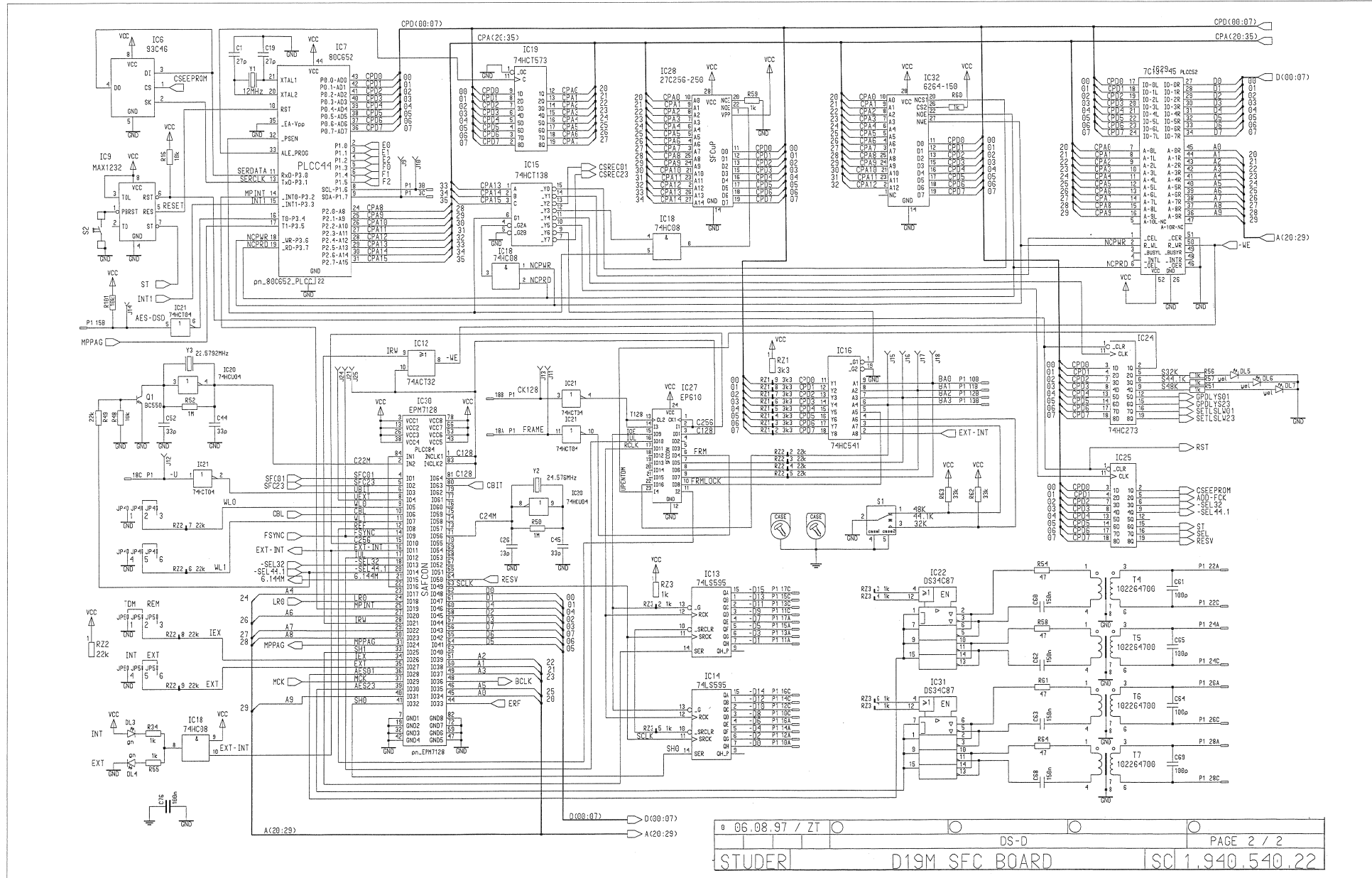
Block Diagram  
D19M SFC Board 1.940.540







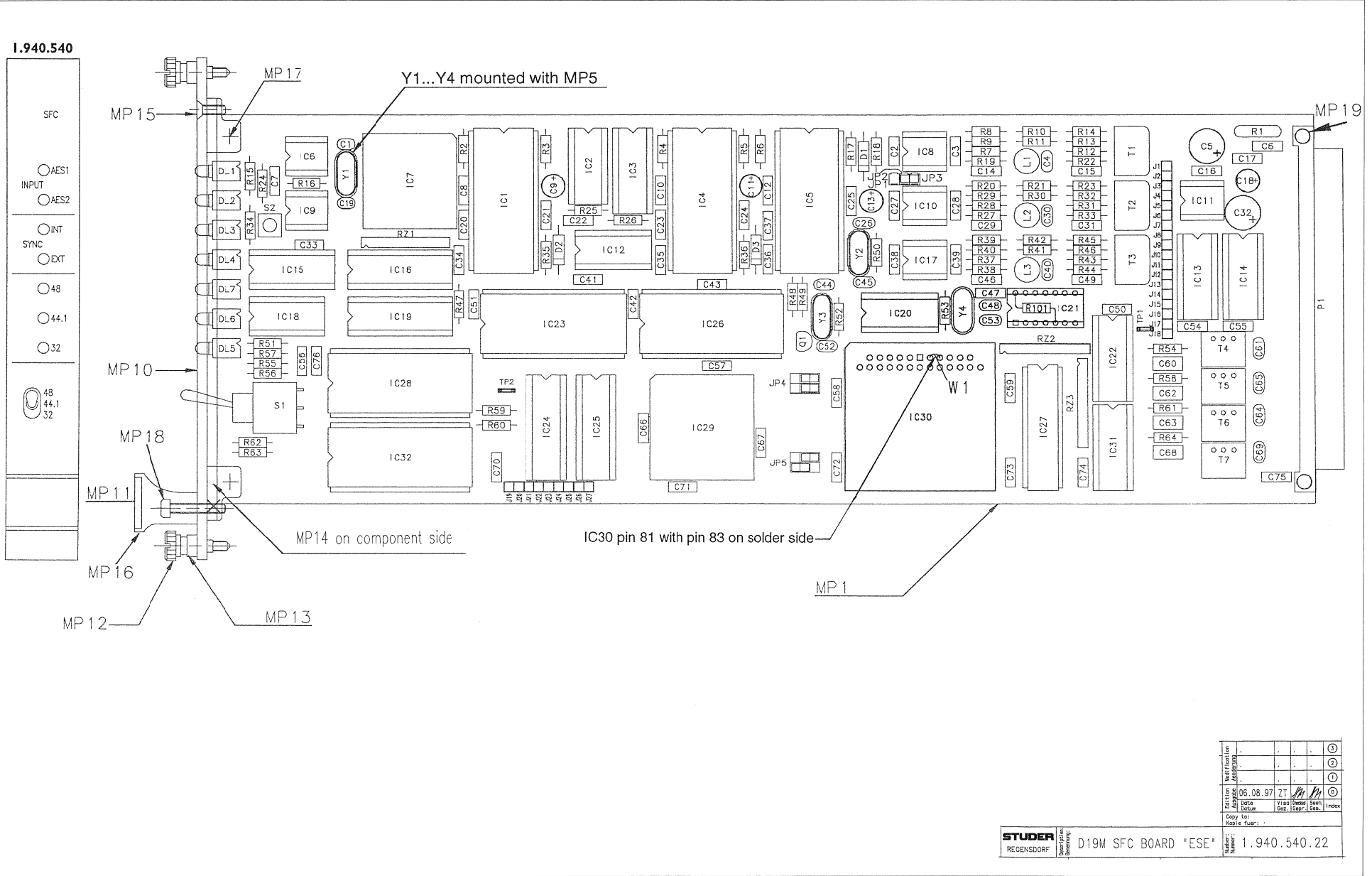
D19M SFC Board 1.940.540.22







D19M SFC Board I.940.540.22





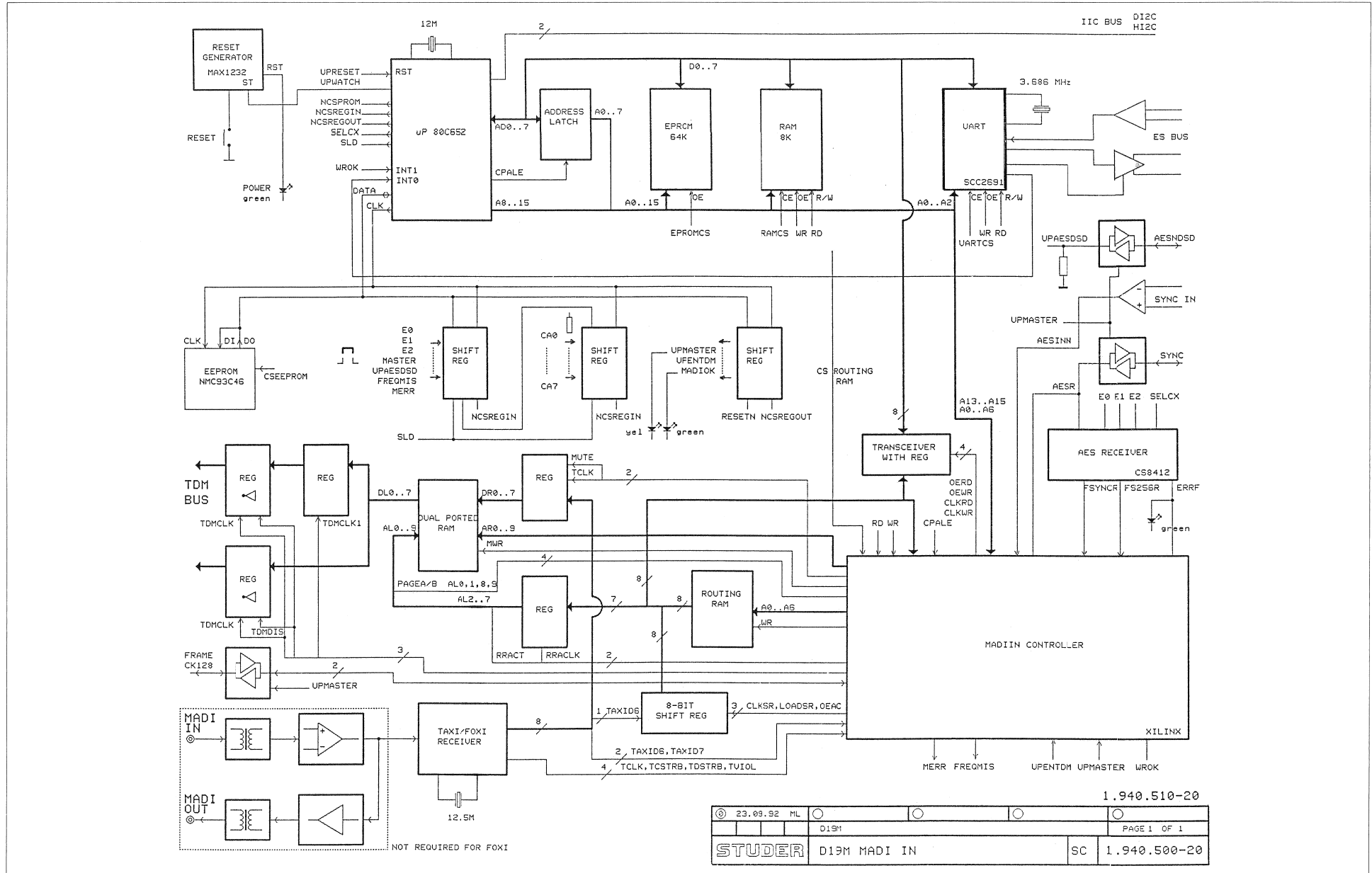
D19m SFC Board 1.940.540.23

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.34.2273	27p		CER 63V, 5%, N150	0 DL 7	50.04.2752	yel		LED mit Halter, gelb	0 MP 14	46.02.0522	2 pcs		Kartenhalter (Rack)	0 T 5	1.022.647.00	1:1.4		OUTPUT TRAF0 AES/EBU
0 C 2	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 1	50.13.0201	CS8411		AES/EBU Receiver	0 MP 15	46.02.0523	1 pce	M2.5*7	Sanf-Schr. KS, Senkripp	0 T 6	1.022.647.00	1:1.4		OUTPUT TRAF0 AES/EBU
0 C 3	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 2	50.13.0201	74HC700		IC .. 74 HCT 00 .. A	0 MP 16	46.02.0504	1 pce	4TE	Frontplatten-Griff	0 T 7	1.022.647.00	1:1.4		OUTPUT TRAF0 AES/EBU
0 C 4	59.34.4101	100p		CER 63V, 5%, N750	0 IC 3	50.17.1153	74HC153		IC .. 74 HC 153 .. A	0 MP 17	21.53.0279	2 pcs		Z-SCHR. IS, ZN, M2.5 * 6					
0 C 5	59.22.4101	100u		EL 16V, 20%, RMS	0 IC 4	50.13.0201	CS8411		AES/EBU Receiver	0 MP 18	21.53.0284	1 pce		Z-SCHR. IS, ZN, M2.5 * 16	0 TP 1	54.02.0320	1p		Flatpin, 2.8*0.8mm
0 C 6	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 5	50.13.0202	CS8412		IC CS 8412-CP .. A	0 MP 19	28.99.0119	2 pcs		ROHRSCHLIE D 2.5*0.15* 9	0 TP 2	54.02.0320	1p		Flatpin, 2.8*0.8mm
0 C 7	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 6	50.14.2103	HY93CA68		EEPROM54 * 16, serial	0 P 1	54.11.2009	96p		EU-R 3*32p	0 W 1	64.01.0108	3 mm		SCHALTDRAHT SN D 0.8
0 C 8	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 7	50.53.0039	80C552		MPU 8bit	0 Q 1	50.03.0407	BC550C	BC 550 C	0 XIC 7	53.03.2244	PLCC44p		PLCC-Socket 44p	
0 C 9	59.22.8109	1u		PETP, 63V, 10%, RMS	0 IC 8	50.11.0159	MAX1232		IC MAX 1232 CPA, DS 1232	0 R 1	57.92.7053	1.6A	POLY-PTC, 30V	0 XIC 13	53.03.0168	16p		DIL 0.3", lot, gerade	
0 C 10	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 9	50.11.0159	MAX1232		IC MAX 1232 CPA, DS 1232	0 R 2	57.11.3823	82k	MF, 1%, 0207	0 XIC 14	53.03.0168	16p		DIL 0.3", lot, gerade	
0 C 11	59.22.8109	1u		EL 50V, 20%, RMS	0 IC 10	50.11.0002	LM380		High speed Comparator	0 R 3	57.11.3470	47R	MF, 1%, 0207	0 XIC 22	53.03.0168	16p		DIL 0.3", lot, gerade	
0 C 12	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 11	50.10.0124	MAX860		V-Converter... +5.5V to -5.5V	0 R 4	57.11.3823	82k	MF, 1%, 0207	0 XIC 27	53.03.0182	24p		DIL 0.3", lot, gerade	
0 C 13	59.22.8109	1u		EL 50V, 20%, RMS	0 IC 12	50.17.7032	ACT32		.. 74 ACT 32 ..	0 R 5	57.11.3470	47R	MF, 1%, 0207	0 XIC 28	53.03.0173	28p		DIL 0.3", lot, gerade	
0 C 14	59.06.0103	10n		PETP, 63V, 10%, RMS	0 IC 13	50.06.0595	*4LS585		IC SN 74LS 585 N	0 R 6	57.11.3470	47R	MF, 1%, 0207	0 XIC 29	53.03.2252	PLCC52p		PLCC-Socket 52p	
0 C 15	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 14	50.06.0595	*4LS585		IC SN 74LS 585 N	0 R 7	57.11.3823	82k	MF, 1%, 0207	0 XIC 30	53.03.2284	PLCC84p		PLCC-Socket 84p	
0 C 16	59.06.0103	10n		PETP, 63V, 10%, RMS	0 IC 15	50.17.0138	*4HCT138		IC .. 74 HCT138 .. A	0 R 8	57.11.3103	10k	MF, 1%, 0207	0 XIC 31	53.03.0168	16p		DIL 0.3", lot, gerade	
0 C 17	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 16	50.17.1541	*4HC641		IC .. 74 HC 541 .. A	0 R 9	57.11.3103	10k	MF, 1%, 0207	0 Y 1	89.01.1014	12.000MHz	12.000 MHz, HC 49/U		
0 C 18	59.22.3470	47u		EL 10V, 20%, RMS	0 IC 17	50.11.0002	LM380		High speed Comparator	0 R 10	57.11.3471	470R	MF, 1%, 0207	0 Y 2	89.01.1010	24.576MHz	24.576 000 MHz, HC 18/U		
0 C 19	59.34.2270	27p		CER 63V, 5%, N150	0 IC 18	50.17.1008	*4HC08		IC .. 74 HC 08 .. A	0 R 11	57.11.3102	1k0	MF, 1%, 0207	0 Y 3	89.01.1012	22.576200 MHz	22.576 200 MHz, HC 49/U		
0 C 20	59.06.0103	10n		PETP, 63V, 10%, RMS	0 IC 19	50.17.0873	*4HCT573		IC .. 74 HCT573 .. A	0 R 12	57.11.3150	15R	MF, 1%, 0207	0 Y 4	89.01.1009	16.000MHz	16.000 000 MHz, HC 49/U		
0 C 21	59.06.0473	47n		PETP, 63V, 10%, RMS	0 IC 20	50.17.1954	*4HCU04		IC .. 74 HCT04 .. A	0 R 13	57.11.3150	15R	MF, 1%, 0207						
0 C 22	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 21	50.17.0004	*4HCT04		IC .. 74 HCT 04 .. A	0 R 14	57.11.3271	270R	MF, 1%, 0207						
0 C 23	59.06.0103	10n		PETP, 63V, 10%, RMS	0 IC 22	50.15.0127	34C87		IC DS 34 C 87 TN, MC34C87P, A	0 R 15	57.11.3102	1k0	MF, 1%, 0207						
0 C 24	59.06.0473	47n		PETP, 63V, 10%, RMS	0 IC 23	50.13.0204	IC AD 1839 JN		.. A	0 R 16	57.11.3102	1k0	MF, 1%, 0207						
0 C 25	59.06.0473	47n		PETP, 63V, 10%, RMS	0 IC 24	50.17.1273	*4HC273		IC .. 74 HC 273 .. A	0 R 17	57.11.3102	1k0	MF, 1%, 0207						
0 C 26	59.34.2330	33p		CER 63V, 5%, N150	0 IC 25	50.17.1273	*4HC273		IC .. 74 HC 273 .. A	0 R 18	57.11.3102	1k0	MF, 1%, 0207						
0 C 27	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 26	50.13.0204	IC AD 1839 JN		.. A	0 R 19	57.11.3103	10k	MF, 1%, 0207						
0 C 28	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 27	1.940.951.21			1.940.951.21	0 R 20	57.11.3103	10k	MF, 1%, 0207						
0 C 29	59.06.0103	10n		PETP, 63V, 10%, RMS	0 IC 28	1.940.951.21			1.940.951.21	0 R 21	57.11.3471	470R	MF, 1%, 0207						
0 C 30	59.34.4101	100p		CER 63V, 5%, N750	0 IC 29	50.63.1702	2Y7C130		Dualport SRAM, 1K*8	0 R 22	57.11.3271	270R	MF, 1%, 0207						
0 C 31	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 30	1.940.950.23			SW 540 SAFCON (50.18.0104)	0 R 23	57.11.3102	1k0	MF, 1%, 0207						
0 C 32	59.22.4101	100u		EL 16V, 20%, RMS	0 IC 31	50.15.0127	34C87		IC DS 34 C 87 TN, MC34C87P, A	0 R 24	57.11.3102	1k0	MF, 1%, 0207						
0 C 33	59.06.0104	100n		PETP, 63V, 10%, RMS	0 IC 32	50.14.0133	3595		IC HM 6294LP-15 .. A	0 R 25	57.11.3332	3k3	MF, 1%, 0207						
0 C 34	59.06.0103	10n		PETP, 63V, 10%, RMS	0 J 1	53.03.0219	1p		single-in-line	0 R 26	57.11.3332	3k3	MF, 1%, 0207						
0 C 35	59.06.0103	10n		PETP, 63V, 10%, RMS	0 J 2	53.03.0219	1p		single-in-line	0 R 27	57.11.3103	10k	MF, 1%, 0207						
0 C 36	59.06.0103	10n		PETP, 63V, 10%, RMS	0 J 3	53.03.0219	1p		single-in-line	0 R 28	57.11.3103	10k	MF, 1%, 0207						
0 C 37	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 4	53.03.0219	1p		single-in-line	0 R 29	57.11.3103	10k	MF, 1%, 0207						
0 C 38	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 5	53.03.0219	1p		single-in-line	0 R 30	not used	470R	MF, 1%, 0207						
0 C 39	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 6	53.03.0219	1p		single-in-line	0 R 31	57.11.3150	15R	MF, 1%, 0207						
0 C 40	59.34.4101	100p		CER 63V, 5%, N750	0 J 7	53.03.0219	1p		single-in-line	0 R 32	57.11.3150	15R	MF, 1%, 0207						
0 C 41	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 8	53.03.0219	1p		single-in-line	0 R 33	57.11.3271	270R	MF, 1%, 0207						
0 C 42	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 9	53.03.0219	1p		single-in-line	0 R 34	57.11.3102	1k0	MF, 1%, 0207						
0 C 43	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 10	53.03.0219	1p		single-in-line	0 R 35	57.11.3102	1k0	MF, 1%, 0207						
0 C 44	59.34.2330	33p		CER 63V, 5%, N150	0 J 11	53.03.0219	1p		single-in-line	0 R 36	57.11.3102	1k0	MF, 1%, 0207						
0 C 45	59.34.2330	33p		CER 63V, 5%, N150	0 J 12	53.03.0219	1p		single-in-line	0 R 37	57.11.3103	10k	MF, 1%, 0207						
0 C 46	59.06.0103	10n		PETP, 63V, 10%, RMS	0 J 13	53.03.0219	1p		single-in-line	0 R 38	57.11.3103	10k	MF, 1%, 0207						
0 C 47	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 14	53.03.0219	1p		single-in-line	0 R 39	57.11.3103	10k	MF, 1%, 0207						
0 C 48	59.34.2330	33p		CER 63V, 5%, N150	0 J 15	53.03.0219	1p		single-in-line	0 R 40	57.11.3103	10k	MF, 1%, 0207						
0 C 49	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 16	53.03.0219	1p		single-in-line	0 R 41	not used	470R	MF, 1%, 0207						
0 C 50	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 17	53.03.0219	1p		single-in-line	0 R 42	57.11.3471	470R	MF, 1%, 0207						
0 C 51	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 18	53.03.0219	1p		single-in-line	0 R 43	57.11.3150	15R	MF, 1%, 0207						
0 C 52	59.34.2330	33p		CER 63V, 5%, N150	0 J 19	53.03.0219	1p		single-in-line	0 R 44	57.11.3271	270R	MF, 1%, 0207						
0 C 53	59.34.2330	33p		CER 63V, 5%, N150	0 J 20	53.03.0219	1p		single-in-line	0 R 45	57.11.3102	1k0	MF, 1%, 0207						
0 C 54	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 21	53.03.0219	1p		single-in-line	0 R 46	57.11.3150	15R	MF, 1%, 0207						
0 C 55	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 22	53.03.0219	1p		single-in-line	0 R 47	57.11.3472	47R	MF, 1%, 0207						
0 C 56	59.06.0104	100n		PETP, 63V, 10%, RMS	0 J 23	53.03.0219	1p		single-in-line	0 R 4									

**STUDER**

D19m Digital Audio Processing

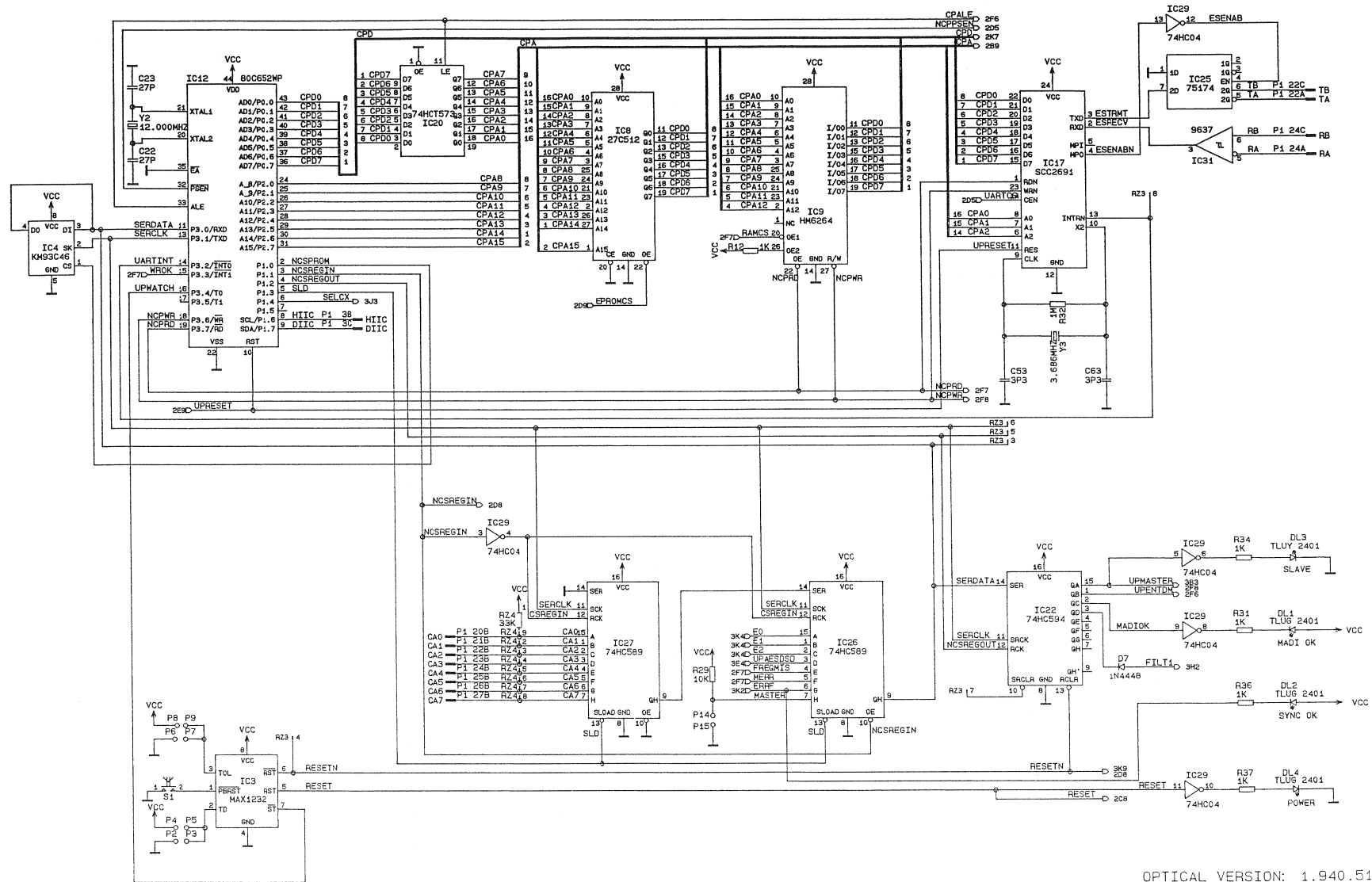
**Block Diagram**  
**D19M Madi Coaxial 1.940.500**  
**Madi Optical 1.940.510**



1.940.510-20

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	D19M			PAGE 1 OF 1
<b>STUDER</b>	D19M MADI IN	SC	1.940.500-20	

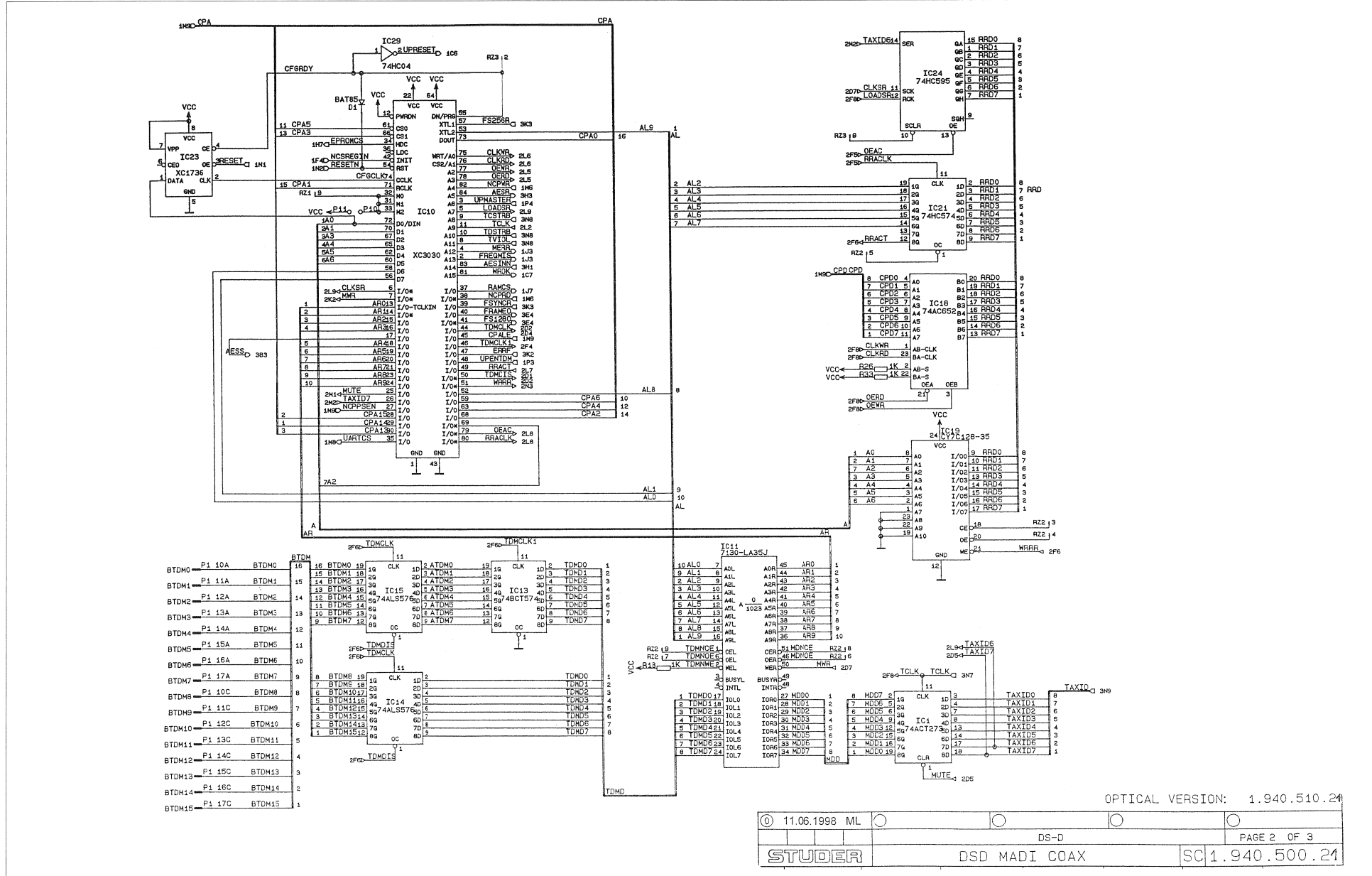
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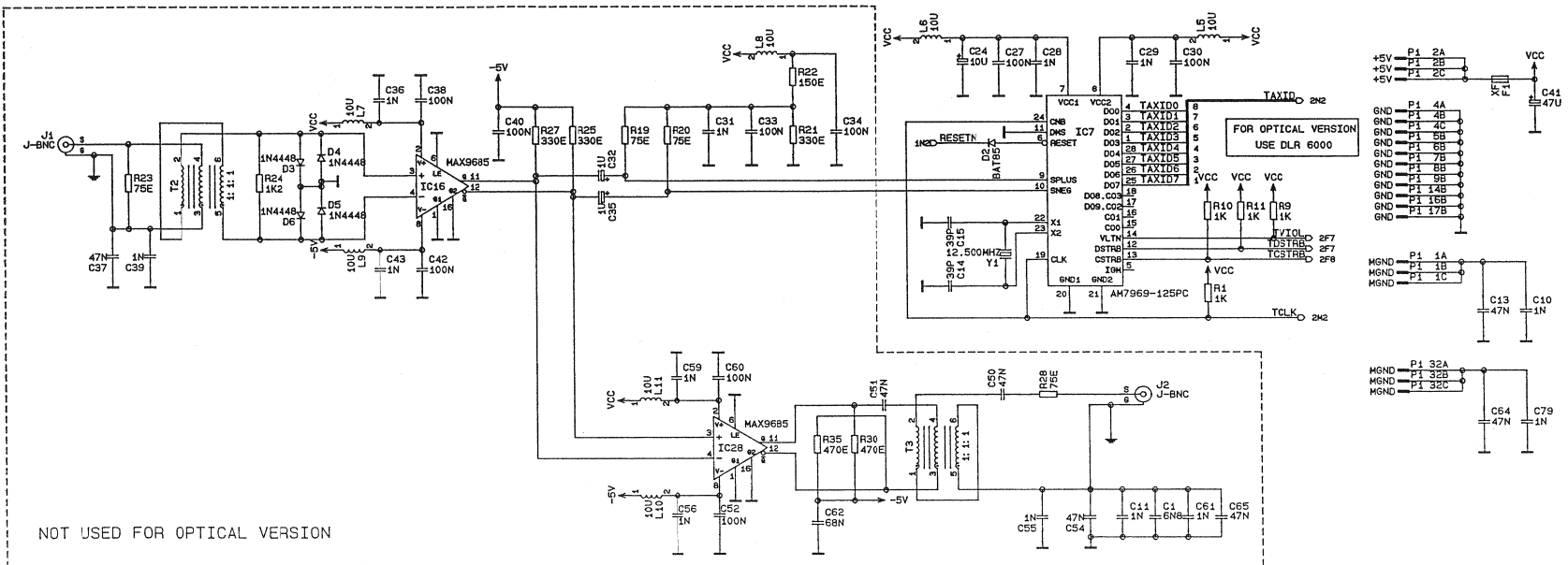
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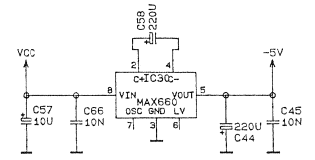
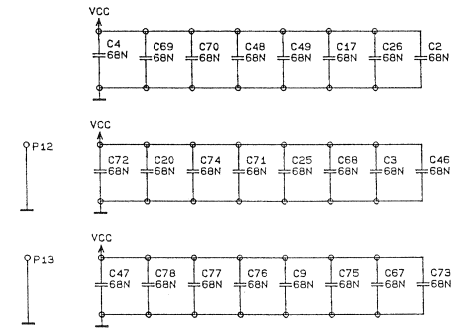
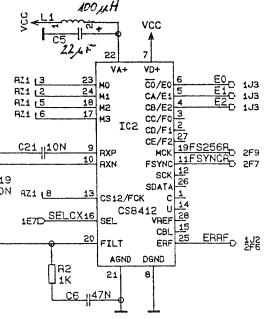
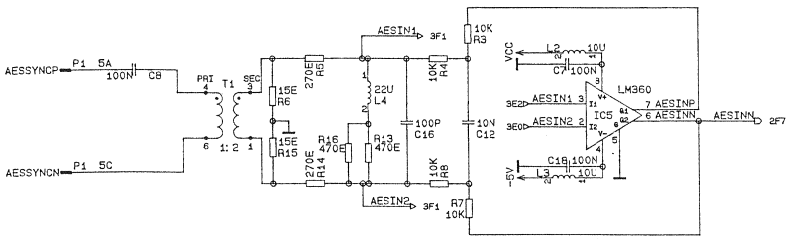
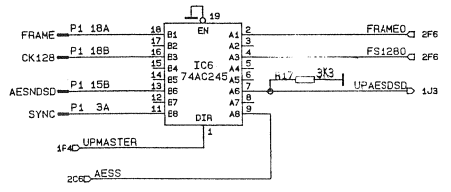
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Madi Optical 1.940.510.21



D19M Madi Coaxial 1.940.500.21  
Madi Optical 1.940.510.21



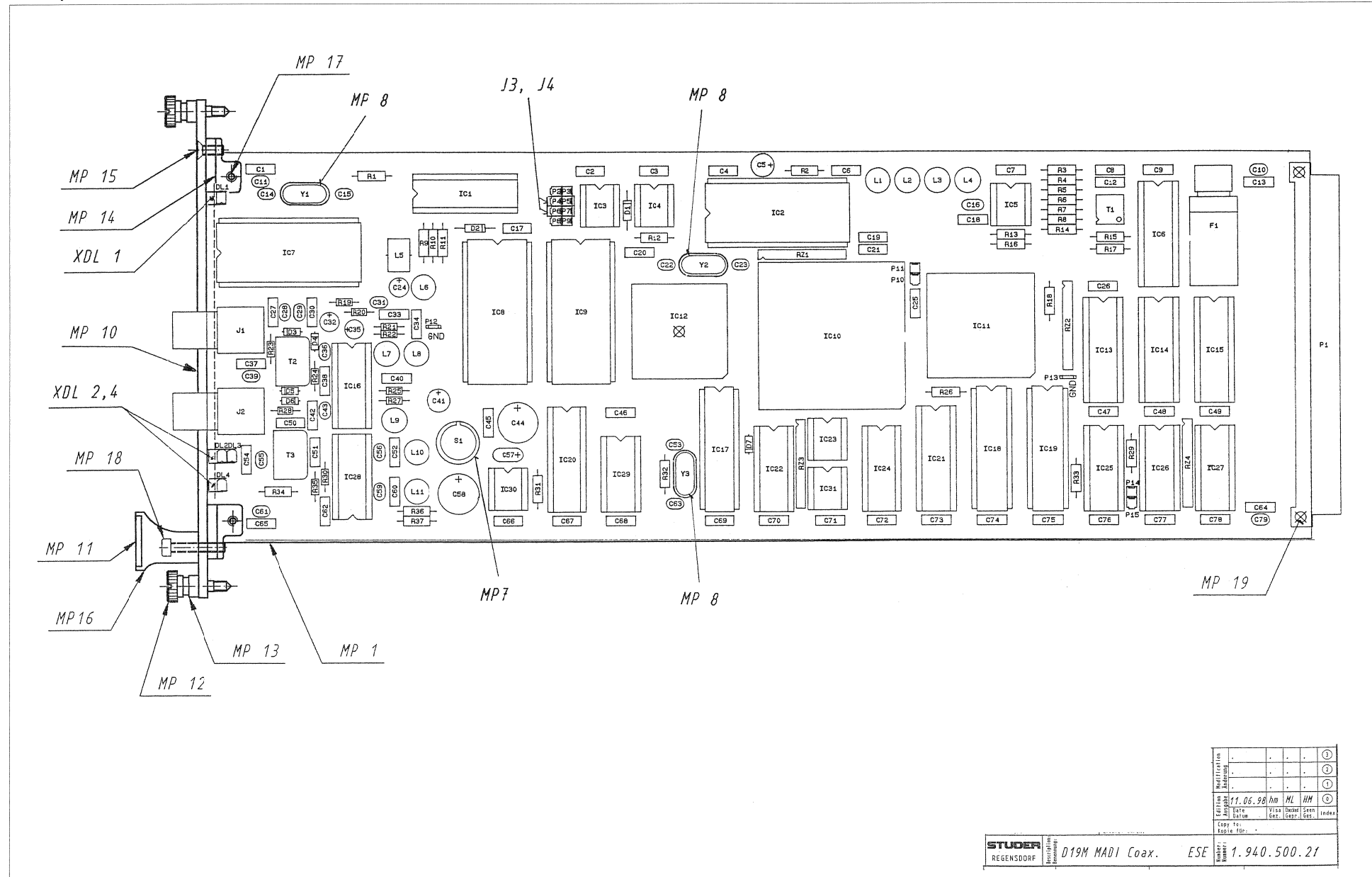
NOT USED FOR OPTICAL VERSION



OPTICAL VERSION: 1.940.510.21



D19M Madi Coaxial 1.940.500.21  
Madi Optical 1.940.510.21



Revision	1	1	1	1	1
Modifikation					
Änderung					
Date	11.06.98	hm	ML	HM	
Vista					
Gez.					
Gepr.					
Index					



D19M Madi Coaxial 1.940.500.21

Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0682		6n8	PETP, 63V, 10%, RM5	0	D 4	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	C 2	59.06.0683		68n	PETP, 63V, 10%, RM5	0	D 5	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	C 3	59.06.0683		68n	PETP, 63V, 10%, RM5	0	D 6	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	C 4	59.06.0683		68n	PETP, 63V, 10%, RM5	0	D 7	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	C 5	59.22.5220		22u	EL 25V 20% RM5	0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0	C 6	59.06.0473		47n	PETP, 63V, 10%, RM5	0	DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0	C 7	59.06.0104		100n	PETP, 63V, 10%, RM5	0	DL 3	50.04.2201		HLMP1719	DL HLMP - 1719 GB
0	C 8	59.06.0104		100n	PETP, 63V, 10%, RM5	0	DL 4	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0	C 9	59.06.0683		68n	PETP, 63V, 10%, RM5	0	F 1	51.01.0119		1.6A	T 5*20 L 250V
0	C 10	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	IC 1	50.17.7273		ACT273	.. 74 ACT 273 .
0	C 11	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	IC 2	50.13.0202		CS8412	IC CS 8412-CP ,A
0	C 12	59.06.0103		10n	PETP, 63V, 10%, RM5	0	IC 3	50.11.0159		MAX1232	IC MAX 1232 CPA, DS 1232
0	C 13	59.06.0473		47n	PETP, 63V, 10%, RM5	0	IC 4	50.14.2103		93C46	EEPROM 64 * 16, serial
0	C 14	59.34.2390		39p	CER 63V, 5%, N150	0	IC 5	50.11.1002		LM360	High speed Comparator
0	C 15	59.34.2390		39p	CER 63V, 5%, N150	0	IC 6	50.06.0245		74LS245	SN 74 LS 245 N
0	C 16	59.34.4101		100p	CER 63V, 5%, N750	0	IC 7	50.16.0702		AM7969-125	TAXI Receiver
0	C 17	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 8	1.940.940.20		SW 500 MADI (50.14.2002)	
0	C 18	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 9	50.14.0133		5565	IC HM 6264LP-15 ,A
0	C 19	59.06.0103		10n	PETP, 63V, 10%, RM5	0	IC 10	50.63.4002		XC3030A-7	LCA 3000 / 3000 PLCC84
0	C 20	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 11	50.63.1702		CY7C130	Dualport SRAM, 1K*8
0	C 21	59.06.0103		10n	PETP, 63V, 10%, RM5	0	IC 12	50.63.0009		80C652	MPU 8bit
0	C 22	59.34.2270		27p	CER 63V, 5%, N150	0	IC 13	50.17.0574		74HCT574	IC .. 74 HCT574 .. ,A
0	C 23	59.34.2270		27p	CER 63V, 5%, N150	0	IC 14	50.06.1576		74ALS576	Octal D-Type FF, tri
0	C 24	59.22.6100		10u	EL 35V 20% RM5	0	IC 15	50.06.1576		74ALS576	Octal D-Type FF, tri
0	C 25	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 16	50.11.0156		MAX9685	ECL Comparator, latching
0	C 26	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 17	50.16.0201		SCC2691	IC SCC 2691 AE 1 N 24 ,A
0	C 27	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 18	50.17.5652		74AC652	Octal Bus Reg/Transceiver
0	C 28	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	IC 19	50.14.1009		7C128A	SRAM 2K*8 35ns
0	C 29	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	IC 20	50.17.0573		74HCT573	IC .. 74 HCT573 .. ,A
0	C 30	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 21	50.17.1574		74HC574	IC ... 74 HC 574 .. ,A
0	C 31	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	IC 22	50.17.1594		74HC594	IC ... 74 HC 594 .. ,A
0	C 32	59.30.6109		1u	TA, 20%, 35V	0	IC 23	1.940.941.21		SW 500 MADIIN (50.14.1501)	
0	C 33	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 24	50.17.1595		74HC595	IC ... 74 HC 595 .. ,A
0	C 34	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 25	50.15.0121		75174	IC SN 75174 N
0	C 35	59.30.6109		1u	TA, 20%, 35V	0	IC 26	50.17.1589		74HC589	MC 74 HC 589 N
0	C 36	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	IC 27	50.17.1589		74HC589	MC 74 HC 589 N
0	C 37	59.06.0473		47n	PETP, 63V, 10%, RM5	0	IC 28	50.11.0156		MAX9685	ECL Comparator, latching
0	C 38	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 29	50.17.1004		74HC04	IC ... 74 HC 04 .. ,A
0	C 39	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	IC 30	50.10.0124		MAX660	V-Converter ... +5.5V to -5.5V
0	C 40	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 31	50.15.0114		9637	Dual diff Line Receiver
0	C 41	59.22.3470		47u	EL 10V 20% RM5	0	J 1	54.21.2031		BNC	J 1 POL PRINT/WINKEL BNC
0	C 42	59.06.0104		100n	PETP, 63V, 10%, RM5	0	J 2	54.21.2031		BNC	J 1 POL PRINT/WINKEL BNC
0	C 43	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	J 3	54.01.0021		Jumper	0.63 * 0.63mm
0	C 44	59.22.4221		220u	EL 16V 20% RM5	0	J 4	54.01.0021		Jumper	0.63 * 0.63mm
0	C 45	59.06.0103		10n	PETP, 63V, 10%, RM5	0	L 1	62.02.3101		100uH	10%, radial RM 5
0	C 46	59.06.0683		68n	PETP, 63V, 10%, RM5	0	L 2	62.02.3100		10uH	10%, radial RM 5
0	C 47	59.06.0683		68n	PETP, 63V, 10%, RM5	0	L 3	62.02.3100		10uH	10%, radial RM 5
0	C 48	59.06.0683		68n	PETP, 63V, 10%, RM5	0	L 4	62.02.3220		22uH	10%, radial RM 5
0	C 49	59.06.0683		68n	PETP, 63V, 10%, RM5	0	L 5	62.03.0001		10uH	1A Toroid Chocke
0	C 50	59.06.0473		47n	PETP, 63V, 10%, RM5	0	L 6	62.02.3100		10uH	10%, radial RM 5
0	C 51	59.06.0473		47n	PETP, 63V, 10%, RM5	0	L 7	62.02.3100		10uH	10%, radial RM 5
0	C 52	59.06.0104		100n	PETP, 63V, 10%, RM5	0	L 8	62.02.3100		10uH	10%, radial RM 5
0	C 53	59.34.0339		3p3	CER 63V, 5%, P100	0	L 9	62.02.3100		10uH	10%, radial RM 5
0	C 54	59.06.0473		47n	PETP, 63V, 10%, RM5	0	L 10	62.02.3100		10uH	10%, radial RM 5
0	C 55	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	L 11	62.02.3100		10uH	10%, radial RM 5
0	C 56	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	MP 1	1.940.500.11			D19M MADI PCB
0	C 57	59.22.6100		10u	EL 35V 20% RM5	0	MP 2	1.010.057.43			Baugruppenschild
0	C 58	59.22.4221		220u	EL 16V 20% RM5	0	MP 3	43.01.0108		Label	ESE-WARNschild
0	C 59	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	MP 5	1.010.117.51			TEXT-ETIK. 5*20 (T1.60A)
0	C 60	59.06.0104		100n	PETP, 63V, 10%, RM5	0	MP 7	1.010.015.50		Spacer	Isolierscheibe
0	C 61	59.32.4102		1n	C 1000 P, 20%, 50V, CER	0	MP 8	89.01.1499	3 pcs		QUARZ - ISOLIERPLATTE
0	C 62	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 10	1.940.500.01	1 pce		FRONTPLATTE
0	C 63	59.34.0339		3p3	CER 63V, 5%, P100	0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE
0	C 64	59.06.0473		47n	PETP, 63V, 10%, RM5	0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0	C 65	59.06.0473		47n	PETP, 63V, 10%, RM5	0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)
0	C 66	59.06.0103		10n	PETP, 63V, 10%, RM5	0	MP 14	49.02.0522	2 pcs		Kartenhalter (Rack)
0	C 67	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0	C 68	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff
0	C 69	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 17	21.53.0279	2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr
0	C 70	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0	C 71	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0	C 72	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 20	1.101.001.21	1 pce		TEXT-ETIK. 5*20 HARDWARE -21
0	C 73	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 1	54.11.2009		96p	EU-R 3*32p
0	C 74	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 2	54.01.0020		1p	Pin 0.63*0.63
0	C 75	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 3	54.01.0020		1p	Pin 0.63*0.63
0	C 76	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 4	54.01.0020		1p	Pin 0.63*0.63
0	C 77	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 5	54.01.0020		1p	Pin 0.63*0.63
0	C 78	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 6	54.01.0020		1p	Pin 0.63*0.63
0	C 79	59.32.4102		1n	C 1000 P, 20%, 50V, CER						
0	D 1	50.04.0127		BAT85	200mA, Schottky						
0	D 2	50.04.0127		BAT85	200mA, Schottky						
0	D 3	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						



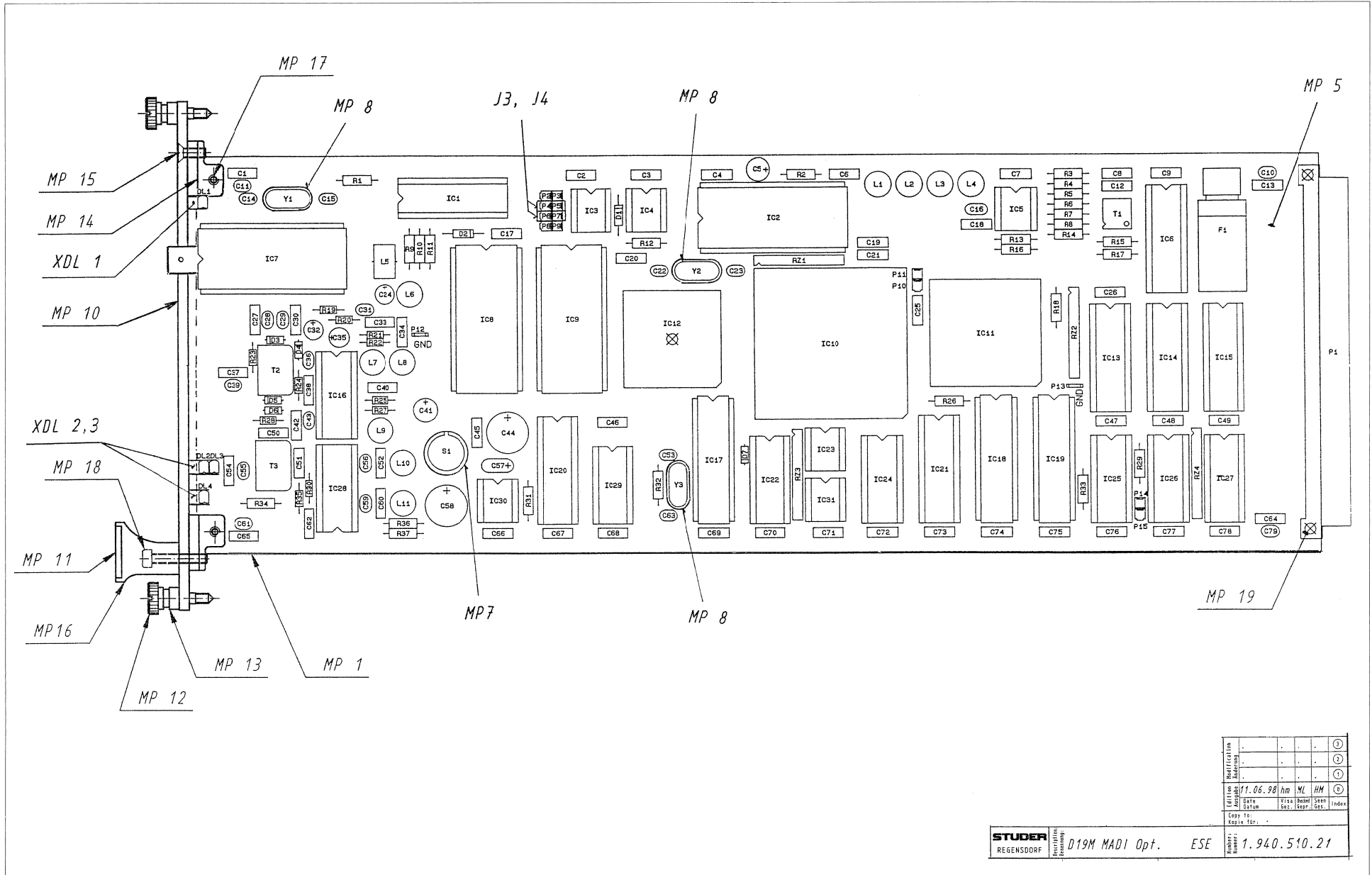


## DI9M Madi Coaxial I.940.500.21

Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	P 7	54.01.0020		1p	Pin 0.63*0.63	0	XIC 25	53.03.0168		16p	DIL 0.3", lötl, gerade
0	P 8	54.01.0020		1p	Pin 0.63*0.63	0	XIC 31	53.03.0166		8p	DIL 0.3", lötl, gerade
0	P 9	54.01.0020		1p	Pin 0.63*0.63						
0	P 10	54.01.0020		1p	Pin 0.63*0.63	0	Y 1	89.01.1013		12.500MHz	XTAL HC 49/U
0	P 11	54.01.0020		1p	Pin 0.63*0.63	0	Y 2	89.01.1014		12.000MHz	XTAL HC 49/U
0	P 12	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade	0	Y 3	89.01.1002		3.6664MHz	XTAL HC 16 U
0	P 13	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade						
0	P 14	54.01.0020		1p	Pin 0.63*0.63						
0	P 15	54.01.0020		1p	Pin 0.63*0.63						
											<b>End of List</b>
											<b>Comments</b>
											Datenübernahme
0	R 1	57.11.3102		1k0	MF, 1%, 0207						
0	R 2	57.11.3102		1k0	MF, 1%, 0207						
0	R 3	57.11.3103		10k	MF, 1%, 0207						
0	R 4	57.11.3103		10k	MF, 1%, 0207						
0	R 5	57.11.3271		270R	MF, 1%, 0207						
0	R 6	57.11.3150		15R	MF, 1%, 0207						
0	R 7	57.11.3103		10k	MF, 1%, 0207						
0	R 8	57.11.3103		10k	MF, 1%, 0207						
0	R 9	57.11.3102		1k0	MF, 1%, 0207						
0	R 10	57.11.3102		1k0	MF, 1%, 0207						
0	R 11	57.11.3102		1k0	MF, 1%, 0207						
0	R 12	57.11.3102		1k0	MF, 1%, 0207						
0	R 13	57.11.3471		470R	MF, 1%, 0207						
0	R 14	57.11.3271		270R	MF, 1%, 0207						
0	R 15	57.11.3150		15R	MF, 1%, 0207						
0	R 16	not used		470R	MF, 1%, 0207						
1	R 17	57.11.3332		3k3	MF, 1%, 0207						
0	R 18	57.11.3102		1k0	MF, 1%, 0207						
0	R 19	57.10.1750		75R	MF, 1%, 0204						
0	R 20	57.10.1750		75R	MF, 1%, 0204						
0	R 21	57.10.1331		330R	MF, 1%, 0204						
0	R 22	57.11.3151		150R	MF, 1%, 0207						
0	R 23	57.10.1750		75R	MF, 1%, 0204						
0	R 24	57.10.1122		1k2	MF, 1%, 0204						
0	R 25	57.10.1331		330R	MF, 1%, 0204						
0	R 26	57.11.3102		1k0	MF, 1%, 0207						
0	R 27	57.10.1331		330R	MF, 1%, 0204						
0	R 28	57.10.1750		75R	MF, 1%, 0204						
0	R 29	57.11.3103		10k	MF, 1%, 0207						
0	R 30	57.10.1471		470R	MF, 1%, 0204						
0	R 31	57.11.3102		1k0	MF, 1%, 0207						
0	R 32	57.11.3105		1M0	MF, 1%, 0207						
0	R 33	57.11.3102		1k0	MF, 1%, 0207						
0	R 34	57.11.3102		1k0	MF, 1%, 0207						
0	R 35	57.10.1471		470R	MF, 1%, 0204						
0	R 36	57.11.3102		1k0	MF, 1%, 0207						
0	R 37	57.11.3102		1k0	MF, 1%, 0207						
0	RZ 1	57.88.4102		1k0	8*R Resistor-Netw 2% SIP9						
0	RZ 2	57.88.4102		1k0	8*R Resistor-Netw 2% SIP9						
0	RZ 3	57.88.4103		10k	8*R Resistor-Netw 2% SIP9						
0	RZ 4	57.88.4333		33k	8*R Resistor-Netw 2% SIP9						
0	S 1	55.03.0122		1*a	S 1 TASTE, 1*A, PRINT,IMPULS						
0	T 1	63.15.0021			RF - Trafo						
0	T 2	63.15.0001			IMPULSTRANSFORMATOR						
0	T 3	63.15.0001			IMPULSTRANSFORMATOR						
0	XDL 1	50.20.2501		Spacer	LED-Sockel						
0	XDL 2	50.20.2501		Spacer	LED-Sockel						
0	XDL 3	50.20.2501		Spacer	LED-Sockel						
0	XF 1	53.03.0118			XF 5 * 20, PRINT-LIEGEND						
0	XIC 8	53.03.0173		28p	DIL 0.6", lötl, gerade						
0	XIC 10	53.03.2284		84p	PLCC-Socket						
0	XIC 11	53.03.2252		52p	PLCC-Socket						
0	XIC 12	53.03.2244		44p	PLCC-Socket						
0	XIC 14	53.03.0165		20p	DIL 0.3", lötl, gerade						
0	XIC 15	53.03.0165		20p	DIL 0.3", lötl, gerade						
0	XIC 23	53.03.0166		8p	DIL 0.3", lötl, gerade						



Madi Optical 1.940.510.21



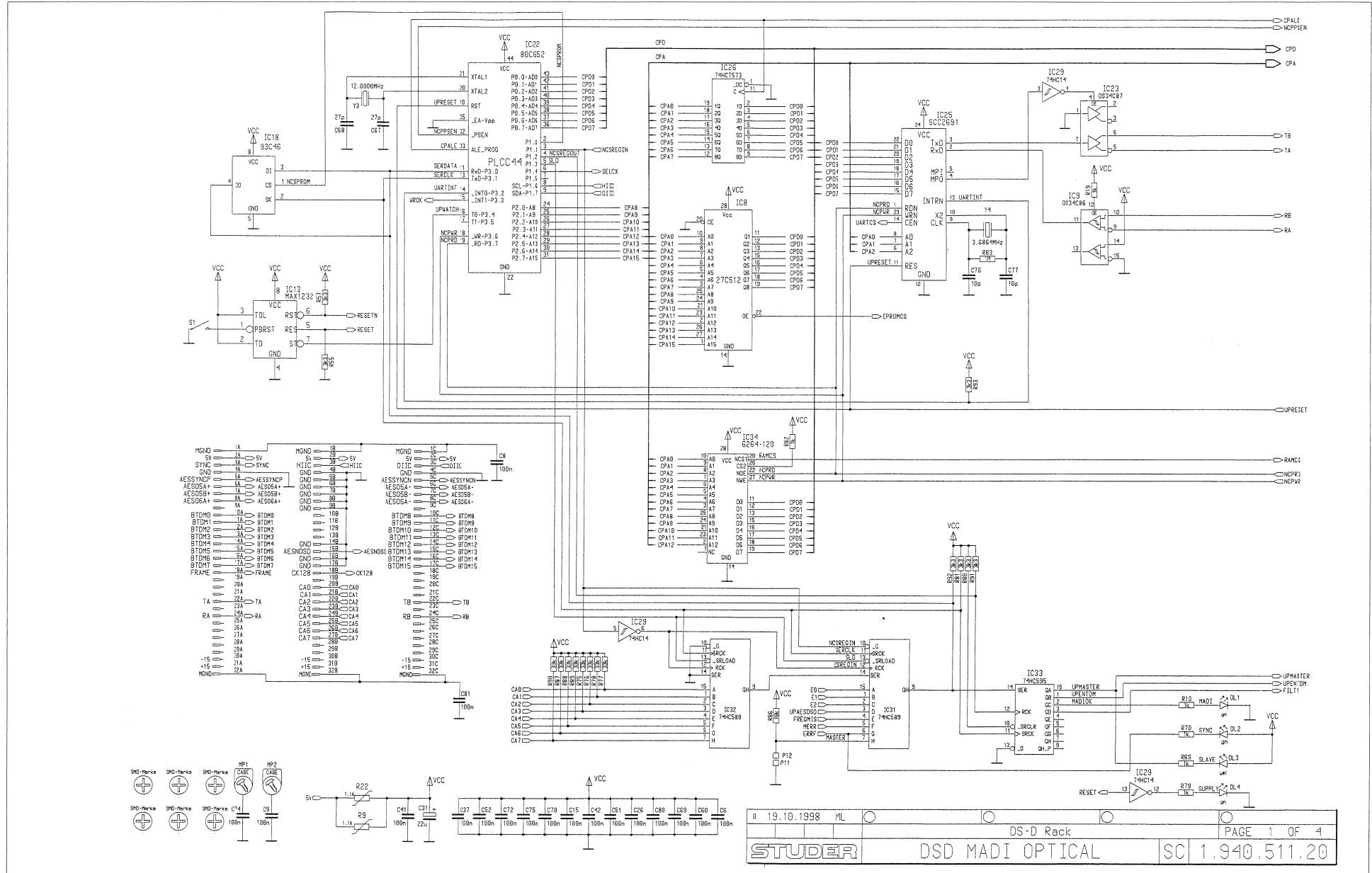
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Änderung					②
					③
Edition	1.06.98	hm	WL	HM	④
Layout	SAF	RTA	BRUN	SEB	
Titel	SAF	RTA	BRUN	SEB	Index
Copy To:					
Apply Fun:					



Madi Optical 1.940.510.21

Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description	Idx	Pos.	Part No.	Qty.	Type/Val.	Description	
0	C 1	not used				0	D 1	50.04.0127		BA785	200mA, Schottky	0	P 1	54.11.2009		96p	EU-R 3'32p	0	Y 2	89.01.1014		12.000MHz	XTAL HC 49/U	
0	C 2	59.06.0683	68n	PETP, 63V, 10%, RMS		0	D 2	50.04.0127		BA785	200mA, Schottky	0	P 2	54.01.0020		1p	Pin 0.63"0.63	0	Y 3	89.01.1002		3.8984MHz	XTAL HC 18 U	
0	C 3	59.06.0683	68n	PETP, 63V, 10%, RMS		0	D 3	not used		1N4448	75V, 150mA, 4ns, DO-35	0	P 3	54.01.0020		1p	Pin 0.63"0.63							
0	C 4	59.06.0683	68n	PETP, 63V, 10%, RMS		0	D 4	not used		1N4448	75V, 150mA, 4ns, DO-35	0	P 4	54.01.0020		1p	Pin 0.63"0.63							
0	C 5	59.22.5220	22u	EL 25V 20% RMS		0	D 5	not used		1N4448	75V, 150mA, 4ns, DO-35	0	P 5	54.01.0020		1p	Pin 0.63"0.63							
0	C 6	59.06.0473	47n	PETP, 63V, 10%, RMS		0	D 6	not used		1N4448	75V, 150mA, 4ns, DO-35	0	P 6	54.01.0020		1p	Pin 0.63"0.63							
0	C 7	59.06.0104	100n	PETP, 63V, 10%, RMS		0	D 7	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	P 7	54.01.0020		1p	Pin 0.63"0.63							
0	C 8	59.06.0104	100n	PETP, 63V, 10%, RMS		0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	P 8	54.01.0020		1p	Pin 0.63"0.63							
0	C 9	59.06.0683	68n	PETP, 63V, 10%, RMS		0	DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	P 9	54.01.0020		1p	Pin 0.63"0.63							
0	C 10	59.32.4102	1n	C 1000 P, 20%, 50V, CER		0	DL 3	50.04.2201		HLMP1719	DL HLMP - 1719 GB	0	P 10	54.01.0020		1p	Pin 0.63"0.63							
0	C 11	not used	1n	C 1000 P, 20%, 50V, CER		0	DL 4	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	P 11	54.01.0020		1p	Pin 0.63"0.63							
0	C 12	59.06.0103	10n	PETP, 63V, 10%, RMS		0	F 1	51.01.0119		1.6A	T 5*20 L 250V	0	P 12	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade							
0	C 13	59.06.0473	47n	PETP, 63V, 10%, RMS		0	IC 1	50.17.7273		ACT273	... 74 ACT 273 .	0	P 13	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade							
0	C 14	59.34.2390	39p	CER 63V, 5%, N150		0	IC 2	50.13.0202		CS8412	IC CS 8412-CP, A	0	P 14	54.01.0020		1p	Pin 0.63"0.63							
0	C 15	59.34.2390	39p	CER 63V, 5%, N150		0	IC 3	50.11.0159		MAX1232	IC MAX 1232 CPA, DS 1232	0	P 15	54.01.0020		1p	Pin 0.63"0.63							
0	C 16	59.34.4101	100p	PETP, 63V, 10%, RMS		0	IC 4	50.14.2103		93C46	EEPROM 64 * 16, serial	0	R 1	57.11.3102		1k0	MF, 1%, 0207							
0	C 17	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 5	50.11.1002		LM560	High speed Comparator	0	R 2	57.11.3102		1k0	MF, 1%, 0207							
0	C 18	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 6	50.03.0245		74LS245	SN 74 LLS 245 N	0	R 3	57.11.3103		10k	MF, 1%, 0207							
0	C 19	59.06.0103	10n	PETP, 63V, 10%, RMS		0	IC 7	89.10.0002		DLR6000	LWL-TAXI-Receiver	0	R 4	57.11.3103		10k	MF, 1%, 0207							
0	C 20	59.34.2270	27p	CER 63V, 5%, N150		0	IC 8	1.940.940.20			SW 500 MADI (50.14.2002)	0	R 5	57.11.3271		270R	MF, 1%, 0207							
0	C 21	59.34.2270	27p	CER 63V, 5%, N150		0	IC 9	50.14.0133		5565	IC HM 6264LR-15 A	0	R 6	57.11.3150		15R	MF, 1%, 0207							
0	C 22	59.34.2270	27p	CER 63V, 5%, N150		0	IC 10	50.63.4002		XC3030A-7	LCA 3000 / 3000 PLCC84	0	R 7	57.11.3103		10k	MF, 1%, 0207							
0	C 23	59.34.2270	27p	CER 63V, 5%, N150		0	IC 11	50.63.1702		CY7C130	Dualport SRAM, 1K*8	0	R 8	57.11.3103		10k	MF, 1%, 0207							
0	C 24	59.22.6100	10u	EL 35V 20% RMS		0	IC 12	50.63.0009		80C852	MPU 8bit	0	R 9	57.11.3102		1k0	MF, 1%, 0207							
0	C 25	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 13	50.17.0574		74HCT574	IC ... 74 HCT574 ., A	0	R 10	57.11.3102		1k0	MF, 1%, 0207							
0	C 26	59.32.4102	1n	C 1000 P, 20%, 50V, CER		0	IC 14	50.03.1578		74ALS576	Octal D-Type FF, tri	0	R 11	57.11.3471		470R	MF, 1%, 0207							
0	C 27	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 15	50.03.1578		74ALS576	Octal D-Type FF, tri	0	R 12	57.11.3471		470R	MF, 1%, 0207							
0	C 28	59.32.4102	1n	C 1000 P, 20%, 50V, CER		0	IC 16	not used		MAX9885	ECL Comparator, latching	0	R 13	57.11.3271		270R	MF, 1%, 0207							
0	C 29	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 17	50.15.0201		SCC2691	IC SCC 2691 AE 1 N 24 . A	0	R 14	57.11.3271		270R	MF, 1%, 0207							
0	C 30	not used	1n	C 1000 P, 20%, 50V, CER		0	IC 18	50.17.5652		74AC652	Octal Bus Reg/Transceiver	0	R 15	57.11.3150		15R	MF, 1%, 0207							
0	C 31	not used	1u	"A, 20%, 35V		0	IC 19	50.14.1009		7C128A	SRAM 2K*8 35ns	0	R 16	not used		470R	MF, 1%, 0207							
0	C 32	not used	100n	PETP, 63V, 10%, RMS		0	IC 20	50.17.0573		74HCT573	IC ... 74 HCT573 ., A	0	R 17	57.11.3332		3k3	MF, 1%, 0207							
0	C 33	not used	100n	PETP, 63V, 10%, RMS		0	IC 21	50.17.1574		74HC574	IC ... 74 HC 574 ., A	0	R 18	57.11.3102		1k0	MF, 1%, 0207							
0	C 34	not used	100n	PETP, 63V, 10%, RMS		0	IC 22	50.17.1594		74HC594	IC ... 74 HC 594 ., A	0	R 19	not used		75R	MF, 1%, 0204							
0	C 35	not used	1u	"A, 20%, 35V		0	IC 23	1.940.941.21		74HC595	IC ... 74 HC 595 ., A	0	R 20	not used		75R	MF, 1%, 0204							
0	C 36	not used	1n	C 1000 P, 20%, 50V, CER		0	IC 24	50.17.1595		75174	IC SN 75174 N	0	R 21	not used		330R	MF, 1%, 0204							
0	C 37	not used	47n	PETP, 63V, 10%, RMS		0	IC 25	50.15.0121		74HC589	MC 74 HC 589 N	0	R 22	not used		150R	MF, 1%, 0207							
0	C 38	not used	100n	PETP, 63V, 10%, RMS		0	IC 26	50.17.1589		74HC589	MC 74 HC 589 N	0	R 23	not used		75R	MF, 1%, 0204							
0	C 39	not used	100n	PETP, 63V, 10%, RMS		0	IC 27	50.17.1589		74HC589	MC 74 HC 589 N	0	R 24	not used		1k2	MF, 1%, 0204							
0	C 40	not used	100n	PETP, 63V, 10%, RMS		0	IC 28	not used		MAX9885	ECL Comparator, latching	0	R 25	not used		330R	MF, 1%, 0204							
0	C 41	59.22.3470	47u	EL 10V 20% RMS		0	IC 29	50.17.1004		74HC04	IC ... 74 HC 04 ., A	0	R 26	not used		330R	MF, 1%, 0204							
0	C 42	not used	100n	PETP, 63V, 10%, RMS		0	IC 30	50.13.0124		MAX860	V-Converter ... +5.5V to -5.5V	0	R 27	not used		75R	MF, 1%, 0204							
0	C 43	not used	1n	C 1000 P, 20%, 50V, CER		0	IC 31	50.15.0114		9637	Dual diff Line Receiver	0	R 28	not used		75R	MF, 1%, 0204							
0	C 44	59.22.4221	220u	EL 16V 20% RMS		0	J 3	54.01.0021		Jumper	0.63 * 0.63mm	0	R 29	57.11.3103		10k	MF, 1%, 0207							
0	C 45	59.06.0103	10n	PETP, 63V, 10%, RMS		0	J 4	54.01.0021		Jumper	0.63 * 0.63mm	0	R 30	not used		470R	MF, 1%, 0204							
0	C 46	59.06.0683	68n	PETP, 63V, 10%, RMS		0	J 3	54.01.0021		Jumper	0.63 * 0.63mm	0	R 31	57.11.3102		1k0	MF, 1%, 0207							
0	C 47	59.06.0683	68n	PETP, 63V, 10%, RMS		0	J 4	54.01.0021		Jumper	0.63 * 0.63mm	0	R 32	57.11.3105		1M0	MF, 1%, 0207							
0	C 48	59.06.0683	68n	PETP, 63V, 10%, RMS		0	L 1	62.02.3101		100uH	10%, radial RM 5	0	R 33	57.11.3102		1k0	MF, 1%, 0207							
0	C 49	59.06.0683	68n	PETP, 63V, 10%, RMS		0	L 2	62.02.3100		10uH	10%, radial RM 5	0	R 34	57.11.3102		1k0	MF, 1%, 0207							
0	C 50	not used	47n	PETP, 63V, 10%, RMS		0	L 3	62.02.3100		10uH	10%, radial RM 5	0	R 35	not used		470R	MF, 1%, 0204							
0	C 51	not used	47n	PETP, 63V, 10%, RMS		0	L 4	62.02.3220		22uH	10%, radial RM 5	0	R 36	57.11.3102		1k0	MF, 1%, 0207							
0	C 52	not used	100n	PETP, 63V, 10%, RMS		0	L 5	62.03.0001		10uH	1A Toroid Choke	0	R 37	57.11.3102		1k0	MF, 1%, 0207							
0	C 53	59.34.0339	3p3	CER 63V, 5%, P100	</																			

DSD Madi Optical 1.940.511.20

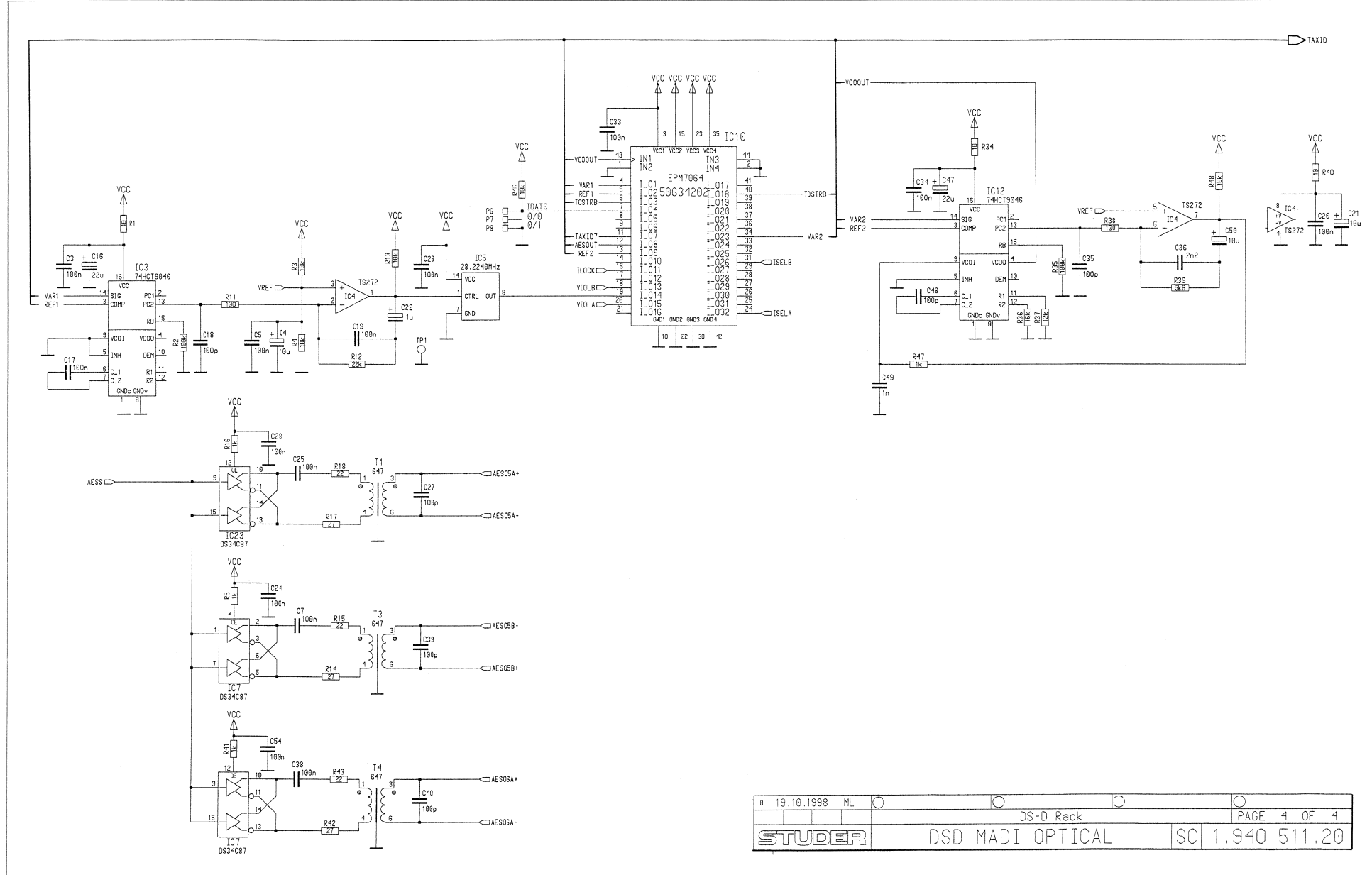


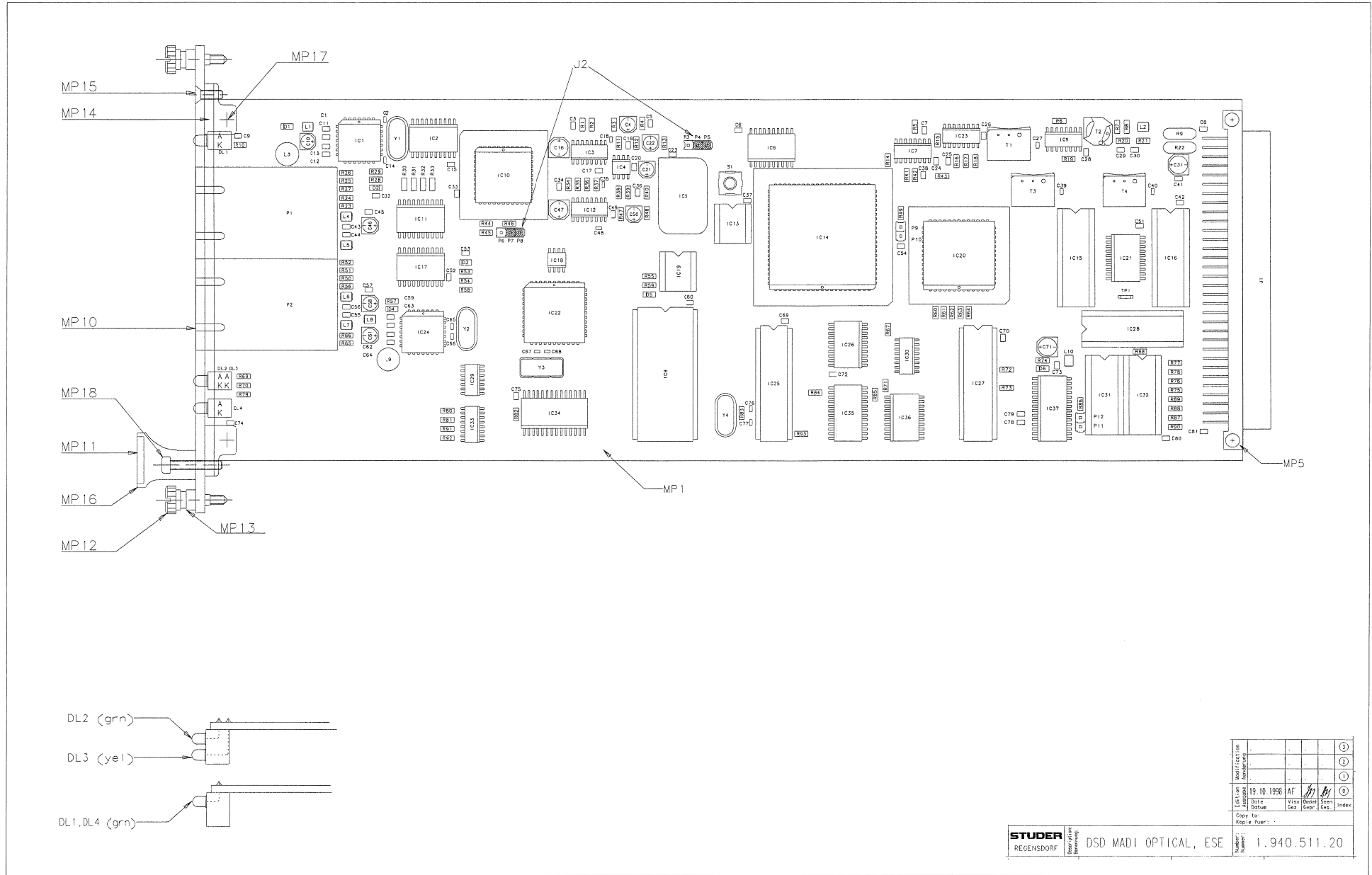






DSD Madi Optical 1.940.511.20





Classification									
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Date									
Drawn									
Seen									
Index									



MADI Optical 1.940.511.21 ( 0)

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 2	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 3	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 3	50.04.2201		HLMP1719	DL HLMP - 1719 GB
0 C 4	59.68.0065	10u		EL 16V, 4.0*5.7	0 DL 4	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 1	50.63.0205		AM7969	TAXI Chip Receiver
0 C 6	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 2	50.62.6244		74ACT244	Octal bus line driver
0 C 7	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 3	50.62.4946		74HCT9046	PLL with bandgap contr VCO
0 C 8	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 4	50.61.0205		TS272CD	Dual Op-Amp CMOS SO 8
0 C 9	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 5	89.01.1507		28.224MHz	VCXO Xtal-Oscillator voltage c
0 C 10	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 6	50.62.1273		74HC273	Octal D-FF with reset
0 C 11	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 IC 7	50.62.0464		DS34C87	4*RS 422 Line Driver
0 C 12	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 IC 8	1.940.940.20			SW 500 MADI (50.14.2002)
0 C 13	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 9	50.62.0463		DS34C86	4*RS 422 Line Receiver
0 C 14	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 IC 10	1.680.904.21			SW 050 MADILOCK (50.63.4202)
0 C 15	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 11	50.62.6244		74ACT244	Octal bus line driver
0 C 16	59.68.0067	22u		EL 16V, 5.0*5.7	0 IC 12	50.62.4946		74HCT9046	PLL with bandgap contr VCO
0 C 17	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 13	50.11.0159		MAX1232	IC MAX 1232 CPA, DS 1232
0 C 18	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 14	50.63.4002		XC3030A-7	LCA 3000 / 3000 PLCC84
0 C 19	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 15	50.06.1576		74ALS576	Octal D-Type FF, tri
0 C 20	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 16	50.06.1576		74ALS576	Octal D-Type FF, tri
0 C 21	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 17	not used		74ACT244	Octal bus line driver
0 C 22	59.68.0127	1u0		EL 50V, 4.0*5.7	0 IC 18	50.63.1108		93C46	EEPROM 64*16, SO 8
0 C 23	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 19	1.940.941.21			SW 500 MADIIN (50.14.1501)
0 C 24	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 20	50.63.1702		CY7C130	Dualport SRAM, 1K*8
0 C 25	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 21	50.62.3574		74HCT574	Octal D-FF
0 C 26	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 22	50.63.0009		80C652	MPU 8bit
0 C 27	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 23	50.62.0464		DS34C87	4*RS 422 Line Driver
0 C 28	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 24	not used		AM7969	TAXI Chip Receiver
0 C 29	not used	2n2		CER 50V, 10%, X7R, 0805	0 IC 25	50.16.0201		SCC2691	IC SCC 2691 AE 1 N 24 A
0 C 30	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 26	50.62.3573		74HCT573	Octal D-type latch
0 C 31	59.68.0067	22u		EL 16V, 5.0*5.7	0 IC 27	50.14.1009		7C128A	SRAM 2K*8 35ns
0 C 32	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 IC 28	50.06.0245		74LS245	SN 74 LS 245 N
0 C 33	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 29	50.62.1014		74HC 14	Hex Schmitt trigger inverter
0 C 34	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 30	50.62.1595		74HC595	8bit shift/output register
0 C 35	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 31	50.17.1589		74HC589	MC 74 HC 589 N
0 C 36	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 IC 32	50.17.1589		74HC589	MC 74 HC 589 N
0 C 37	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 33	50.62.1595		74HC595	8bit shift/output register
0 C 38	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 34	50.63.1502		6264	SRAM 8K*8, 120ns
0 C 39	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 35	50.62.2652		74ALS652	Octal bus transceiver & reg.
0 C 40	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 36	50.62.1574		74HC574	Octal D-FF
0 C 41	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 37	50.62.0913		CS8412	AES-Receiver
0 C 42	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 J 1	54.11.2009		96p	EU-R 3*32p
0 C 43	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 J 2	54.01.0021 2 pcs		Jumper	0.63*0.63mm, Au
0 C 44	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 1	62.60.0113		10uH	SMD 10% 1210
0 C 45	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 2	not used		22uH	SMD 10% 1210
0 C 46	59.68.0065	10u		EL 16V, 4.0*5.7	0 L 3	62.02.3100		10uH	10%, radial RM 5
0 C 47	59.68.0067	22u		EL 16V, 5.0*5.7	0 L 4	62.60.0101		1u0	SMD 10% 1210
0 C 48	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 L 5	62.60.0101		1u0	SMD 10% 1210
0 C 49	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 L 6	62.60.0101		1u0	SMD 10% 1210
0 C 50	59.68.0065	10u		EL 16V, 4.0*5.7	0 L 7	62.60.0101		1u0	SMD 10% 1210
0 C 51	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 8	62.60.0113		10uH	SMD 10% 1210
0 C 52	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 9	not used		10uH	10%, radial RM 5
0 C 53	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 L 10	62.60.0125		100uH	SMD 10% 1210
0 C 54	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 1	1.940.511.11 1 pce			D19M MADI PCB
0 C 55	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 2	43.01.0108 1 pce		Label	ESE-WARNschild
0 C 56	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 3	1.940.512.04 1 pce			TYPENSCHILD
0 C 57	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 4	1.101.001.20 1 pce		Label	TEXT-ETIK. 5*20 HARDWARE -20
0 C 58	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 5	28.99.0119 2 pcs			ROHRNIETE D 2.5*0.15* 9
0 C 59	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 10	1.940.511.01			Frontplatte MADI
0 C 60	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 11	1.940.600.04 1 pce			GRIFFEINLAGE 4TE
0 C 61	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 12	49.02.0520 2 pcs		M2.5*12	Rändelschraube (Rack)
0 C 62	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 13	49.02.0521 2 pcs			Metall-Buchse (Rack)
0 C 63	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 MP 14	49.02.0522 2 pcs			Kartenhalter mit Z-Schr
0 C 64	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 MP 15	49.02.0523 1 pce		M2.5*7	Senk-Schr, KS, Senkripp
0 C 65	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 MP 16	49.02.0504 1 pce		4TE	Frontplatten-Griff
0 C 66	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 MP 17	not used		M2.5*6	Z-Schraube Inbus Zn gb chr
0 C 67	59.60.2235	27p		CER 50V, 5%, COG, 0603	0 MP 18	21.53.0284 1 pce		M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 68	59.60.2235	27p		CER 50V, 5%, COG, 0603	0 P 1	89.10.0021		HFBR5103	LWL Transceiver FDDI/MADI
0 C 69	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 2	not used		HFBR5103	LWL Transceiver FDDI/MADI
0 C 70	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 3	54.01.0020		1p	Pin, 1reihig, gerade
0 C 71	59.68.0067	22u		EL 16V, 5.0*5.7	0 P 4	54.01.0020		1p	Pin, 1reihig, gerade
0 C 72	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 5	54.01.0020		1p	Pin, 1reihig, gerade
0 C 73	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 P 6	54.01.0020		1p	Pin, 1reihig, gerade
0 C 74	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 7	54.01.0020		1p	Pin, 1reihig, gerade
0 C 75	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 8	54.01.0020		1p	Pin, 1reihig, gerade
0 C 76	59.60.2225	10p		CER 50V, 5%, COG, 0603	0 P 9	54.01.0020		1p	Pin, 1reihig, gerade
0 C 77	59.60.2225	10p		CER 50V, 5%, COG, 0603	0 P 10	54.01.0020		1p	Pin, 1reihig, gerade
0 C 78	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 P 11	54.01.0020		1p	Pin, 1reihig, gerade
0 C 79	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 P 12	54.01.0020		1p	Pin, 1reihig, gerade
0 C 80	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 1	57.60.1100		10R	MF, 1%, 0204, E24
0 C 81	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 2	57.60.1104		100k	MF, 1%, 0204, E24
0 D 1	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 3	57.60.1103		10k	MF, 1%, 0204, E24
0 D 2	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 4	57.60.1103		10k	MF, 1%, 0204, E24
0 D 3	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 5	57.60.1102		1k0	MF, 1%, 0204, E24
0 D 4	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 6	57.60.1102		1k0	MF, 1%, 0204, E24
0 D 5	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 7	57.60.1221		220R	MF, 1%, 0204, E24
0 D 6	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 8	57.60.1221		220R	MF, 1%, 0204, E24

**MADI Optical 1.940.511.21 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 R 9	57.92.7051		1.1A	PTC 30V
0 R 10	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 11	57.60.1101		100R	MF, 1%, 0204, E24
0 R 12	57.60.1223		22k	MF, 1%, 0204, E24
0 R 13	57.60.1103		10k	MF, 1%, 0204, E24
0 R 14	57.60.1270		27R	MF, 1%, 0204, E24
0 R 15	57.60.1220		22R	MF, 1%, 0204, E24
0 R 16	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 17	57.60.1270		27R	MF, 1%, 0204, E24
0 R 18	57.60.1220		22R	MF, 1%, 0204, E24
0 R 19	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 20	57.60.1000		0R0	MF, 0204
0 R 21	not used		470R	MF, 1%, 0204, E24
0 R 22	57.92.7051		1.1A	PTC 30V
0 R 23	57.60.1820		82R	MF, 1%, 0204, E24
0 R 24	57.60.1820		82R	MF, 1%, 0204, E24
0 R 25	57.60.1222		2k2	MF, 1%, 0204, E24
0 R 26	57.60.1222		2k2	MF, 1%, 0204, E24
0 R 27	57.60.1222		2k2	MF, 1%, 0204, E24
0 R 28	57.60.1103		10k	MF, 1%, 0204, E24
0 R 29	57.60.1222		2k2	MF, 1%, 0204, E24
0 R 30	57.60.1470		47R	MF, 1%, 0204, E24
0 R 31	57.60.1470		47R	MF, 1%, 0204, E24
0 R 32	57.60.1470		47R	MF, 1%, 0204, E24
0 R 33	57.60.1470		47R	MF, 1%, 0204, E24
0 R 34	57.60.1100		10R	MF, 1%, 0204, E24
0 R 35	57.60.1104		100k	MF, 1%, 0204, E24
0 R 36	57.60.1163		16k	MF, 1%, 0204, E24
0 R 37	57.60.1123		12k	MF, 1%, 0204, E24
0 R 38	57.60.1101		100R	MF, 1%, 0204, E24
0 R 39	57.60.1562		5k6	MF, 1%, 0204, E24
0 R 40	57.60.1100		10R	MF, 1%, 0204, E24
0 R 41	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 42	57.60.1270		27R	MF, 1%, 0204, E24
0 R 43	57.60.1220		22R	MF, 1%, 0204, E24
0 R 44	57.60.1222		2k2	MF, 1%, 0204, E24
0 R 45	57.60.1222		2k2	MF, 1%, 0204, E24
0 R 46	57.60.1103		10k	MF, 1%, 0204, E24
0 R 47	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 48	57.60.1103		10k	MF, 1%, 0204, E24
0 R 49	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 50	57.60.1820		82R	MF, 1%, 0204, E24
0 R 51	57.60.1131		130R	MF, 1%, 0204, E24
0 R 52	57.60.1131		130R	MF, 1%, 0204, E24
0 R 53	57.60.1103		10k	MF, 1%, 0204, E24
0 R 54	57.60.1222		2k2	MF, 1%, 0204, E24
0 R 55	57.60.1332		3k3	MF, 1%, 0204, E24
0 R 56	57.60.1820		82R	MF, 1%, 0204, E24
0 R 57	57.60.1332		3k3	MF, 1%, 0204, E24
0 R 58	57.60.1222		2k2	MF, 1%, 0204, E24
0 R 59	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 60	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 61	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 62	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 63	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 64	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 65	57.60.1131		130R	MF, 1%, 0204, E24
0 R 66	57.60.1131		130R	MF, 1%, 0204, E24
0 R 67	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 68	57.60.1332		3k3	MF, 1%, 0204, E24
0 R 69	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 70	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 71	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 72	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 73	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 74	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 75	57.60.1333		33k	MF, 1%, 0204, E24
0 R 76	57.60.1333		33k	MF, 1%, 0204, E24
0 R 77	57.60.1333		33k	MF, 1%, 0204, E24
0 R 78	57.60.1333		33k	MF, 1%, 0204, E24
0 R 79	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 80	57.60.1332		3k3	MF, 1%, 0204, E24
0 R 81	57.60.1332		3k3	MF, 1%, 0204, E24
0 R 82	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 83	57.60.1105		1M	MF, 1%, 0204, E24
0 R 84	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 85	57.60.1102		1k0	MF, 1%, 0204, E24
0 R 86	57.60.1103		10k	MF, 1%, 0204, E24
0 R 87	57.60.1333		33k	MF, 1%, 0204, E24
0 R 88	57.60.1333		33k	MF, 1%, 0204, E24
0 R 89	57.60.1333		33k	MF, 1%, 0204, E24
0 R 90	57.60.1333		33k	MF, 1%, 0204, E24
0 R 91	57.60.1332		3k3	MF, 1%, 0204, E24
0 R 92	57.60.1332		3k3	MF, 1%, 0204, E24
0 R 93	57.60.1332		3k3	MF, 1%, 0204, E24
0 S 1	55.60.0201		1*s	SMD Tactswitch
0 T 1	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 T 2	1.022.632.00		1:1	DI/DO TRANSFORMER
0 T 3	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU
0 T 4	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU
0 TP 1	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade
0 XDL 1	50.20.2501		Spacer	LED-Sockel
0 XDL 2	50.20.2501		Spacer	LED-Sockel
0 XDL 4	50.20.2501		Spacer	LED-Sockel
0 XIC 8	53.03.0173		28p	DIL 0.6", löt, gerade
0 XIC 10	53.03.2244		44p	PLCC-Socket
0 XIC 14	53.03.2284		84p	PLCC-Socket
0 XIC 19	53.03.0166		8p	DIL 0.3", löt, gerade
0 XIC 20	53.03.2252		52p	PLCC-Socket
0 XY 1	89.01.1499	1 pce		QUARZ - ISOLIERPLATTE
0 XY 2	not used	1 pce		QUARZ - ISOLIERPLATTE
0 XY 4	89.01.1499	1 pce		QUARZ - ISOLIERPLATTE
0 Y 1	89.01.1013		12.500MHz	XTAL HC 49/U
0 Y 2	89.01.1013		12.500MHz	XTAL HC 49/U
0 Y 3	89.60.1003		12.000MHz	SMD Quartz
0 Y 4	89.01.1002		3.6864MHz	XTAL HC 18 U

End of List

MADI Optical, Redundant Input 1.940.512.21 ( 0)

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 2	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 3	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 3	50.04.2201		HLMP1719	DL HLMP - 1719 GB
0 C 4	59.68.0065	10u		EL 16V, 4.0*5.7	0 DL 4	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 1	50.63.0205		AM7969	TAXI Chip Receiver
0 C 6	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 2	50.62.6244		74ACT244	Octal bus line driver
0 C 7	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 3	50.62.4946		74HCT9046	PLL with bandgap contr VCO
0 C 8	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 4	50.61.0205		TS272CD	Dual Op-Amp CMOS SO 8
0 C 9	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 5	89.01.1507		28.224MHz	VCXO Xtal-Oscillator voltage c
0 C 10	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 6	50.62.1273		74HC273	Octal D-FF with reset
0 C 11	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 IC 7	50.62.0464		DS34C87	4*RS 422 Line Driver
0 C 12	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 IC 8	1.940.940.20			SW 500 MADI (50.14.2002)
0 C 13	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 9	50.62.0463		DS34C86	4*RS 422 Line Receiver
0 C 14	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 IC 10	1.680.904.21			SW 050 MADILOCK (50.63.4202)
0 C 15	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 11	50.62.6244		74ACT244	Octal bus line driver
0 C 16	59.68.0067	22u		EL 16V, 5.0*5.7	0 IC 12	50.62.4946		74HCT9046	PLL with bandgap contr VCO
0 C 17	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 13	50.11.0159		MAX1232	IC MAX 1232 CPA, DS 1232
0 C 18	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 14	50.63.4002		XC3030A-7	LCA 3000 / 3000 PLCC84
0 C 19	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 15	50.06.1576		74ALS576	Octal D-Type FF, tri
0 C 20	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 16	50.06.1576		74ALS576	Octal D-Type FF, tri
0 C 21	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 17	50.62.6244		74ACT244	Octal bus line driver
0 C 22	59.68.0127	1u0		EL 50V, 4.0*5.7	0 IC 18	50.63.1108		93C46	EEPROM 64*16, SO 8
0 C 23	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 19	1.940.941.21			SW 500 MADIIN (50.14.1501)
0 C 24	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 20	50.63.1702		CY7C130	Dualport SRAM, 1K*8
0 C 25	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 21	50.62.3574		74HCT574	Octal D-FF
0 C 26	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 22	50.63.0009		80C852	MPU 8bit
0 C 27	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 23	50.62.0464		DS34C87	4*RS 422 Line Driver
0 C 28	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 24	50.63.0205		AM7969	TAXI Chip Receiver
0 C 29	not used	2n2		CER 50V, 10%, X7R, 0805	0 IC 25	50.16.0201		SCC2691	IC SCC 2691 AE 1 N 24 A
0 C 30	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 26	50.62.3573		74HCT573	Octal D-type latch
0 C 31	59.68.0067	22u		EL 16V, 5.0*5.7	0 IC 27	50.14.1009		7C128A	SRAM 2K*8 35ns
0 C 32	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 IC 28	50.06.0245		74LS245	SN 74 LS 245 N
0 C 33	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 29	50.62.1014		74HC 14	Hex Schmitt trigger inverter
0 C 34	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 30	50.62.1595		74HC595	8bit shift/output register
0 C 35	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 31	50.17.1589		74HC589	MC 74 HC 589 N
0 C 36	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 IC 32	50.17.1589		74HC589	MC 74 HC 589 N
0 C 37	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 33	50.62.1595		74HC595	8bit shift/output register
0 C 38	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 34	50.63.1502		6264	SRAM 8K*8, 120ns
0 C 39	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 35	50.62.2652		74ALS652	Octal bus transceiver & reg.
0 C 40	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 36	50.62.1574		74HC574	Octal D-FF
0 C 41	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 37	50.62.0913		CS8412	AES-Receiver
0 C 42	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 J 1	54.11.2009		96p	EU-R 3*32p
0 C 43	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 J 2	54.01.0021 2 pcs		Jumper	0.63*0.63mm, Au
0 C 44	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 1	62.60.0113		10uH	SMD 10% 1210
0 C 45	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 2	not used		22uH	SMD 10% 1210
0 C 46	59.68.0065	10u		EL 16V, 4.0*5.7	0 L 3	62.02.3100		10uH	10%, radial RM 5
0 C 47	59.68.0067	22u		EL 16V, 5.0*5.7	0 L 4	62.60.0101		1u0	SMD 10% 1210
0 C 48	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 L 5	62.60.0101		1u0	SMD 10% 1210
0 C 49	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 L 6	62.60.0101		1u0	SMD 10% 1210
0 C 50	59.68.0065	10u		EL 16V, 4.0*5.7	0 L 7	62.60.0101		1u0	SMD 10% 1210
0 C 51	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 8	62.60.0113		10uH	SMD 10% 1210
0 C 52	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 9	62.02.3100		10uH	10%, radial RM 5
0 C 53	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 L 10	62.60.0125		100uH	SMD 10% 1210
0 C 54	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 1	1.940.511.11 1 pce			D19M MADI PCB
0 C 55	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 2	43.01.0108 1 pce		Label	ESE-WARNschild
0 C 56	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 3	1.940.512.04 1 pce			TYPENSCHILD
0 C 57	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 4	1.101.001.20 1 pce		Label	TEXT-ETIK. 5*20 HARDWARE -20
0 C 58	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 5	28.99.0119 2 pcs			ROHRNIETE D 2.5*0.15* 9
0 C 59	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 10	1.940.512.01 1 pce			Frontplatte MADI redundant in
0 C 60	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 11	1.940.600.04 1 pce			GRIFFEINLAGE 4TE
0 C 61	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 12	49.02.0520 2 pcs		M2.5*12	Rändelschraube (Rack)
0 C 62	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 13	49.02.0521 2 pcs			Metall-Buchse (Rack)
0 C 63	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 MP 14	49.02.0522 2 pcs			Kartenhalter mit Z-Schr
0 C 64	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 MP 15	49.02.0523 1 pce		M2.5*7	Senk-Schr, KS, Senkripp
0 C 65	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 MP 16	49.02.0504 1 pce		4TE	Frontplatten-Griff
0 C 66	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 MP 17	21.53.0279 2 pcs		M2.5*6	Z-Schraube Inbus Zn gb chr
0 C 67	59.60.2235	27p		CER 50V, 5%, COG, 0603	0 MP 18	21.53.0284 1 pce		M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 68	59.60.2235	27p		CER 50V, 5%, COG, 0603	0 P 1	89.10.0021		HFBRS103	LWL Transceiver FDDI/MADI
0 C 69	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 2	89.10.0021		HFBRS103	LWL Transceiver FDDI/MADI
0 C 70	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 3	54.01.0020		1p	Pin, 1reihig, gerade
0 C 71	59.68.0067	22u		EL 16V, 5.0*5.7	0 P 4	54.01.0020		1p	Pin, 1reihig, gerade
0 C 72	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 5	54.01.0020		1p	Pin, 1reihig, gerade
0 C 73	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 P 6	54.01.0020		1p	Pin, 1reihig, gerade
0 C 74	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 7	54.01.0020		1p	Pin, 1reihig, gerade
0 C 75	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 8	54.01.0020		1p	Pin, 1reihig, gerade
0 C 76	59.60.2225	10p		CER 50V, 5%, COG, 0603	0 P 9	54.01.0020		1p	Pin, 1reihig, gerade
0 C 77	59.60.2225	10p		CER 50V, 5%, COG, 0603	0 P 10	54.01.0020		1p	Pin, 1reihig, gerade
0 C 78	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 P 11	54.01.0020		1p	Pin, 1reihig, gerade
0 C 79	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 P 12	54.01.0020		1p	Pin, 1reihig, gerade
0 C 80	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 1	57.60.1100		10R	MF, 1%, 0204, E24
0 C 81	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 2	57.60.1104		100k	MF, 1%, 0204, E24
0 D 1	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 3	57.60.1103		10k	MF, 1%, 0204, E24
0 D 2	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 4	57.60.1103		10k	MF, 1%, 0204, E24
0 D 3	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 5	57.60.1102		1k0	MF, 1%, 0204, E24
0 D 4	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 6	57.60.1102		1k0	MF, 1%, 0204, E24
0 D 5	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 7	57.60.1221		220R	MF, 1%, 0204, E24
0 D 6	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 8	57.60.1221		220R	MF, 1%, 0204, E24

**MADI Optical, Redundant Input 1.940.512.21 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 R 9	57.02.7051		1.1A	PTC 30V	0 T 2	1.022.632.00		1:1	DI/DO TRANSFORMER
0 R 10	57.60.1102		1k0	MF, 1%, 0204, E24	0 T 3	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU
0 R 11	57.60.1101		100R	MF, 1%, 0204, E24	0 T 4	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU
0 R 12	57.60.1223		22k	MF, 1%, 0204, E24	0 TP 1	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade
0 R 13	57.60.1103		10k	MF, 1%, 0204, E24	0 XDL 1	50.20.2501		Spacer	LED-Sockel
0 R 14	57.60.1270		27R	MF, 1%, 0204, E24	0 XDL 2	50.20.2501		Spacer	LED-Sockel
0 R 15	57.60.1220		22R	MF, 1%, 0204, E24	0 XDL 4	50.20.2501		Spacer	LED-Sockel
0 R 16	57.60.1102		1k0	MF, 1%, 0204, E24	0 XIC 8	53.03.0173		28p	DIL 0.6", löt, gerade
0 R 17	57.60.1270		27R	MF, 1%, 0204, E24	0 XIC 10	53.03.2244		44p	PLCC-Socket
0 R 18	57.60.1220		22R	MF, 1%, 0204, E24	0 XIC 14	53.03.2284		84p	PLCC-Socket
0 R 19	57.60.1102		1k0	MF, 1%, 0204, E24	0 XIC 19	53.03.0166		8p	DIL 0.3", löt, gerade
0 R 20	57.60.1000		0R0	MF, 0204	0 XIC 20	53.03.2252		52p	PLCC-Socket
0 R 21	not used		470R	MF, 1%, 0204, E24	0 XY 1	89.01.1499	1 pce		QUARZ - ISOLIERPLATTE
0 R 22	57.92.7051		1.1A	PTC 30V	0 XY 2	89.01.1499	1 pce		QUARZ - ISOLIERPLATTE
0 R 23	57.60.1820		82R	MF, 1%, 0204, E24	0 XY 4	89.01.1499	1 pce		QUARZ - ISOLIERPLATTE
0 R 24	57.60.1820		82R	MF, 1%, 0204, E24	0 Y 1	89.01.1013		12.500MHz	XTAL HC 49/U
0 R 25	57.60.1222		2k2	MF, 1%, 0204, E24	0 Y 2	89.01.1013		12.500MHz	XTAL HC 49/U
0 R 26	57.60.1222		2k2	MF, 1%, 0204, E24	0 Y 3	89.60.1003		12.000MHz	SMD Quartz
0 R 27	57.60.1222		2k2	MF, 1%, 0204, E24	0 Y 4	89.01.1002		3.6864MHz	XTAL HC 18 U
0 R 28	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 29	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 30	57.60.1470		47R	MF, 1%, 0204, E24					
0 R 31	57.60.1470		47R	MF, 1%, 0204, E24					
0 R 32	57.60.1470		47R	MF, 1%, 0204, E24					
0 R 33	57.60.1470		47R	MF, 1%, 0204, E24					
0 R 34	57.60.1100		10R	MF, 1%, 0204, E24					
0 R 35	57.60.1104		100k	MF, 1%, 0204, E24					
0 R 36	57.60.1163		16k	MF, 1%, 0204, E24					
0 R 37	57.60.1123		12k	MF, 1%, 0204, E24					
0 R 38	57.60.1101		100R	MF, 1%, 0204, E24					
0 R 39	57.60.1562		5k6	MF, 1%, 0204, E24					
0 R 40	57.60.1100		10R	MF, 1%, 0204, E24					
0 R 41	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 42	57.60.1270		27R	MF, 1%, 0204, E24					
0 R 43	57.60.1220		22R	MF, 1%, 0204, E24					
0 R 44	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 45	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 46	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 47	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 48	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 49	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 50	57.60.1820		82R	MF, 1%, 0204, E24					
0 R 51	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 52	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 53	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 54	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 55	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 56	57.60.1820		82R	MF, 1%, 0204, E24					
0 R 57	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 58	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 59	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 60	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 61	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 62	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 63	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 64	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 65	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 66	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 67	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 68	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 69	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 70	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 71	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 72	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 73	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 74	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 75	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 76	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 77	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 78	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 79	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 80	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 81	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 82	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 83	57.60.1105		1M	MF, 1%, 0204, E24					
0 R 84	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 85	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 86	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 87	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 88	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 89	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 90	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 91	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 92	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 93	57.60.1332		3k3	MF, 1%, 0204, E24					
0 S 1	55.60.0201		1*s	SMD Tactswitch					
0 T 1	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU					

End of List

MADI Optical Route56 1.940.514.20 ( 0)

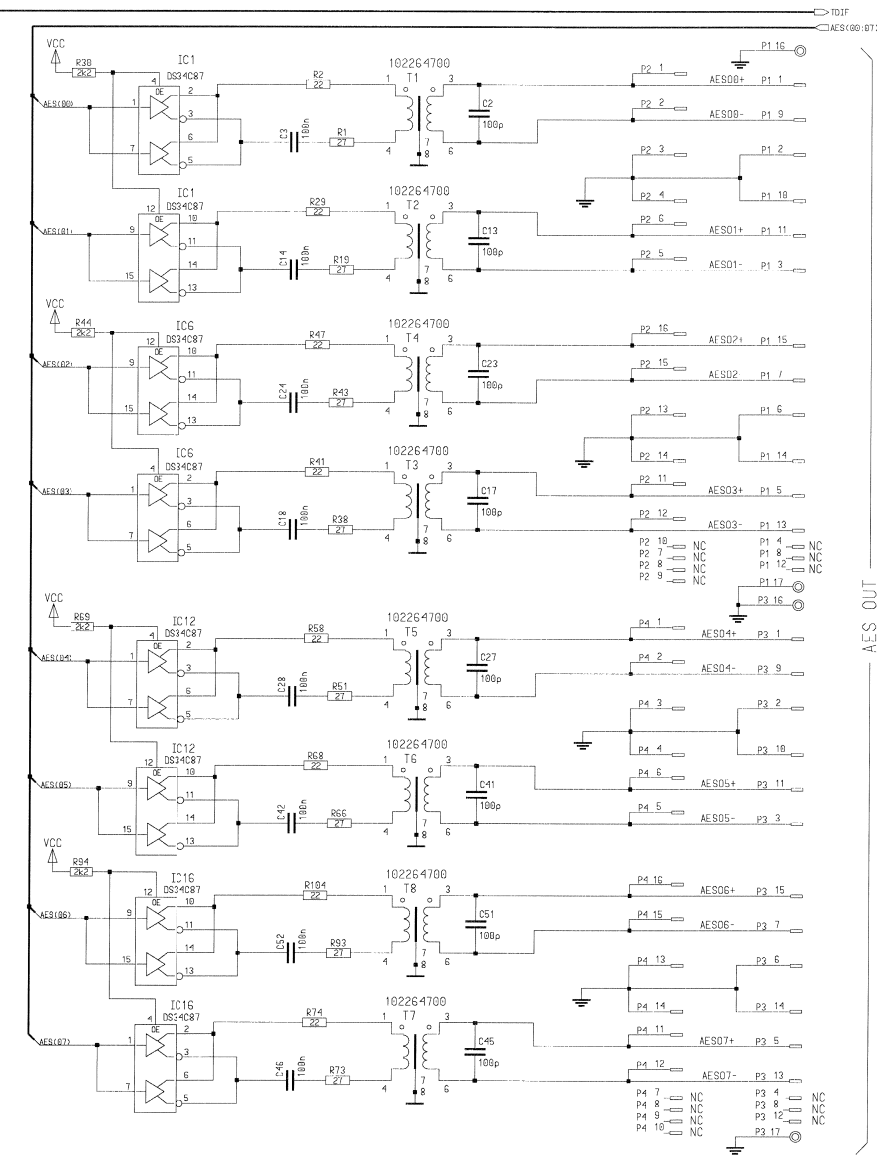
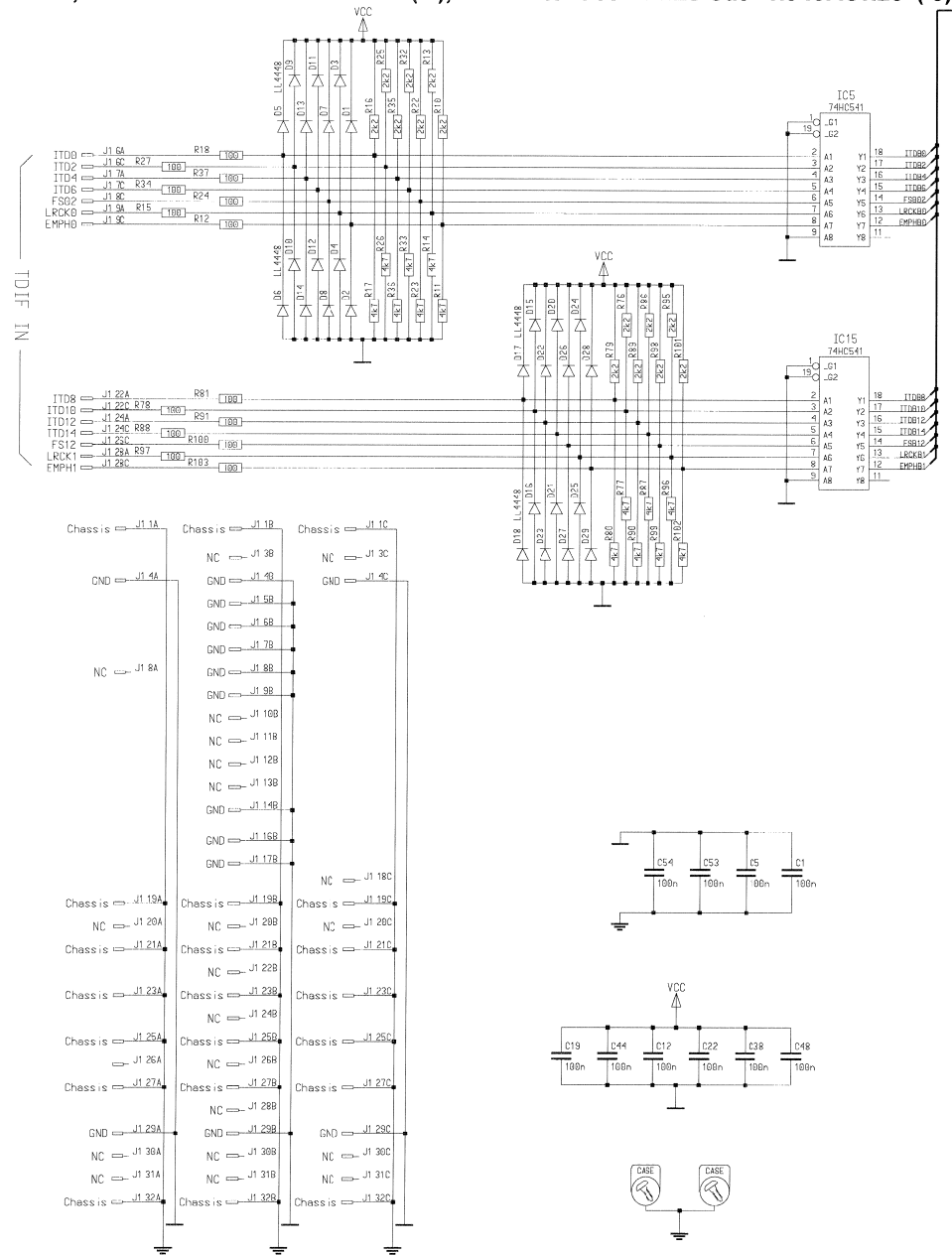
Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 2	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 3	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 DL 3	50.04.2201		HLMP1719	DL HLMP - 1719 GB
0 C 4	59.68.0065	10u		EL 16V, 4.0*5.7	0 DL 4	50.04.2202		HLMP1790	DL HLMP - 1790 GN
0 C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 1	50.63.0205		AM7969	TAXI Chip Receiver
0 C 6	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 2	50.62.6244		74ACT244	Octal bus line driver
0 C 7	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 3	50.62.4946		74HCT9046	PLL with bandgap contr VCO
0 C 8	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 4	50.61.0205		TS272CD	Dual Op-Amp CMOS SO 8
0 C 9	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 5	89.01.1507		28.224MHz	VCXO Xtal-Oscillator voltage c
0 C 10	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 6	50.62.1273		74HC273	Octal D-FF with reset
0 C 11	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 IC 7	50.62.0464		DS34C87	4*RS 422 Line Driver
0 C 12	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 IC 8	1.940.943.21			SW 600 Route66 (50.14.2002)
0 C 13	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 9	50.62.0463		DS34C86	4*RS 422 Line Receiver
0 C 14	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 IC 10	1.680.904.21			SW 050 MADILOCK (50.63.4202)
0 C 15	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 11	50.62.6244		74ACT244	Octal bus line driver
0 C 16	59.68.0067	22u		EL 16V, 5.0*5.7	0 IC 12	50.62.4946		74HCT9046	PLL with bandgap contr VCO
0 C 17	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 13	50.11.0159		MAX1232	IC MAX 1232 CPA, DS 1232
0 C 18	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 14	50.63.4002		XC3030A-7	LCA 3000 / 3000 PLCC84
0 C 19	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 15	50.06.1576		74ALS576	Octal D-Type FF, tri
0 C 20	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 16	50.06.1576		74ALS576	Octal D-Type FF, tri
0 C 21	59.68.0065	10u		EL 16V, 4.0*5.7	0 IC 17	not used		74ACT244	Octal bus line driver
0 C 22	59.68.0127	1u0		EL 50V, 4.0*5.7	0 IC 18	50.63.1108		93C46	EEPROM 64*16, SO 8
0 C 23	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 19	1.940.941.21			SW 500 MADIIN (50.14.1501)
0 C 24	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 20	50.63.1702		CY7C130	Dualport SRAM, 1K*8
0 C 25	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 21	50.62.3574		74HCT574	Octal D-FF
0 C 26	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 22	50.63.0009		80C652	MPU 8bit
0 C 27	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 23	50.62.0464		DS34C87	4*RS 422 Line Driver
0 C 28	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 24	not used		AM7969	TAXI Chip Receiver
0 C 29	not used	2n2		CER 50V, 10%, X7R, 0805	0 IC 25	50.16.0201		SCC2691	IC SCC 2691 AE 1 N 24 ,A
0 C 30	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 26	50.62.3573		74HCT573	Octal D-type latch
0 C 31	59.68.0067	22u		EL 16V, 5.0*5.7	0 IC 27	50.14.1009		7C128A	SRAM 2K*8 35ns
0 C 32	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 IC 28	50.06.0245		74LS245	SN 74 LS 245 N
0 C 33	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 29	50.62.1014		74HC 14	Hex Schmitt trigger inverter
0 C 34	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 30	50.62.1595		74HC595	8bit shift/output register
0 C 35	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 31	50.17.1589		74HC589	MC 74 HC 589 N
0 C 36	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 IC 32	50.17.1589		74HC589	MC 74 HC 589 N
0 C 37	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 33	50.62.1595		74HC595	8bit shift/output register
0 C 38	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 34	50.63.1502		6264	SRAM 8K*8, 120ns
0 C 39	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 35	50.62.2652		74ALS652	Octal bus transceiver & reg.
0 C 40	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 IC 36	50.62.1574		74HC574	Octal D-FF
0 C 41	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 37	50.62.0913		CS8412	AES-Receiver
0 C 42	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 J 1	54.11.2009		96p	EU-R 3*32p
0 C 43	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 J 2	54.01.0021 2 pcs		Jumper	0.63*0.63mm, Au
0 C 44	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 1	62.60.0113		10uH	SMD 10% 1210
0 C 45	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 2	not used		22uH	SMD 10% 1210
0 C 46	59.68.0065	10u		EL 16V, 4.0*5.7	0 L 3	62.02.3100		10uH	10%, radial RM 5
0 C 47	59.68.0067	22u		EL 16V, 5.0*5.7	0 L 4	62.60.0101		1u0	SMD 10% 1210
0 C 48	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 L 5	62.60.0101		1u0	SMD 10% 1210
0 C 49	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 L 6	62.60.0101		1u0	SMD 10% 1210
0 C 50	59.68.0065	10u		EL 16V, 4.0*5.7	0 L 7	62.60.0101		1u0	SMD 10% 1210
0 C 51	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 8	62.60.0113		10uH	SMD 10% 1210
0 C 52	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 L 9	not used		10uH	10%, radial RM 5
0 C 53	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 L 10	62.60.0125		100uH	SMD 10% 1210
0 C 54	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 1	1.940.511.11 1 pce			D19M MADI PCB
0 C 55	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 2	43.01.0108 1 pce		Label	ESE-WARNschild
0 C 56	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 3	1.940.511.04 1 pce			TYPENSCHILD
0 C 57	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 4	1.101.001.20 1 pce		Label	TEXT-ETIK. 5*20 HARDWARE -20
0 C 58	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 5	28.99.0119 2 pcs			ROHRNIETE D 2.5*0.15* 9
0 C 59	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 10	1.940.511.01			Frontplatte MADI
0 C 60	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 11	1.940.600.04 1 pce			GRIFFEINLAGE 4TE
0 C 61	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 12	49.02.0520 2 pcs		M2.5*12	Rändelschraube (Rack)
0 C 62	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 13	49.02.0521 2 pcs			Metall-Buchse (Rack)
0 C 63	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 MP 14	49.02.0522 2 pcs			Kartenhalter mit Z-Schr
0 C 64	59.60.2373	1n0		CER 50V, 5%, COG, 0805	0 MP 15	49.02.0523 1 pce		M2.5*7	Senk-Schr, KS, Senkripp
0 C 65	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 MP 16	49.02.0504 1 pce		4TE	Frontplatten-Griff
0 C 66	59.60.2239	39p		CER 50V, 5%, COG, 0603	0 MP 17	not used		M2.5*6	Z-Schraube Inbus Zn gb chr
0 C 67	59.60.2235	27p		CER 50V, 5%, COG, 0603	0 MP 18	21.53.0284 1 pce		M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 68	59.60.2235	27p		CER 50V, 5%, COG, 0603	0 P 1	89.10.0021		HFBRS103	LWL Transceiver FDDI/MADI
0 C 69	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 2	not used		HFBRS103	LWL Transceiver FDDI/MADI
0 C 70	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 3	54.01.0020		1p	Pin, 1reihig, gerade
0 C 71	59.68.0067	22u		EL 16V, 5.0*5.7	0 P 4	54.01.0020		1p	Pin, 1reihig, gerade
0 C 72	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 5	54.01.0020		1p	Pin, 1reihig, gerade
0 C 73	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 P 6	54.01.0020		1p	Pin, 1reihig, gerade
0 C 74	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 7	54.01.0020		1p	Pin, 1reihig, gerade
0 C 75	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 P 8	54.01.0020		1p	Pin, 1reihig, gerade
0 C 76	59.60.2225	10p		CER 50V, 5%, COG, 0603	0 P 9	54.01.0020		1p	Pin, 1reihig, gerade
0 C 77	59.60.2225	10p		CER 50V, 5%, COG, 0603	0 P 10	54.01.0020		1p	Pin, 1reihig, gerade
0 C 78	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 P 11	54.01.0020		1p	Pin, 1reihig, gerade
0 C 79	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 P 12	54.01.0020		1p	Pin, 1reihig, gerade
0 C 80	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 1	57.60.1100		10R	MF, 1%, 0204, E24
0 C 81	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 2	57.60.1104		100k	MF, 1%, 0204, E24
0 D 1	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 3	57.60.1103		10k	MF, 1%, 0204, E24
0 D 2	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 4	57.60.1103		10k	MF, 1%, 0204, E24
0 D 3	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 5	57.60.1102		1k0	MF, 1%, 0204, E24
0 D 4	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 6	57.60.1102		1k0	MF, 1%, 0204, E24
0 D 5	50.60.8101	BAS85		200mA 30V Schottky SOD 80	0 R 7	57.60.1221		220R	MF, 1%, 0204, E24
0 D 6	50.60.8001	4448		200mA 75V 4ns SOD 80	0 R 8	57.60.1221		220R	MF, 1%, 0204, E24

**MADI Optical Route56 1.940.514.20 ( 0)**

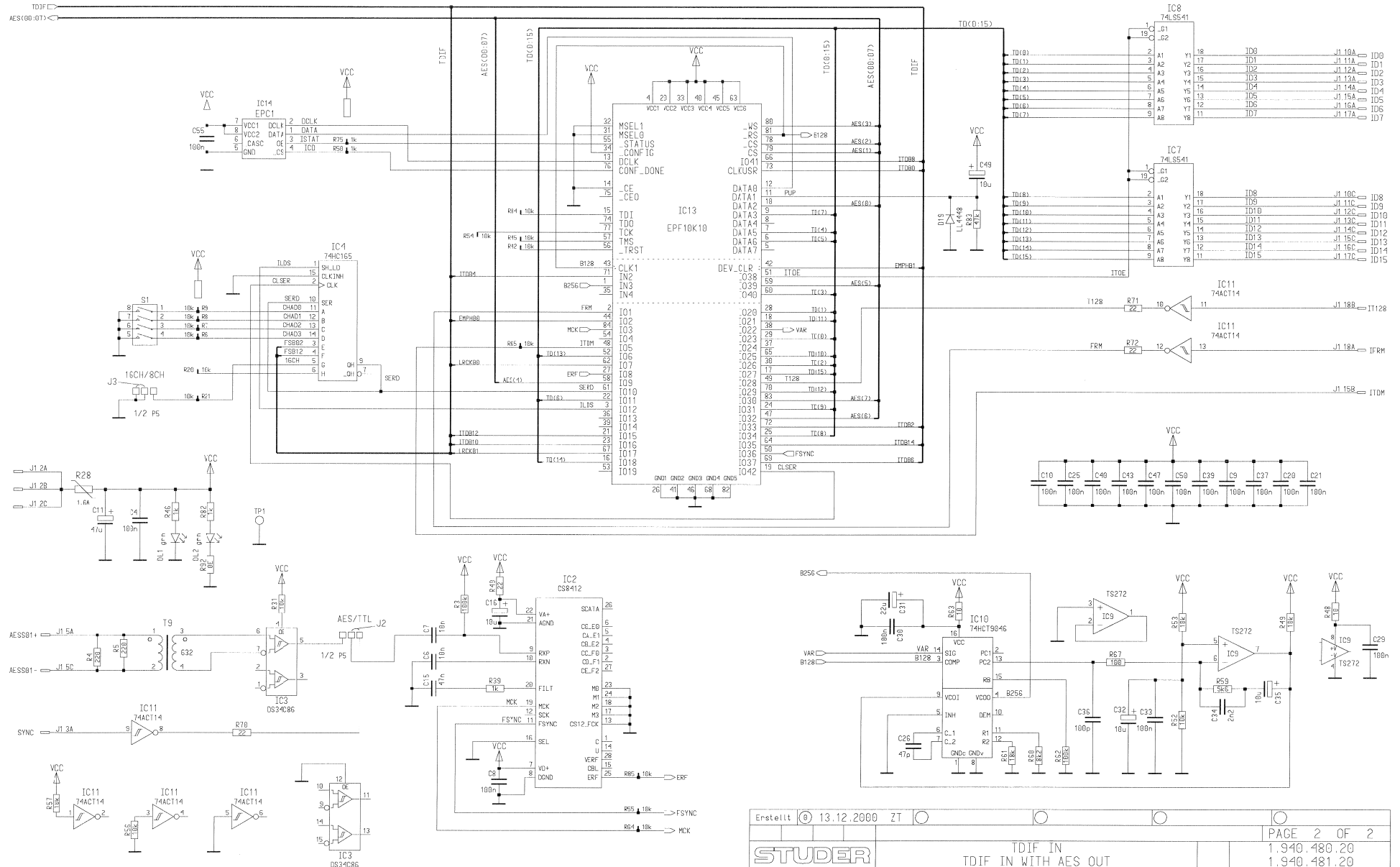
Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 R 9	57.92.7051	1	1A	PTC 30V	0 T 2	1.022.632.00		1:1	DI/DO TRANSFORMER
0 R 10	57.60.1102		1k0	MF, 1%, 0204, E24	0 T 3	1.022.647.00		1:1.4	OUTPUT TRAFO AES/EBU
0 R 11	57.60.1101		100R	MF, 1%, 0204, E24	0 T 4	1.022.647.00		1:1.4	OUTPUT TRAFO AES/EBU
0 R 12	57.60.1223		22k	MF, 1%, 0204, E24	0 TP 1	54.02.0320		1p	PCB-Flachst 2.8*0.8, gerade
0 R 13	57.60.1103		10k	MF, 1%, 0204, E24	0 XDL 1	50.20.2501		Spacer	LED-Sockel
0 R 14	57.60.1270		27R	MF, 1%, 0204, E24	0 XDL 2	50.20.2501		Spacer	LED-Sockel
0 R 15	57.60.1220		22R	MF, 1%, 0204, E24	0 XDL 4	50.20.2501		Spacer	LED-Sockel
0 R 16	57.60.1102		1k0	MF, 1%, 0204, E24	0 XIC 8	53.03.0173		28p	DIL 0.6", löt, gerade
0 R 17	57.60.1270		27R	MF, 1%, 0204, E24	0 XIC 10	53.03.2244		44p	PLCC-Socket
0 R 18	57.60.1220		22R	MF, 1%, 0204, E24	0 XIC 14	53.03.2284		84p	PLCC-Socket
0 R 19	57.60.1102		1k0	MF, 1%, 0204, E24	0 XIC 19	53.03.0166		8p	DIL-socket 0.3"
0 R 20	57.60.1000		0R0	MF, 0204	0 XIC 20	53.03.2252		52p	PLCC-Socket
0 R 21	not used		470R	MF, 1%, 0204, E24	0 XY 1	89.01.1499	1 pce		QUARZ - ISOLIERPLATTE
0 R 22	57.92.7051		1.1A	PTC 30V	0 XY 2	not used	1 pce		QUARZ - ISOLIERPLATTE
0 R 23	57.60.1820		82R	MF, 1%, 0204, E24	0 XY 4	89.01.1499	1 pce		QUARZ - ISOLIERPLATTE
0 R 24	57.60.1820		82R	MF, 1%, 0204, E24	0 Y 1	89.01.1013		12.500MHz	XTAL HC 49/U
0 R 25	57.60.1222		2k2	MF, 1%, 0204, E24	0 Y 2	89.01.1013		12.500MHz	XTAL HC 49/U
0 R 26	57.60.1222		2k2	MF, 1%, 0204, E24	0 Y 3	89.60.1003		12.000MHz	SMD Quartz
0 R 27	57.60.1222		2k2	MF, 1%, 0204, E24	0 Y 4	89.01.1002		3.6864MHz	XTAL HC 18 U
0 R 28	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 29	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 30	57.60.1470		47R	MF, 1%, 0204, E24					
0 R 31	57.60.1470		47R	MF, 1%, 0204, E24					
0 R 32	57.60.1470		47R	MF, 1%, 0204, E24					
0 R 33	57.60.1470		47R	MF, 1%, 0204, E24					
0 R 34	57.60.1100		10R	MF, 1%, 0204, E24					
0 R 35	57.60.1104		100k	MF, 1%, 0204, E24					
0 R 36	57.60.1163		16k	MF, 1%, 0204, E24					
0 R 37	57.60.1123		12k	MF, 1%, 0204, E24					
0 R 38	57.60.1101		100R	MF, 1%, 0204, E24					
0 R 39	57.60.1562		5k6	MF, 1%, 0204, E24					
0 R 40	57.60.1100		10R	MF, 1%, 0204, E24					
0 R 41	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 42	57.60.1270		27R	MF, 1%, 0204, E24					
0 R 43	57.60.1220		22R	MF, 1%, 0204, E24					
0 R 44	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 45	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 46	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 47	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 48	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 49	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 50	57.60.1820		82R	MF, 1%, 0204, E24					
0 R 51	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 52	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 53	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 54	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 55	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 56	57.60.1820		82R	MF, 1%, 0204, E24					
0 R 57	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 58	57.60.1222		2k2	MF, 1%, 0204, E24					
0 R 59	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 60	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 61	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 62	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 63	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 64	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 65	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 66	57.60.1131		130R	MF, 1%, 0204, E24					
0 R 67	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 68	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 69	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 70	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 71	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 72	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 73	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 74	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 75	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 76	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 77	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 78	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 79	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 80	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 81	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 82	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 83	57.60.1105		1M	MF, 1%, 0204, E24					
0 R 84	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 85	57.60.1102		1k0	MF, 1%, 0204, E24					
0 R 86	57.60.1103		10k	MF, 1%, 0204, E24					
0 R 87	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 88	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 89	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 90	57.60.1333		33k	MF, 1%, 0204, E24					
0 R 91	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 92	57.60.1332		3k3	MF, 1%, 0204, E24					
0 R 93	57.60.1332		3k3	MF, 1%, 0204, E24					
0 S 1	55.60.0201		1*s	SMD Tactswitch					
0 T 1	1.022.647.00		1:1.4	OUTPUT TRAFO AES/EBU					

End of List

**TDIFI, TDIF Interface 1.940.480.20 ( 0); TDIF Interface w. AES Out 1.940.481.20 ( 0)**

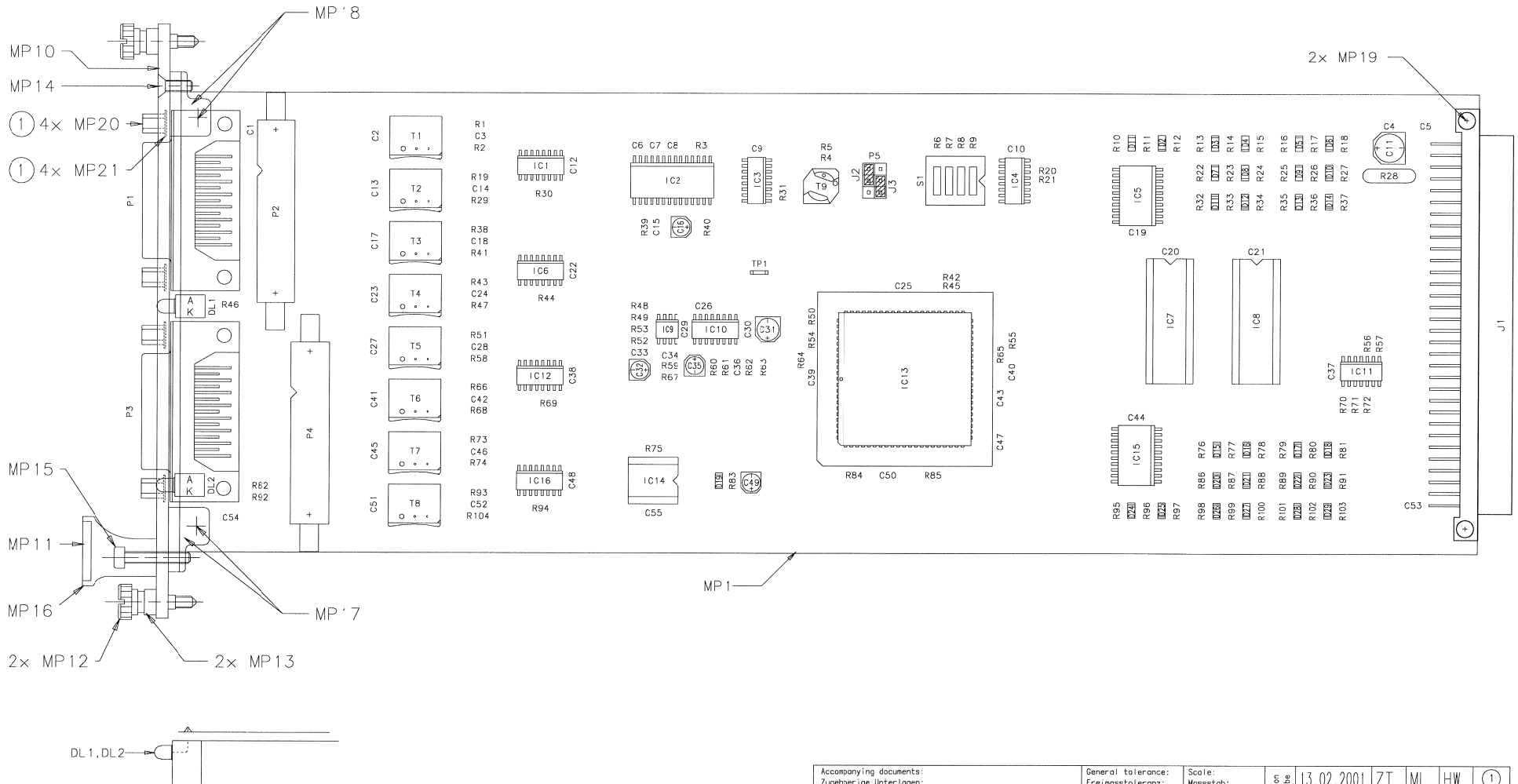


**TDIFI, TDIF Interface 1.940.480.20 ( 0); TDIF Interface w. AES Out 1.940.481.20 ( 0)**





**TDIFI, TDIF Interface 1.940.480.20 ( 0); TDIF Interface w. AES Out 1.940.481.20 ( 0)**



Accompanying documents: Zugehörige Unterlagen: PL	General tolerance: Freimasstoleranz:	Scale: Maßstab:	Edition Ausgabe 13.02.2001	ZT	ML	HW	①
Substitute for: Ersatz fuer:	1.940.480.20 / 481.20	Index 0	Date Datum	Viso Gez.	Checked Gepr.	Seen Ges.	Index
<b>STUDER</b> RESENSDORF	Description: Benennung: TDIF IN BOARD, ESE TDIF IN WITH AES OUT BOARD, ESE		Page: Seite:	1 / 1			
	Number: Number:	1.940.480.20 1.940.481.20					

TDIFI, TDIF In 1.940.480.20 ( 0)

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	not used	1 pce	100p	CER 50V, 5%, COG, 0603
0 C 3	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 4	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 5	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 6	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 7	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 8	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 9	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 10	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 11	59.68.0069	1 pce	47u	EL 16V, 6.3*5.7
0 C 12	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 13	not used	1 pce	100p	CER 50V, 5%, COG, 0603
0 C 14	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 15	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 16	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 17	not used	1 pce	100p	CER 50V, 5%, COG, 0603
0 C 18	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 19	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 20	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 21	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 22	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 23	not used	1 pce	100p	CER 50V, 5%, COG, 0603
0 C 24	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 25	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 26	59.60.2241	1 pce	47p	CER 50V, 5%, COG, 0603
0 C 27	not used	1 pce	100p	CER 50V, 5%, COG, 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	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 31	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7
0 C 32	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 33	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 34	59.60.3317	1 pce	2n2	CER 50V, 10%, X7R, 0805
0 C 35	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 36	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603
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	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 40	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 41	not used	1 pce	100p	CER 50V, 5%, COG, 0603
0 C 42	not used	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	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 45	not used	1 pce	100p	CER 50V, 5%, COG, 0603
0 C 46	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 47	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 48	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 49	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 50	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 51	not used	1 pce	100p	CER 50V, 5%, COG, 0603
0 C 52	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 53	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 54	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 55	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	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 13	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 14	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 15	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 16	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 17	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
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 D 22	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 23	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 24	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 25	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 26	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 27	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 28	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 29	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 DL 1	not used	1 pce	HLMP1790	DL HLMP - 1790 GN
0 DL 2	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN
0 IC 1	not used	1 pce	DS34C87	4*RS 422 Line Driver

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 IC 2	not used	1 pce	CS8412	AES-Receiver
0 IC 3	not used	1 pce	DS34C86	4*RS 422 Line Receiver
0 IC 4	50.62.1165	1 pce	74HC165	8bit shift register
0 IC 5	50.62.1541	1 pce	74HC541	Octal buffer line driver/recei
0 IC 6	not used	1 pce	DS34C87	4*RS 422 Line Driver
0 IC 7	50.06.0541	1 pce	74LS541	SN 74 LS 541 N
0 IC 8	50.06.0541	1 pce	74LS541	SN 74 LS 541 N
0 IC 9	50.61.0205	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0 IC 10	50.62.4946	1 pce	74HCT9046	PLL with bandgap contr VCO
0 IC 11	50.62.6014	1 pce	74ACT 14	Hex inverting Schmitt trigger
0 IC 12	not used	1 pce	DS34C87	4*RS 422 Line Driver
0 IC 13	50.63.4210	1 pce	EPF10K10	PLD 10 000 gates
0 IC 14	1.940.985.20	1 pce		SW480 TDIFIN (50.63.4298)
0 IC 15	50.62.1541	1 pce	74HC541	Octal buffer line driver/recei
0 IC 16	not used	1 pce	DS34C87	4*RS 422 Line Driver
0 J 1	54.11.2009	1 pce	96p	EU-R 3*32p
0 J 2	not used	1 pce	Jumper	0.63*0.63mm, Au
0 J 3	not used	1 pce	Jumper	0.63*0.63mm, Au
0 MP 1	1.940.480.11	1 pce		D19M TDIF IN PCB
0 MP 2	1.940.481.04	1 pce		TYPENSCHILD
0 MP 3	43.01.0108	1 pce	Label	ESE-WARNschild
0 MP 10	1.940.480.01	1 pce		FRONTPLATTE TDIF IN
0 MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE
0 MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0 MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)
0 MP 14	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0 MP 15	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gp chr
0 MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff
0 MP 17	49.02.0522	1 pce		Kartenhalter mit Z-Schr
0 MP 18	49.02.0522	1 pce		Kartenhalter mit Z-Schr
0 MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 P 1	not used	1 pce	15p	D-Sub, PCB, Winkel
0 P 2	not used	1 pce	16p	Stecker gerade Au
0 P 3	not used	1 pce	15p	D-Sub, PCB, Winkel
0 P 4	not used	1 pce	16p	Stecker gerade Au
0 P 5	not used	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0 R 1	not used	1 pce	27R	MF, 1%, 0204, E24
0 R 2	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 3	not used	1 pce	100k	MF, 1%, 0204, E24
0 R 4	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 5	not used	1 pce	220R	MF, 1%, 0204, E24
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	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 11	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 12	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 13	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 14	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 15	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 16	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 17	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 18	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 19	not used	1 pce	27R	MF, 1%, 0204, E24
0 R 20	57.69.1097	1 pce	10k	CF 5% 0603
0 R 21	57.69.1097	1 pce	10k	CF 5% 0603
0 R 22	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 23	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 24	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 25	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 26	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 27	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 28	57.92.7053	1 pce	1.6A	PTC 30V
0 R 29	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 30	not used	1 pce	2k2	MF, 1%, 0204, E24
0 R 31	not used	1 pce	10k	CF 5% 0603
0 R 32	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 33	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 34	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 35	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 36	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 37	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 38	not used	1 pce	27R	MF, 1%, 0204, E24
0 R 39	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 40	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 41	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 42	57.69.1097	1 pce	10k	CF 5% 0603
0 R 43	not used	1 pce	27R	MF, 1%, 0204, E24
0 R 44	not used	1 pce	2k2	MF, 1%, 0204, E24
0 R 45	57.69.1097	1 pce	10k	CF 5% 0603
0 R 46	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 47	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 48	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0 R 49	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 50	57.69.1073	1 pce	1k0	CF 5% 0603
0 R 51	not used	1 pce	27R	MF, 1%, 0204, E24

**TDIFI, TDIF In 1.940.480.20 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
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	57.69.1097	1 pce	10k	CF 5% 0603
0 R 55	57.69.1097	1 pce	10k	CF 5% 0603
0 R 56	57.69.1097	1 pce	10k	CF 5% 0603
0 R 57	57.69.1097	1 pce	10k	CF 5% 0603
0 R 58	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 59	57.60.1562	1 pce	5k6	MF, 1%, 0204, E24
0 R 60	57.60.1822	1 pce	8k2	MF, 1%, 0204, E24
0 R 61	57.60.1183	1 pce	18k	MF, 1%, 0204, E24
0 R 62	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 R 63	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0 R 64	57.69.1097	1 pce	10k	CF 5% 0603
0 R 65	57.69.1097	1 pce	10k	CF 5% 0603
0 R 66	not used	1 pce	27R	MF, 1%, 0204, E24
0 R 67	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 68	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 69	not used	1 pce	2k2	MF, 1%, 0204, E24
0 R 70	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 R 71	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 R 72	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 R 73	not used	1 pce	27R	MF, 1%, 0204, E24
0 R 74	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 75	57.69.1073	1 pce	1k0	CF 5% 0603
0 R 76	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 77	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 78	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 79	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 80	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 81	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 82	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 R 83	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0 R 84	57.69.1097	1 pce	10k	CF 5% 0603
0 R 85	57.69.1097	1 pce	10k	CF 5% 0603
0 R 86	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 87	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 88	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 89	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 90	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 91	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 92	57.60.1000	1 pce	0R0	MF, 0204
0 R 93	not used	1 pce	27R	MF, 1%, 0204, E24
0 R 94	not used	1 pce	2k2	MF, 1%, 0204, E24
0 R 95	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 96	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 97	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 98	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 99	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 100	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 101	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 R 102	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 R 103	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 R 104	not used	1 pce	22R	MF, 1%, 0204, E24
0 S 1	55.01.0164	1 pce	4*a	DIL-Switch, PCB
0 T 1	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU
0 T 2	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU
0 T 3	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU
0 T 4	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU
0 T 5	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU
0 T 6	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU
0 T 7	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU
0 T 8	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU
0 T 9	not used	1 pce	1:1	DI/DO TRANSFORMER
0 TP 1	54.33.6010	1 pce	2.8*0.8	PCB-Flachstecker, gerade
0 XDL 2	50.20.2501	1 pce	Spacer	LED-Sockel
0 XIC 13	53.03.2284	1 pce	84p	PLCC-Socket
0 XIC 14	53.03.0166	1 pce	8p	DIL 0.3", löt, gerade

End of List

**TDIFI, TDIF In with AES Out 1.940.481.20 ( 1)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 2	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 2	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 IC 3	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0 C 3	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 4	50.62.1165	1 pce	74HC165	8bit shift register
0 C 4	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 5	50.62.1541	1 pce	74HC541	Octal buffer line driver/recei
0 C 5	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 6	50.62.0464	1 pce	DS34C87	4*RS 422 Line Driver
0 C 6	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 IC 7	50.06.0541	1 pce	74LS541	SN 74 LS 541 N
0 C 7	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 IC 8	50.06.0541	1 pce	74LS541	SN 74 LS 541 N
0 C 8	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 9	50.61.0205	1 pce	TS272CD	Dual Op-Amp CMOS SO 8
0 C 9	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 10	50.62.4946	1 pce	74HCT9046	PLL with bandgap contr VCO
0 C 10	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 11	50.62.6014	1 pce	74ACT 14	Hex inverting Schmitt trigger
0 C 11	59.68.0069	1 pce	47u	EL 16V, 6.3*5.7	0 IC 12	50.62.0464	1 pce	DS34C87	4*RS 422 Line Driver
0 C 12	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 13	50.63.4210	1 pce	EPF10K10	PLD 10 000 gates
0 C 13	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 IC 14	1.940.985.20	1 pce		SW480 TDIFIN (50.63.4298)
0 C 14	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 15	50.62.1541	1 pce	74HC541	Octal buffer line driver/recei
0 C 15	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 IC 16	50.62.0464	1 pce	DS34C87	4*RS 422 Line Driver
0 C 16	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 J 1	54.11.2009	1 pce	96p	EU-R 3*32p
0 C 17	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 J 2	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au
0 C 18	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 J 3	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au
0 C 19	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 1	1.940.480.11	1 pce		D19M TDIF IN PCB
0 C 20	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 2	1.940.481.04	1 pce		TYPENSCHILD
0 C 21	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 3	43.01.0108	1 pce	Label	ESE-WARNschild
0 C 22	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 10	1.940.481.01	1 pce		FRONTPLATTE TDIF IN/AES OUT
0 C 23	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE
0 C 24	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0 C 25	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)
0 C 26	59.60.2241	1 pce	47p	CER 50V, 5%, COG, 0603	0 MP 14	not used	1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0 C 27	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 MP 15	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 28	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff
0 C 29	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 17	49.02.0522	1 pce		Kartenhalter mit Z-Schr
0 C 30	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 18	not used	1 pce		Kartenhalter mit Z-Schr
0 C 31	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 C 32	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	1 MP 20	54.13.0081	4 pcs	4.85mm	Bolzen UNC 4-40
0 C 33	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	1 MP 21	24.16.2025	4 pcs	2.7/5.5	Fächerscheibe Form A
0 C 34	59.60.3317	1 pce	2n2	CER 50V, 10%, X7R, 0805	0 P 1	54.13.0077	1 pce	15p	D-Sub, PCB, Winkel
0 C 35	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 P 2	not used	1 pce	16p	Stecker gerade Au
0 C 36	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 3	54.13.0077	1 pce	15p	D-Sub, PCB, Winkel
0 C 37	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 P 4	not used	1 pce	16p	Stecker gerade Au
0 C 38	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 P 5	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0 C 39	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 1	57.60.1270	1 pce	27R	MF, 1%, 0204, E24
0 C 40	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 2	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 C 41	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 3	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 C 42	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 4	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0 C 43	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 5	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0 C 44	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 6	57.69.1097	1 pce	10k	CF 5% 0603
0 C 45	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 7	57.69.1097	1 pce	10k	CF 5% 0603
0 C 46	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 8	57.69.1097	1 pce	10k	CF 5% 0603
0 C 47	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 9	57.69.1097	1 pce	10k	CF 5% 0603
0 C 48	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 10	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 49	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 11	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 C 50	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 12	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 C 51	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 13	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 52	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 14	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 C 53	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 15	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 C 54	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 16	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 55	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 17	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 D 1	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 18	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 D 2	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 19	57.60.1270	1 pce	27R	MF, 1%, 0204, E24
0 D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 20	57.69.1097	1 pce	10k	CF 5% 0603
0 D 4	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 21	57.69.1097	1 pce	10k	CF 5% 0603
0 D 5	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 22	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 D 6	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 23	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 D 7	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 24	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 D 8	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 25	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 D 9	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 26	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 D 10	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 27	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 D 11	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 28	57.92.7063	1 pce	1.6A	PTC 30V
0 D 12	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 29	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 D 13	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 30	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 D 14	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 31	57.69.1097	1 pce	10k	CF 5% 0603
0 D 15	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 32	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 D 16	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 33	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 D 17	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 34	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 D 18	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 35	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 D 19	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 36	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0 D 20	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 37	57.60.1101	1 pce	100R	MF, 1%, 0204, E24
0 D 21	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 38	57.60.1270	1 pce	27R	MF, 1%, 0204, E24
0 D 22	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 39	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 D 23	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 40	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 D 24	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 41	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 D 25	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 42	57.69.1097	1 pce	10k	CF 5% 0603
0 D 26	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 43	57.60.1270	1 pce	27R	MF, 1%, 0204, E24
0 D 27	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 44	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 D 28	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 45	57.69.1097	1 pce	10k	CF 5% 0603
0 D 29	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 46	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 DL 1	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN	0 R 47	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 DL 2	not used	1 pce	HLMP1790	DL HLMP - 1790 GN	0 R 48	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0 IC 1	50.62.0464	1 pce	DS34C87	4*RS 422 Line Driver	0 R 49	57.60.1103	1 pce	10k	MF, 1%, 0204, E24

**TDIFI, TDIF In with AES Out 1.940.481.20 ( 1)**

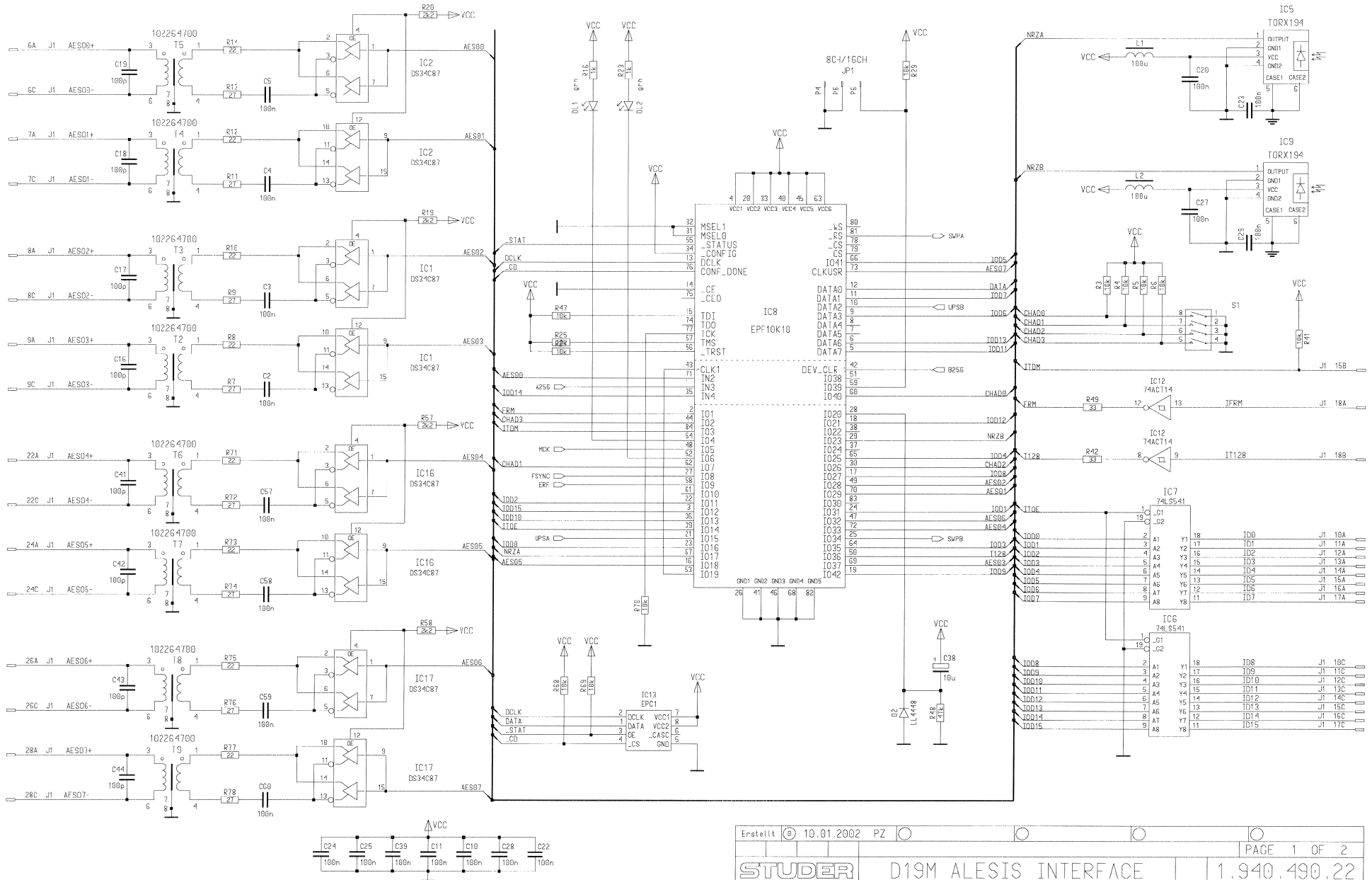
Page: 2 of 2

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	R 50	57.69.1073	1 pce	1k0	CF	5%	0603		
0	R 51	57.60.1270	1 pce	27R	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	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 55	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 56	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 57	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 58	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 59	57.60.1562	1 pce	5k6	MF	1%	0204, E24		
0	R 60	57.60.1822	1 pce	8k2	MF	1%	0204, E24		
0	R 61	57.60.1183	1 pce	18k	MF	1%	0204, E24		
0	R 62	57.60.1104	1 pce	100k	MF	1%	0204, E24		
0	R 63	57.60.1100	1 pce	10R	MF	1%	0204, E24		
0	R 64	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 65	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 66	57.60.1270	1 pce	27R	MF	1%	0204, E24		
0	R 67	57.60.1101	1 pce	100R	MF	1%	0204, E24		
0	R 68	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 69	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 70	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 71	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 72	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 73	57.60.1270	1 pce	27R	MF	1%	0204, E24		
0	R 74	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 75	57.69.1073	1 pce	1k0	CF	5%	0603		
0	R 76	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 77	57.60.1472	1 pce	4k7	MF	1%	0204, E24		
0	R 78	57.60.1101	1 pce	100R	MF	1%	0204, E24		
0	R 79	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 80	57.60.1472	1 pce	4k7	MF	1%	0204, E24		
0	R 81	57.60.1101	1 pce	100R	MF	1%	0204, E24		
0	R 82	not used	1 pce	1k0	MF	1%	0204, E24		
0	R 83	57.60.1473	1 pce	47k	MF	1%	0204, E24		
0	R 84	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 85	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 86	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 87	57.60.1472	1 pce	4k7	MF	1%	0204, E24		
0	R 88	57.60.1101	1 pce	100R	MF	1%	0204, E24		
0	R 89	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 90	57.60.1472	1 pce	4k7	MF	1%	0204, E24		
0	R 91	57.60.1101	1 pce	100R	MF	1%	0204, E24		
0	R 92	not used	1 pce	0R0	MF		0204		
0	R 93	57.60.1270	1 pce	27R	MF	1%	0204, E24		
0	R 94	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 95	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 96	57.60.1472	1 pce	4k7	MF	1%	0204, E24		
0	R 97	57.60.1101	1 pce	100R	MF	1%	0204, E24		
0	R 98	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 99	57.60.1472	1 pce	4k7	MF	1%	0204, E24		
0	R 100	57.60.1101	1 pce	100R	MF	1%	0204, E24		
0	R 101	57.60.1222	1 pce	2k2	MF	1%	0204, E24		
0	R 102	57.60.1472	1 pce	4k7	MF	1%	0204, E24		
0	R 103	57.60.1101	1 pce	100R	MF	1%	0204, E24		
0	R 104	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	S 1	55.01.0164	1 pce	4*a	DIL-Switch, PCB				
0	T 1	1.022.647.00	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 2	1.022.647.00	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 3	1.022.647.00	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 4	1.022.647.00	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 5	1.022.647.00	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 6	1.022.647.00	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 7	1.022.647.00	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 8	1.022.647.00	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 9	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	TP 1	54.33.8010	1 pce	2.8*0.8	PCB-Flachstecker, gerade				
0	XDL 1	50.20.2501	1 pce	Spacer	LED-Sockel				
0	XIC 13	53.03.2284	1 pce	84p	PLCC-Socket				
0	XIC 14	53.03.0166	1 pce	8p	DIL 0.3", lötl, gerade				

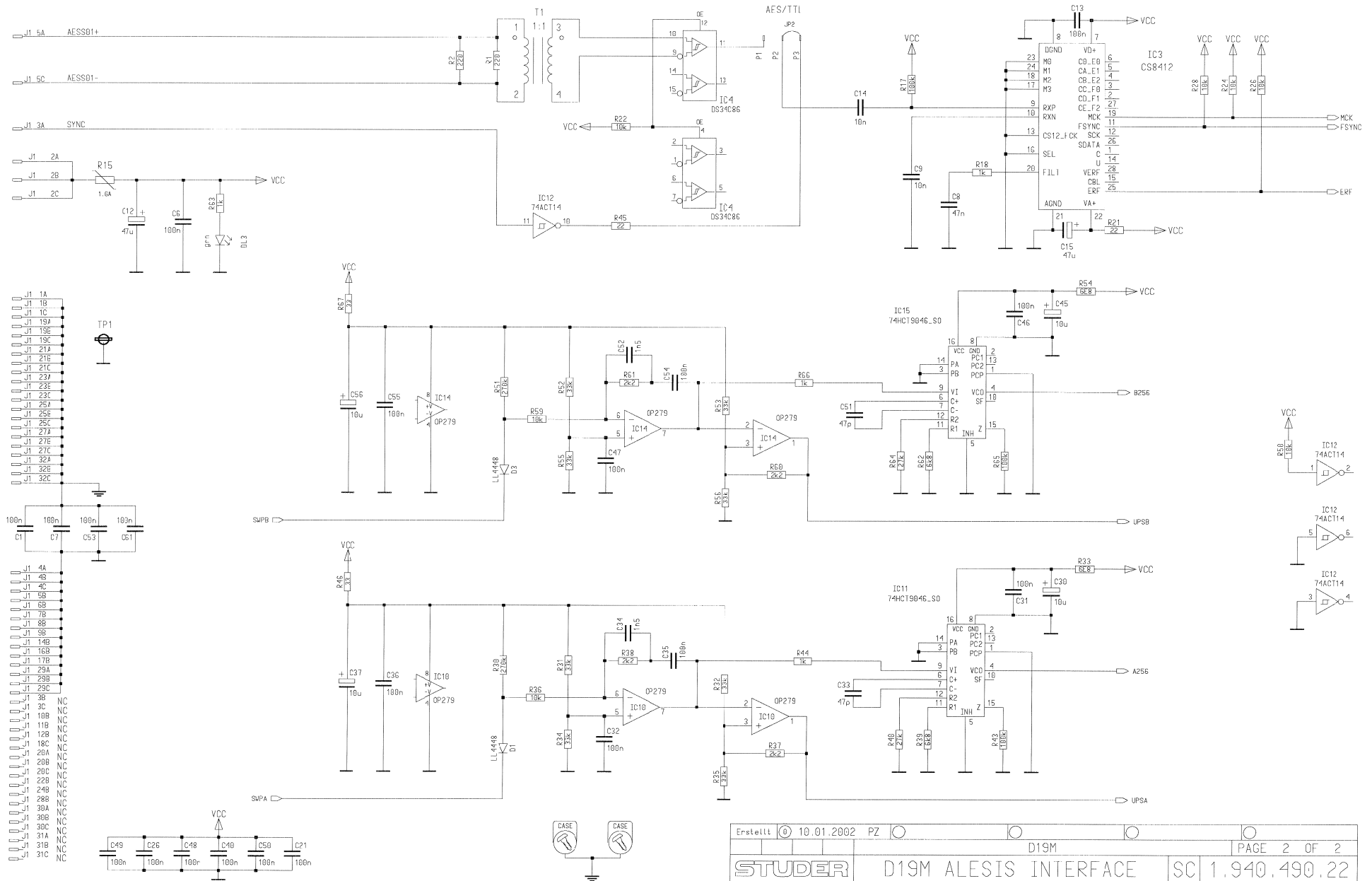
End of List

(01) Additionally MP20 and MP21

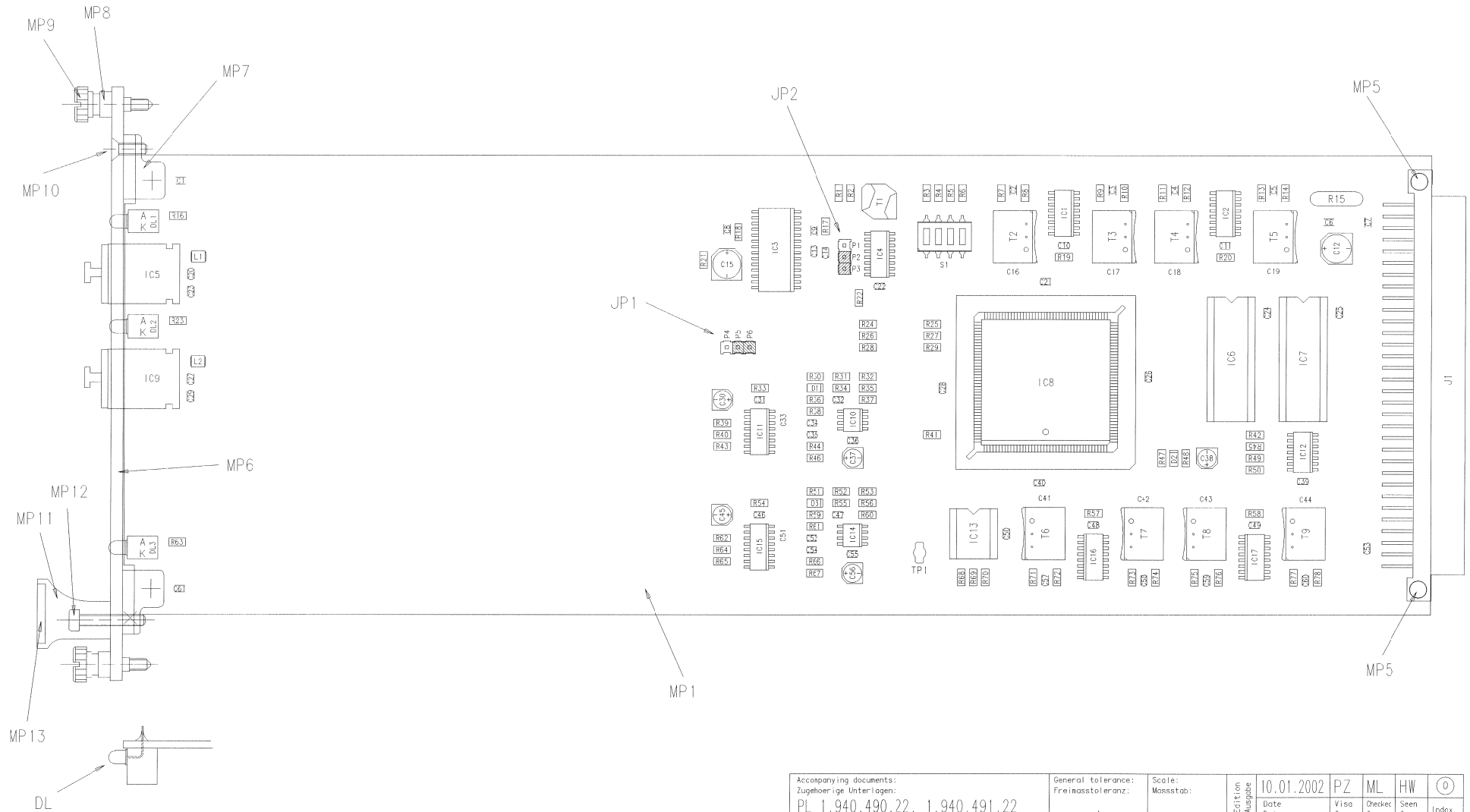
ADATII, ADAT Interface 1.940.490.22 ( 0); ADAT Interface w. AES Out 1.940.491.22 ( 0)



**ADATII, ADAT Interface 1.940.490.22 ( 0); ADAT Interface w. AES Out 1.940.491.22 ( 0)**



ADATII, ADAT Interface 1.940.490.22 ( 0); ADAT Interface w. AES Out 1.940.491.22 ( 0)



Accompanying documents: Zugehörige Unterlagen: PL 1.940.490.22, 1.940.491.22	General tolerance: Freimasstoleranz:	Scale: Masstab:	Edition Ausgabe: 10.01.2002	PZ	ML	HW		
Substitute for: Ersatz fuer:			Date Datum: 10.01.2002	Visa Gez.:	Checked Gepr.:	Seen Ges.:	Index	
			Page: Seite: 1 / 1					
<b>STUDER</b> REGENSDORF			Description: Benennung: D19M ALESIS INTERFACE, ESE				Number: Number: 1.940.490.22	



ADATI, ADAT Interface 1.940.490.22 ( 1)

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 L 1	62.60.0125	1 pce	100uH	SMD 10% 1210
0 C 2	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 L 2	62.60.0125	1 pce	100uH	SMD 10% 1210
0 C 3	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 1	1.940.490.12	1 pce		D19M ALESIS Interface PCB
0 C 4	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 2	43.01.0108	1 pce	Label	ESE-WARNschild
0 C 5	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 3	1.940.490.04	1 pce		TYPENSCHILD
0 C 6	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 4	1.101.001.22	1 pce		TEXT-ETIK. 5*20 HARDWARE -22
0 C 7	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 5	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 C 8	not used	1 pce	47n	CER 50V, 10%, X7R, 0805	0 MP 6	1.940.490.01	1 pce		FRONTPLATTE ALESIS
0 C 9	not used	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 7	49.02.0522	2 pcs		Kartenhalter mit Z-Schr
0 C 10	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 8	49.02.0521	2 pcs		Metall-Buchse (Rack)
0 C 11	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 9	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0 C 12	59.68.0069	1 pce	47u	EL 16V, 6.3*5.7	0 MP 10	49.02.0523	1 pce	M2.5*7	Senk-Schr. KS, Senkripp
0 C 13	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 11	49.02.0504	1 pce	4TE	Frontplatten-Griff
0 C 14	not used	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 12	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 15	not used	1 pce	47u	EL 16V, 6.3*5.7	0 MP 13	1.940.600.04	1 pce		GRIFFEINLAGE 4TE
0 C 16	not used	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 1	not used	1 pce	1p	Pin, 1reihig, gerade
0 C 17	not used	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 2	not used	1 pce	1p	Pin, 1reihig, gerade
0 C 18	not used	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 3	not used	1 pce	1p	Pin, 1reihig, gerade
0 C 19	not used	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 4	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 20	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 P 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 21	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 P 6	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 22	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 1	not used	1 pce	220R	MF, 1%, 0204, E24
0 C 23	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 2	not used	1 pce	220R	MF, 1%, 0204, E24
0 C 24	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 3	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 25	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 4	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 26	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 5	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 27	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 6	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 28	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 7	not used	1 pce	27R	MF, 1%, 0204, E24
0 C 29	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 8	not used	1 pce	22R	MF, 1%, 0204, E24
0 C 30	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 9	not used	1 pce	27R	MF, 1%, 0204, E24
0 C 31	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 10	not used	1 pce	22R	MF, 1%, 0204, E24
0 C 32	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 11	not used	1 pce	27R	MF, 1%, 0204, E24
0 C 33	59.60.2241	1 pce	47p	CER 50V, 5%, COG, 0603	0 R 12	not used	1 pce	22R	MF, 1%, 0204, E24
0 C 34	59.60.3315	1 pce	1n5	CER 50V, 10%, X7R, 0805	0 R 13	not used	1 pce	27R	MF, 1%, 0204, E24
0 C 35	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 14	not used	1 pce	22R	MF, 1%, 0204, E24
0 C 36	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 15	57.92.7053	1 pce	1.6A	PTC 30V
0 C 37	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 16	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 C 38	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 17	not used	1 pce	100k	MF, 1%, 0204, E24
0 C 39	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 18	not used	1 pce	1k0	MF, 1%, 0204, E24
0 C 40	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 19	not used	1 pce	2k2	MF, 1%, 0204, E24
0 C 41	not used	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 20	not used	1 pce	2k2	MF, 1%, 0204, E24
0 C 42	not used	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 21	not used	1 pce	22R	MF, 1%, 0204, E24
0 C 43	not used	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 22	not used	1 pce	10k	MF, 1%, 0204, E24
0 C 44	not used	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 23	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 C 45	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 24	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 46	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 25	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 47	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 26	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 48	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 27	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 49	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 28	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 50	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 29	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 51	59.60.2241	1 pce	47p	CER 50V, 5%, COG, 0603	0 R 30	57.60.1274	1 pce	270k	MF, 1%, 0204, E24
0 C 52	59.60.3315	1 pce	1n5	CER 50V, 10%, X7R, 0805	0 R 31	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 C 53	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 32	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 C 54	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 33	57.60.1689	1 pce	6R8	MF, 1%, 0204, E24
0 C 55	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 34	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 C 56	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 35	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 C 57	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 36	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 58	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 37	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 59	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 38	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 60	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 39	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0 C 61	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 40	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0 D 1	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 41	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 D 2	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 42	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0 D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 43	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 DL 1	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN	0 R 44	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 DL 2	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN	0 R 45	not used	1 pce	22R	MF, 1%, 0204, E24
0 DL 3	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN	0 R 46	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0 IC 1	not used	1 pce	DS34C87	4*RS 422 Line Driver	0 R 47	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 IC 2	not used	1 pce	DS34C87	4*RS 422 Line Driver	0 R 48	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0 IC 3	not used	1 pce	CS8412	AES-Receiver	0 R 49	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0 IC 4	not used	1 pce	DS34C86	4*RS 422 Line Receiver	0 R 50	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 IC 5	89.10.0131	1 pce	TORX194	Toslink Receiver	0 R 51	57.60.1274	1 pce	270k	MF, 1%, 0204, E24
0 IC 6	50.06.0541	1 pce	74LS541	SN 74 LS 541 N	0 R 52	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 IC 7	50.06.0541	1 pce	74LS541	SN 74 LS 541 N	0 R 53	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 IC 8	50.63.4210	1 pce	EPF10K10	PLD 10 000 gates	0 R 54	57.60.1689	1 pce	6R8	MF, 1%, 0204, E24
0 IC 9	89.10.0131	1 pce	TORX194	Toslink Receiver	0 R 55	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 IC 10	50.61.0203	1 pce	OP279	Dual Op-Amp single supply	0 R 56	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 IC 11	50.62.4946	1 pce	74HCT9046	PLL with bandgap contr VCO	0 R 57	not used	1 pce	2k2	MF, 1%, 0204, E24
0 IC 12	50.62.6014	1 pce	74ACT 14	Hex inverting Schmitt trigger	0 R 58	not used	1 pce	2k2	MF, 1%, 0204, E24
0 IC 13	1.940.956.20	1 pce		SW490 PADATI (50.63.4298)	0 R 59	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 IC 14	50.61.0203	1 pce	OP279	Dual Op-Amp single supply	0 R 60	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 IC 15	50.62.4946	1 pce	74HCT9046	PLL with bandgap contr VCO	0 R 61	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 IC 16	not used	1 pce	DS34C87	4*RS 422 Line Driver	0 R 62	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0 IC 17	not used	1 pce	DS34C87	4*RS 422 Line Driver	0 R 63	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 J 1	54.11.2009	1 pce	96p	EU-R 3*32p	0 R 64	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0 JP 1	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au	0 R 65	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
1 JP 2	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au	0 R 66	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24

**ADATI, ADAT Interface 1.940.490.22 ( 1)**

Page: 2 of 2

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	R 67	57.60.1330	1 pce	33R	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	not used	1 pce	22R	MF, 1%, 0204, E24				
0	R 72	not used	1 pce	27R	MF, 1%, 0204, E24				
0	R 73	not used	1 pce	22R	MF, 1%, 0204, E24				
0	R 74	not used	1 pce	27R	MF, 1%, 0204, E24				
0	R 75	not used	1 pce	22R	MF, 1%, 0204, E24				
0	R 76	not used	1 pce	27R	MF, 1%, 0204, E24				
0	R 77	not used	1 pce	22R	MF, 1%, 0204, E24				
0	R 78	not used	1 pce	27R	MF, 1%, 0204, E24				
0	S 1	55.60.0104	1 pce	4p	SMD DIL-Switch				
0	T 1	not used	1 pce	1:1	DI/DO TRANSFORMER				
0	T 2	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 3	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 4	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 5	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 6	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 7	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 8	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	T 9	not used	1 pce	1:1.4	OUTPUT TRAF0 AES/EBU				
0	TP 1	54.02.0320	1 pce	1p	PCB-Flachst 2.8*0.8, gerade				
0	XDL 1	50.20.2501	1 pce	Spacer	LED-Sockel				
0	XDL 2	50.20.2501	1 pce	Spacer	LED-Sockel				
0	XDL 3	50.20.2501	1 pce	Spacer	LED-Sockel				
0	XIC 8	53.03.2284	1 pce	84p	PLCC-Socket				
0	XIC 13	53.03.0166	1 pce	8p	DIL 0.3". löt. gerade				

End of List

(01) JP2 Jumper is used

**ADATI, ADAT Interface w. AES Out 1.940.491.22 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 L 1	62.60.0125	1 pce	100uH	SMD 10% 1210
0 C 2	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 L 2	62.60.0125	1 pce	100uH	SMD 10% 1210
0 C 3	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 1	1.940.490.12	1 pce		D19M ALESIS Interface PCB
0 C 4	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 2	43.01.0108	1 pce	Label	ESE-WARNschild
0 C 5	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 3	1.940.490.04	1 pce		TYPENSCHILD
0 C 6	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 4	1.101.001.22	1 pce		TEXT-ETIK. 5*20 HARDWARE -22
0 C 7	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 5	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 C 8	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 MP 6	1.940.490.01	1 pce		FRONTPLATTE ALESIS
0 C 9	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 7	49.02.0522	2 pcs		Kartenhalter mit Z-Schr
0 C 10	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 8	49.02.0521	2 pcs		Metall-Buchse (Rack)
0 C 11	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 9	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0 C 12	59.68.0069	1 pce	47u	EL 16V, 6.3*5.7	0 MP 10	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0 C 13	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 11	49.02.0504	1 pce	4TE	Frontplatten-Griff
0 C 14	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 12	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 15	59.68.0069	1 pce	47u	EL 16V, 6.3*5.7	0 MP 13	1.940.600.04	1 pce		GRIFFEINLAGE 4TE
0 C 16	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 1	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 17	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 2	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 18	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 3	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 19	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 P 4	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 20	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 P 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 21	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 P 6	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 22	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 1	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0 C 23	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 2	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0 C 24	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 3	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 25	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 4	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 26	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 5	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 27	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 6	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 28	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 7	57.60.1270	1 pce	27R	MF, 1%, 0204, E24
0 C 29	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 8	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 C 30	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 9	57.60.1270	1 pce	27R	MF, 1%, 0204, E24
0 C 31	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 10	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 C 32	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 11	57.60.1270	1 pce	27R	MF, 1%, 0204, E24
0 C 33	59.60.2241	1 pce	47p	CER 50V, 5%, COG, 0603	0 R 12	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 C 34	59.60.3315	1 pce	1n5	CER 50V, 10%, X7R, 0805	0 R 13	57.60.1270	1 pce	27R	MF, 1%, 0204, E24
0 C 35	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 14	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 C 36	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 15	57.92.7053	1 pce	1.6A	PTC 30V
0 C 37	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 16	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 C 38	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 17	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 C 39	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 18	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 C 40	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 19	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 41	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 20	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 42	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 21	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 C 43	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 22	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 44	59.60.2249	1 pce	100p	CER 50V, 5%, COG, 0603	0 R 23	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 C 45	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 24	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 46	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 25	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 47	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 26	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 48	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 27	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 49	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 28	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 50	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 29	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 51	59.60.2241	1 pce	47p	CER 50V, 5%, COG, 0603	0 R 30	57.60.1274	1 pce	270k	MF, 1%, 0204, E24
0 C 52	59.60.3315	1 pce	1n5	CER 50V, 10%, X7R, 0805	0 R 31	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 C 53	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 32	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 C 54	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 33	57.60.1689	1 pce	6R8	MF, 1%, 0204, E24
0 C 55	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 34	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 C 56	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 35	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 C 57	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 36	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 58	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 37	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 59	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 38	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 C 60	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 39	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0 C 61	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 40	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0 D 1	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 41	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 D 2	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 42	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0 D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 43	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 DL 1	50.04.2202	1 pce		DL HLMP-1790 GN	0 R 44	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 DL 2	50.04.2202	1 pce		DL HLMP-1790 GN	0 R 45	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 DL 3	50.04.2202	1 pce		DL HLMP-1790 GN	0 R 46	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0 IC 1	50.62.0464	1 pce		DS34C87 4*RS 422 Line Driver	0 R 47	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 IC 2	50.62.0464	1 pce		DS34C87 4*RS 422 Line Driver	0 R 48	57.60.1473	1 pce	47k	MF, 1%, 0204, E24
0 IC 3	50.62.0913	1 pce		CS8412 AES-Receiver	0 R 49	57.60.1330	1 pce	33R	MF, 1%, 0204, E24
0 IC 4	50.62.0463	1 pce		DS34C86 4*RS 422 Line Receiver	0 R 50	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 IC 5	89.10.0131	1 pce		TORX194 Toslink Receiver	0 R 51	57.60.1274	1 pce	270k	MF, 1%, 0204, E24
0 IC 6	50.06.0541	1 pce		74LS541 SN 74 LS 541 N	0 R 52	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 IC 7	50.06.0541	1 pce		74LS541 SN 74 LS 541 N	0 R 53	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 IC 8	50.63.4210	1 pce		EPF10K10 PLD 10 000 gates	0 R 54	57.60.1689	1 pce	6R8	MF, 1%, 0204, E24
0 IC 9	89.10.0131	1 pce		TORX194 Toslink Receiver	0 R 55	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 IC 10	50.61.0203	1 pce		OP279 Dual Op-Amp single supply	0 R 56	57.60.1333	1 pce	33k	MF, 1%, 0204, E24
0 IC 11	50.62.4946	1 pce		74HCT9046 PLL with bandgap contr VCO	0 R 57	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 IC 12	50.62.6014	1 pce		74ACT 14 Hex inverting Schmitt trigger	0 R 58	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 IC 13	1.940.856.20	1 pce		SW490 PADATI (50.63.4298)	0 R 59	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 IC 14	50.61.0203	1 pce		OP279 Dual Op-Amp single supply	0 R 60	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 IC 15	50.62.4946	1 pce		74HCT9046 PLL with bandgap contr VCO	0 R 61	57.60.1222	1 pce	2k2	MF, 1%, 0204, E24
0 IC 16	50.62.0464	1 pce		DS34C87 4*RS 422 Line Driver	0 R 62	57.60.1682	1 pce	6k8	MF, 1%, 0204, E24
0 IC 17	50.62.0464	1 pce		DS34C87 4*RS 422 Line Driver	0 R 63	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 J 1	54.11.2009	1 pce	96p	EU-R 3*32p	0 R 64	57.60.1273	1 pce	27k	MF, 1%, 0204, E24
0 JP 1	54.01.0021	1 pce		Jumper 0.63*0.63mm, Au	0 R 65	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 JP 2	54.01.0021	1 pce		Jumper 0.63*0.63mm, Au	0 R 66	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24

**ADATI, ADAT Interface w. AES Out 1.940.491.22 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	R 67	57.60.1330	1 pce	33R 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	57.60.1220	1 pce	22R MF, 1%, 0204, E24
0	R 72	57.60.1270	1 pce	27R MF, 1%, 0204, E24
0	R 73	57.60.1220	1 pce	22R MF, 1%, 0204, E24
0	R 74	57.60.1270	1 pce	27R MF, 1%, 0204, E24
0	R 75	57.60.1220	1 pce	22R MF, 1%, 0204, E24
0	R 76	57.60.1270	1 pce	27R MF, 1%, 0204, E24
0	R 77	57.60.1220	1 pce	22R MF, 1%, 0204, E24
0	R 78	57.60.1270	1 pce	27R MF, 1%, 0204, E24
0	S 1	55.60.0104	1 pce	4p SMD DIL-Switch
0	T 1	1.022.632.00	1 pce	1:1 DI/DO TRANSFORMER
0	T 2	1.022.647.00	1 pce	1:1.4 OUTPUT TRAF0 AES/EBU
0	T 3	1.022.647.00	1 pce	1:1.4 OUTPUT TRAF0 AES/EBU
0	T 4	1.022.647.00	1 pce	1:1.4 OUTPUT TRAF0 AES/EBU
0	T 5	1.022.647.00	1 pce	1:1.4 OUTPUT TRAF0 AES/EBU
0	T 6	1.022.647.00	1 pce	1:1.4 OUTPUT TRAF0 AES/EBU
0	T 7	1.022.647.00	1 pce	1:1.4 OUTPUT TRAF0 AES/EBU
0	T 8	1.022.647.00	1 pce	1:1.4 OUTPUT TRAF0 AES/EBU
0	T 9	1.022.647.00	1 pce	1:1.4 OUTPUT TRAF0 AES/EBU
0	TP 1	54.02.0320	1 pce	1p PCB-Flachst 2.8*0.8, gerade
0	XDL 1	50.20.2501	1 pce	Spacer LED-Sockel
0	XDL 2	50.20.2501	1 pce	Spacer LED-Sockel
0	XDL 3	50.20.2501	1 pce	Spacer LED-Sockel
0	XIC 8	53.03.2284	1 pce	84p PLCC-Socket
0	XIC 13	53.03.0166	1 pce	8p DIL 0.3". löt. gerade

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
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End of List

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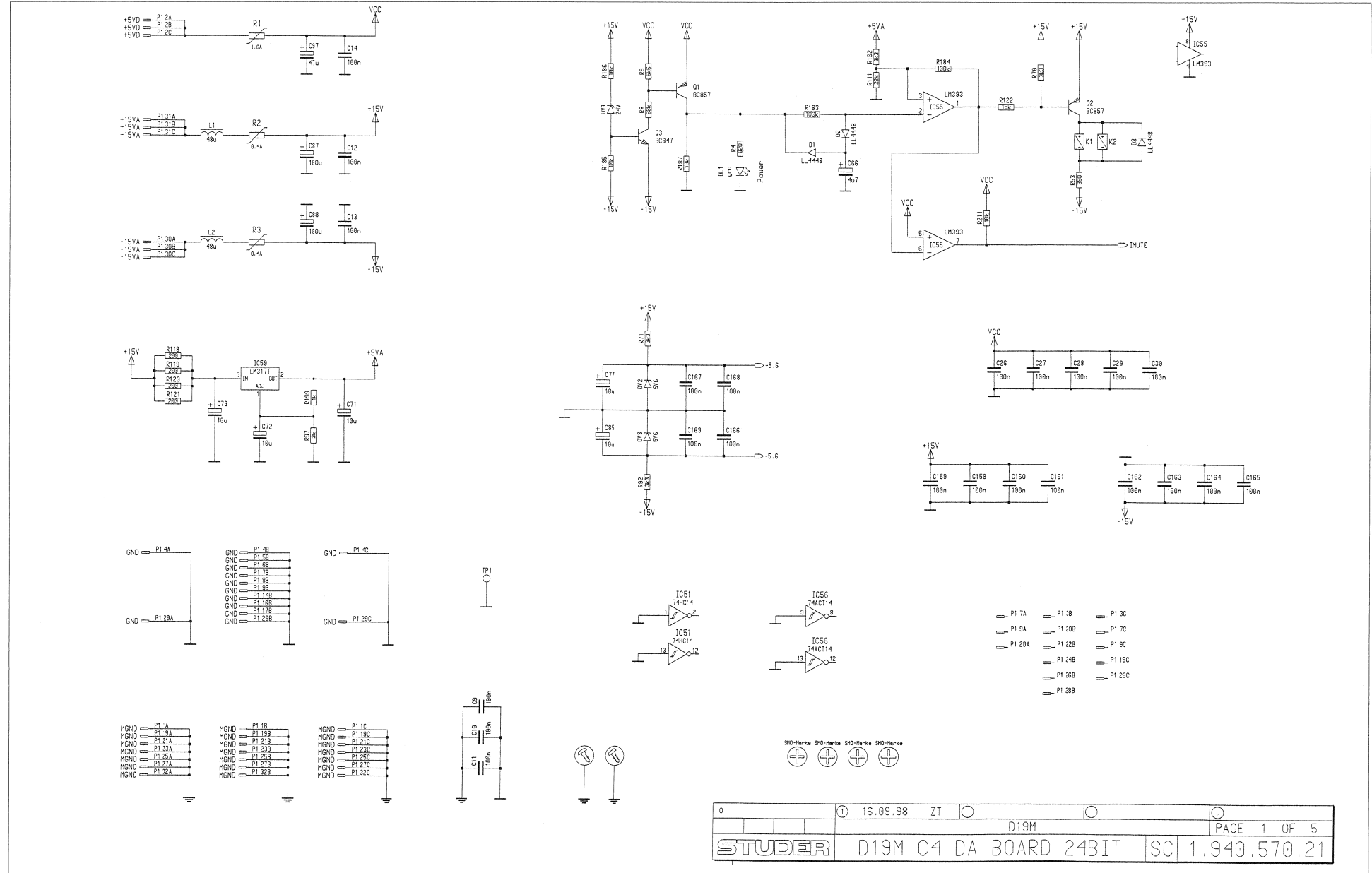
**CIRCUIT DIAGRAMS: D19m OUTPUT INTERFACE CARDS**

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C4DA Board .....	1.940.570
C4DA/24/96 Board .....	1.940.571
AESO Board .....	1.940.585
Block Diagram MADO.....	1.940.520/1.940.530
MADO Coaxial.....	1.940.520
MADO Optical.....	1.940.530
MADO Optical.....	1.940.531
MADO Optical.....	1.940.532
TDIFO Board.....	1.940.485
TDIFO with AES In .....	1.940.486
ADATO Interface.....	1.940.495
ADATO Interface with AES In.....	1.940.496

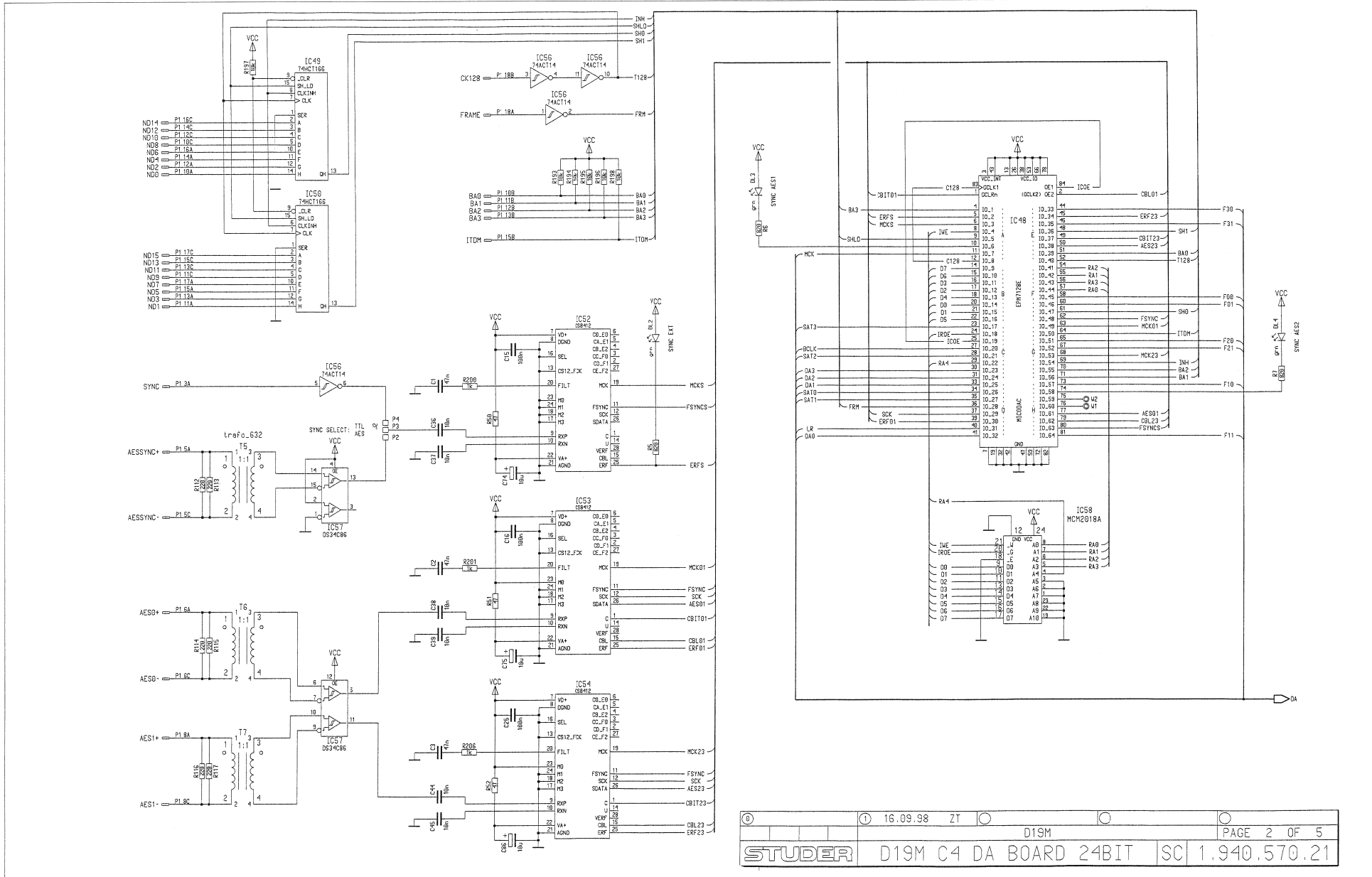


D19m C4 DA Board 24 Bit 1.940.570.21



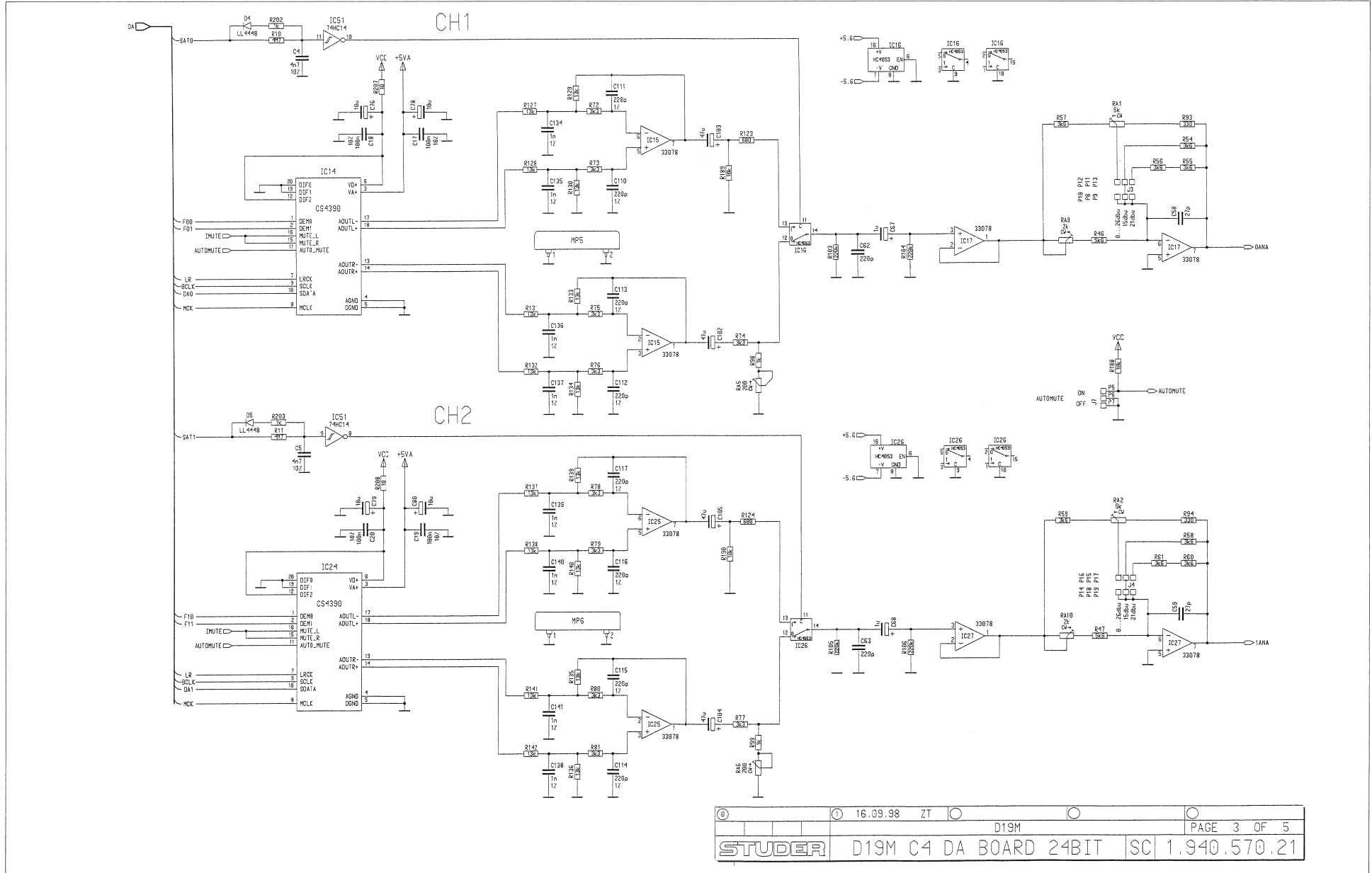


D19m C4 DA Board 24 Bit 1.940.570.21





D19m C4 DA Board 24 Bit 1.940.570.21

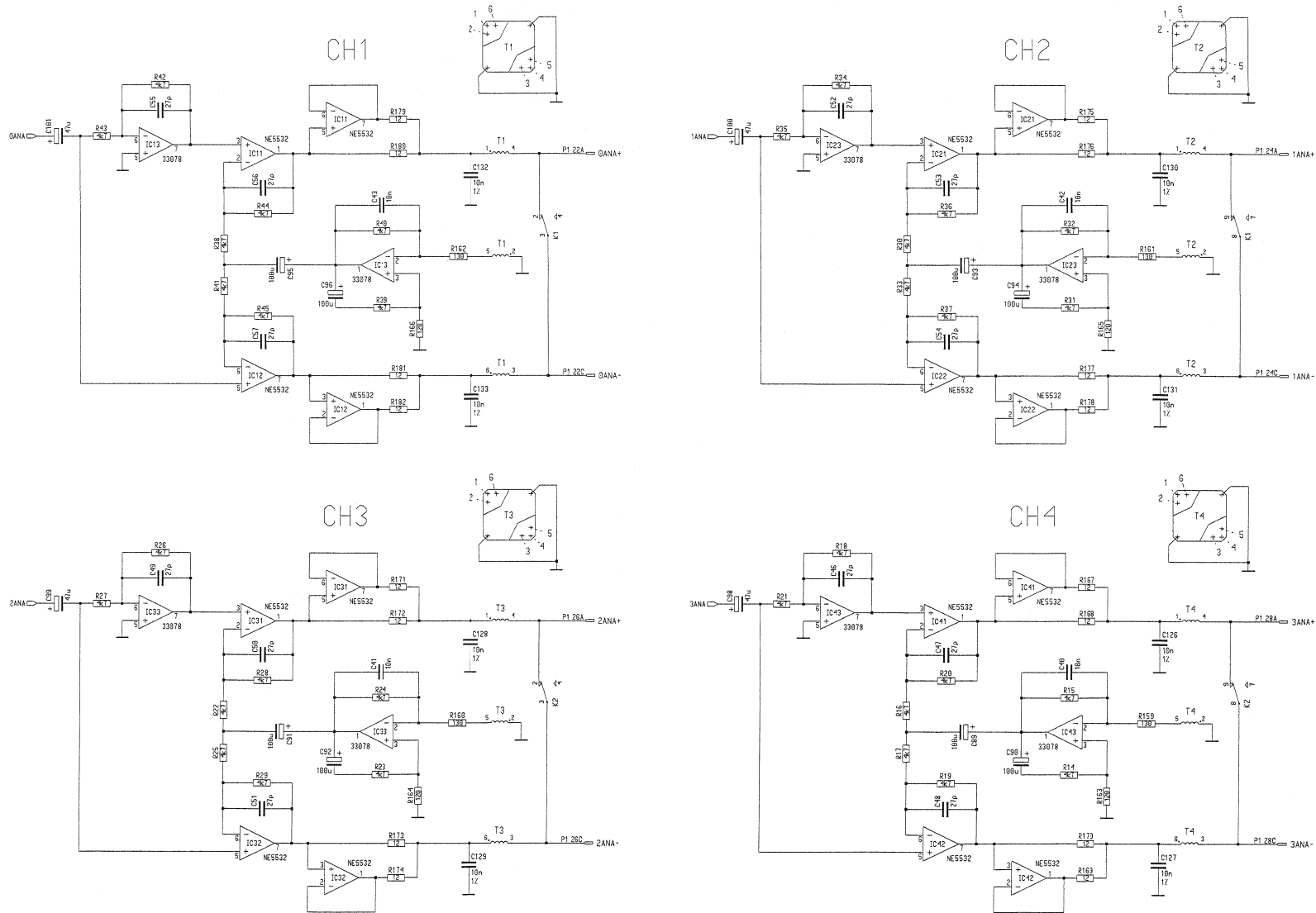








D19m C4 DA Board 24 Bit 1.940.570.21









DI9m C4 DA Board 24 Bit I.940.570.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	P 1	54.11.2009	1 pce	96p	EU-R 3*32p
0	DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	P 2	54.01.0020	1 pce	1p	Pin 0.63*0.63
0	DL 3	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	P 3	54.01.0020	1 pce	1p	Pin 0.63*0.63
0	DL 4	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	P 4	54.01.0020	1 pce	1p	Pin 0.63*0.63
						0	P 5	54.01.0020	1 pce	1p	Pin 0.63*0.63
0	DV 1	50.60.9026		24V	5%, 0.2W, SOT 23	0	P 6	54.01.0020	1 pce	1p	Pin 0.63*0.63
0	DV 2	50.60.9011		5V6	5%, 0.2W, SOT 23	0	P 7	54.01.0020	1 pce	1p	Pin 0.63*0.63
0	DV 3	50.60.9011		5V6	5%, 0.2W, SOT 23	0	P 8	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
						0	P 9	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 11	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, ,A	0	P 10	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 12	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, ,A	0	P 11	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 13	50.61.0204		MC33078	IC MC 33078 P	0	P 12	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 14	50.19.0114		D/A Conv	IC CS 4329-KP,	0	P 13	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 15	50.61.0204		MC33078	IC MC 33078 P	0	P 14	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0	IC 16	50.62.8053		HC4053	IC .. 74 HC 4053 . ,A	0	P 15	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 17	50.61.0204		MC33078	IC MC 33078 P	0	P 16	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 21	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, ,A	0	P 17	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 22	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, ,A	0	P 18	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 23	50.61.0204		MC33078	IC MC 33078 P	0	P 19	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 24	50.19.0114		D/A Conv	IC CS 4329-KP,	0	P 20	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0	IC 25	50.61.0204		MC33078	IC MC 33078 P	0	P 21	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 26	50.62.8053		HC4053	IC .. 74 HC 4053 . ,A	0	P 22	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 27	50.61.0204		MC33078	IC MC 33078 P	0	P 23	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 31	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, ,A	0	P 24	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 32	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, ,A	0	P 25	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 33	50.61.0204		MC33078	IC MC 33078 P	0	P 26	54.11.0136	1 pce	2*3p	Pin 0.63*0.63, RM2.54
0	IC 34	50.19.0114		D/A Conv	IC CS 4329-KP,	0	P 27	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 35	50.61.0204		MC33078	IC MC 33078 P	0	P 28	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 36	50.62.8053		HC4053	IC .. 74 HC 4053 . ,A	0	P 29	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 37	50.61.0204		MC33078	IC MC 33078 P	0	P 30	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 41	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, ,A	0	P 31	54.01.0020	0 pce	1p	Pin 0.63*0.63
0	IC 42	50.09.0106		5532AN	IC NE 5532 AN, NE 5532 AN, ,A	0	Q 1	50.60.1001		BC857B	PNP 45V 100mA SOT 23
0	IC 43	50.61.0204		MC33078	IC MC 33078 P	0	Q 2	50.60.1001		BC857B	PNP 45V 100mA SOT 23
0	IC 44	50.19.0114		D/A Conv	IC CS 4329-KP,	0	Q 3	50.60.0001		BC847B	NPN 45V 100mA SOT 23
0	IC 45	50.61.0204		MC33078	IC MC 33078 P						
0	IC 46	50.62.8053		HC4053	IC .. 74 HC 4053 . ,A	0	R 1	57.92.7053		1.6A	POLY- PTC, 30V
0	IC 47	50.61.0204		MC33078	IC MC 33078 P	0	R 2	57.92.7019		0.4A	POLY- PTC, 60V
0	IC 48	1.940.970.20		SW 570 MICODAC (50.63.4205)		0	R 3	57.92.7019		0.4A	POLY- PTC, 60V
0	IC 49	50.62.3166		74HCT166	.. 74 HCT 166 .	0	R 4	57.60.1821		820R	MF, 1%, 0204, E24
0	IC 50	50.62.3166		74HCT166	.. 74 HCT 166 .	0	R 5	57.60.1821		820R	MF, 1%, 0204, E24
0	IC 51	50.62.1014		74HC 14	IC .. 74 HC 14 . ,A	0	R 6	57.60.1821		820R	MF, 1%, 0204, E24
0	IC 52	50.62.0913		CS8412	AES-Receiver	0	R 7	57.60.1821		820R	MF, 1%, 0204, E24
0	IC 53	50.62.0913		CS8412	AES-Receiver	0	R 8	57.60.1683		66K	MF, 1%, 0204, E24
0	IC 54	50.62.0913		CS8412	AES-Receiver	0	R 9	57.60.1562		5K6	MF, 1%, 0204, E24
0	IC 55	50.61.9001		IC LM 393 D, LM 393		0	R 10	57.60.1475		4M7	MF, 1%, 0204, E24
0	IC 56	50.17.7014		ACT14	.. 74 ACT 14 .	0	R 11	57.60.1475		4M7	MF, 1%, 0204, E24
0	IC 57	50.15.0128		34C86	IC DS 34 C 86 TN, MC34C86P, A	0	R 12	57.60.1475		4M7	MF, 1%, 0204, E24
0	IC 58	50.14.1009		CY7C128-35	IC MCM 2018 A - 35 ,A	0	R 13	57.60.1475		4M7	MF, 1%, 0204, E24
0	IC 59	50.10.0104		LM317SP	IC LM 317 SP, ..T.	0	R 14	57.60.1472		4K7	MF, 1%, 0204, E24
						0	R 15	57.60.1472		4K7	MF, 1%, 0204, E24
						0	R 16	57.60.1472		4K7	MF, 1%, 0204, E24
0	J 2	54.01.0021		Jumper	0.63 * 0.63mm	0	R 17	57.60.1472		4K7	MF, 1%, 0204, E24
0	J 3	54.01.0021		Jumper	0.63 * 0.63mm	0	R 18	57.60.1472		4K7	MF, 1%, 0204, E24
0	J 4	54.01.0021		Jumper	0.63 * 0.63mm	0	R 19	57.60.1472		4K7	MF, 1%, 0204, E24
0	J 5	54.01.0021		Jumper	0.63 * 0.63mm	0	R 20	57.60.1472		4K7	MF, 1%, 0204, E24
0	J 6	54.01.0021		Jumper	0.63 * 0.63mm	0	R 21	57.60.1472		4K7	MF, 1%, 0204, E24
0	J 7	54.01.0021		Jumper	0.63 * 0.63mm	0	R 22	57.60.1472		4K7	MF, 1%, 0204, E24
						0	R 23	57.60.1472		4K7	MF, 1%, 0204, E24
0	K 1	56.04.0197		2u	24V, 125V/2A, AG/AU	0	R 24	57.60.1472		4K7	MF, 1%, 0204, E24
0	K 2	56.04.0197		2u	24V, 125V/2A, AG/AU	0	R 25	57.60.1472		4K7	MF, 1%, 0204, E24
						0	R 26	57.60.1472		4K7	MF, 1%, 0204, E24
0	L 1	62.03.0010		48uH	L 48 U , 2 A, FILTER	0	R 27	57.60.1472		4K7	MF, 1%, 0204, E24
0	L 2	62.03.0010		48uH	L 48 U , 2 A, FILTER	0	R 28	57.60.1472		4K7	MF, 1%, 0204, E24
						0	R 29	57.60.1472		4K7	MF, 1%, 0204, E24
1	MP 1	1.940.570.12			D19M C4 DA BOARD PCB	0	R 30	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 2	1.940.570.04			TYPENSCHILD	0	R 31	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 3	43.01.0108		Label	ESE-WARNSCHILD	0	R 32	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 4	1.101.001.20		Label	TEXT-ETIK. 5*20 HARDWARE -20	0	R 33	57.60.1472		4K7	MF, 1%, 0204, E24
1	MP 5	1.940.570.02			Abschirmblech	0	R 34	57.60.1472		4K7	MF, 1%, 0204, E24
1	MP 6	1.940.570.02			Abschirmblech	0	R 35	57.60.1472		4K7	MF, 1%, 0204, E24
1	MP 7	1.940.570.02			Abschirmblech	0	R 36	57.60.1472		4K7	MF, 1%, 0204, E24
1	MP 8	1.940.570.02			Abschirmblech	0	R 37	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 10	1.940.570.01	1 pce		FRONTPLATTE	0	R 38	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE	0	R 39	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)	0	R 40	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)	0	R 41	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 14	49.02.0522	2 pcs		Kartenhalter (Rack)	0	R 42	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp	0	R 43	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff	0	R 44	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 17	21.53.0279	2 pcs		Z - SCHR. IS , ZN , M2.5 * 6	0	R 45	57.60.1472		4K7	MF, 1%, 0204, E24
0	MP 18	21.53.0284	1 pce		Z - SCHR. IS , ZN , M2.5 * 16	1	R 46	57.60.1562		5K6	MF, 1%, 0204, E24
0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9	1	R 47	57.60.1562		5K6	MF, 1%, 0204, E24





## D19m C4 DA Board 24 Bit 1.940.570.21

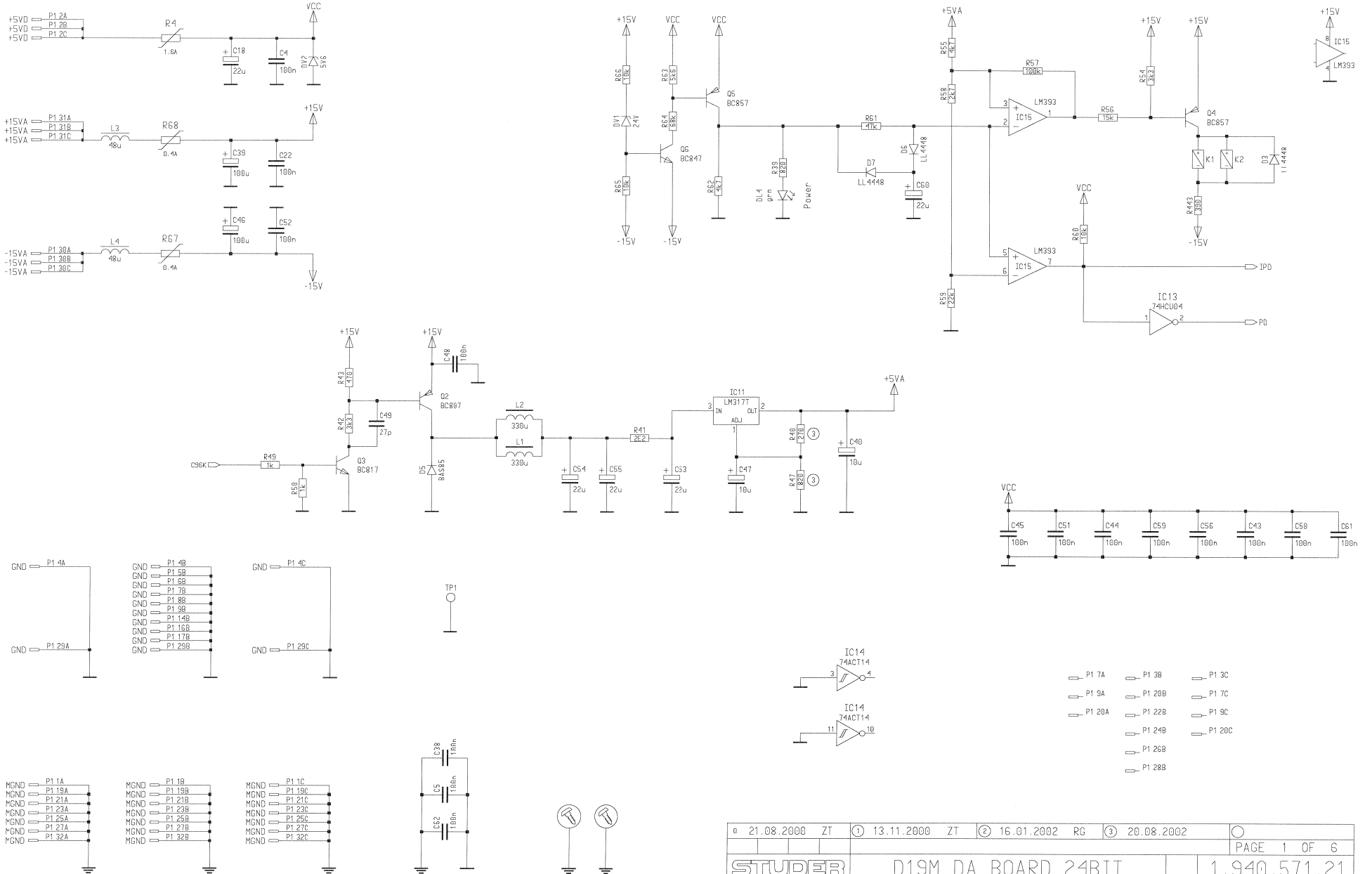
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0	R 210	57.60.1100		10R	MF, 1%, 0204, E24
0	R 211	57.60.1103		10K	MF, 1%, 0204, E24
0	RA 1	58.05.1502		5k	10%, 0.5W, Cermet
0	RA 2	58.05.1502		5k	10%, 0.5W, Cermet
U	RA 3	58.05.1502		5k	10%, 0.5W, Cermet
0	RA 4	58.05.1502		5k	10%, 0.5W, Cermet
0	RA 5	58.05.1201		200R	10%, 0.5W, Cermet
0	RA 6	58.05.1201		200R	10%, 0.5W, Cermet
0	RA 7	58.05.1201		200R	10%, 0.5W, Cermet
0	RA 8	58.05.1201		200R	10%, 0.5W, Cermet
0	RA 9	58.05.1202		2k	10%, 0.5W, Cermet
0	RA 10	58.05.1202		2k	10%, 0.5W, Cermet
0	RA 11	58.05.1202		2k	10%, 0.5W, Cermet
0	RA 12	58.05.1202		2k	10%, 0.5W, Cermet
0	T 1	1.022.275.00			TRIFILARTRAFO OUTPUT
0	T 2	1.022.275.00			TRIFILARTRAFO OUTPUT
0	T 3	1.022.275.00			TRIFILARTRAFO OUTPUT
0	T 4	1.022.275.00			TRIFILARTRAFO OUTPUT
0	T 5	1.022.632.00		1:1	DI/DO TRANSFORMER
0	T 6	1.022.632.00		1:1	DI/DO TRANSFORMER
0	T 7	1.022.632.00		1:1	DI/DO TRANSFORMER
0	TP 1	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	XDL 1	50.20.2501		Spacer	LED-Sockel
0	XDL 2	50.20.2501		Spacer	LED-Sockel
0	XDL 3	50.20.2501		Spacer	LED-Sockel
0	XDL 4	50.20.2501		Spacer	LED-Sockel
0	XIC 11	53.03.0166		8p	DIL 0.3", löt, gerade
0	XIC 12	53.03.0166		8p	DIL 0.3", löt, gerade
0	XIC 21	53.03.0166		8p	DIL 0.3", löt, gerade
0	XIC 22	53.03.0166		8p	DIL 0.3", löt, gerade
0	XIC 31	53.03.0166		8p	DIL 0.3", löt, gerade
0	XIC 32	53.03.0166		8p	DIL 0.3", löt, gerade
0	XIC 41	53.03.0166		8p	DIL 0.3", löt, gerade
0	XIC 42	53.03.0166		8p	DIL 0.3", löt, gerade
0	XIC 48	53.03.2284		XIC PLCC84	XIC PLCC 84 PIN

End of List

Comments

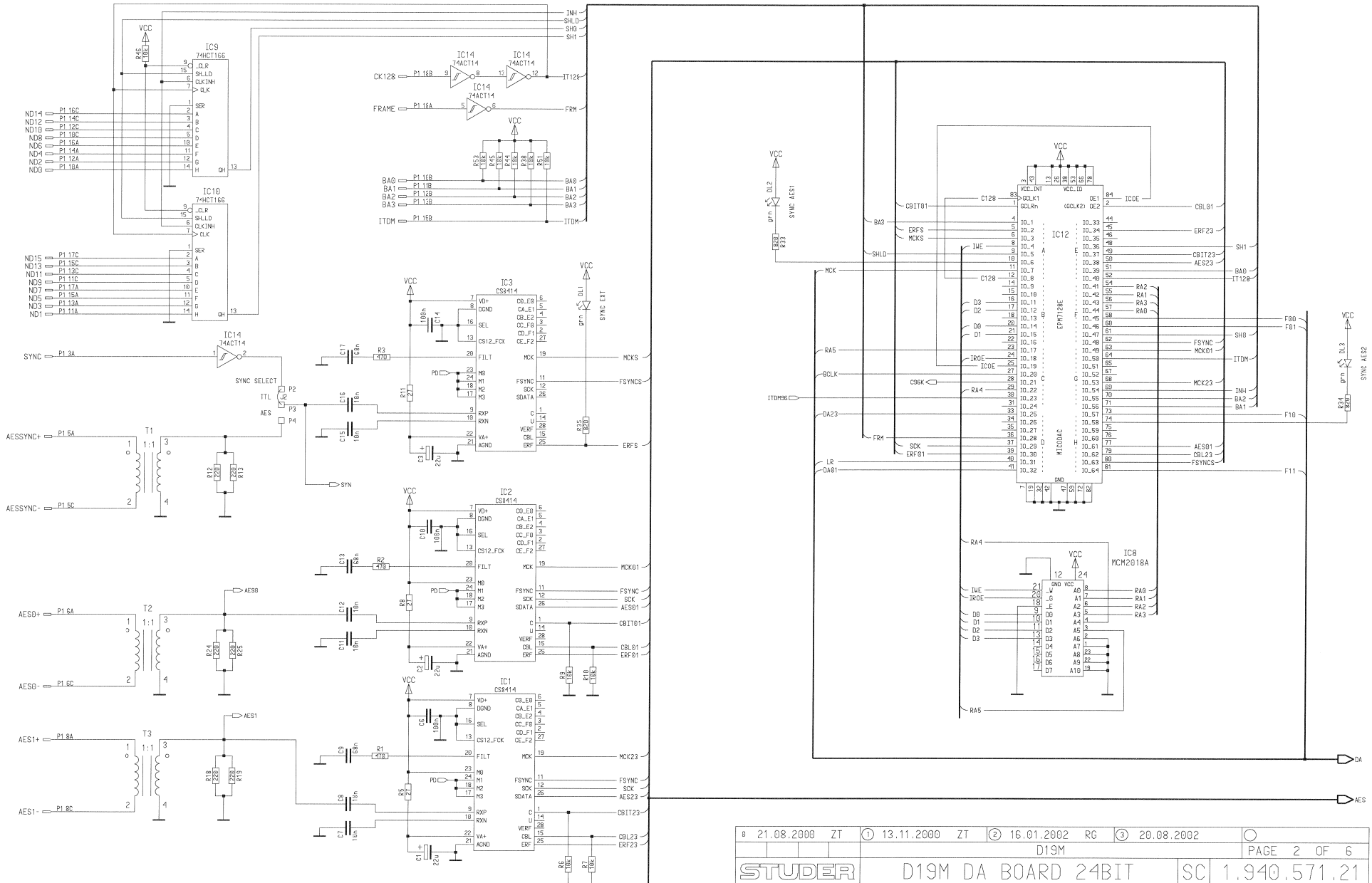
Wertanpassung von R46,R47,R48 und R49

**C4DA/24/96, 24 Bit D/A 1.940.571.21 ( 3 )**



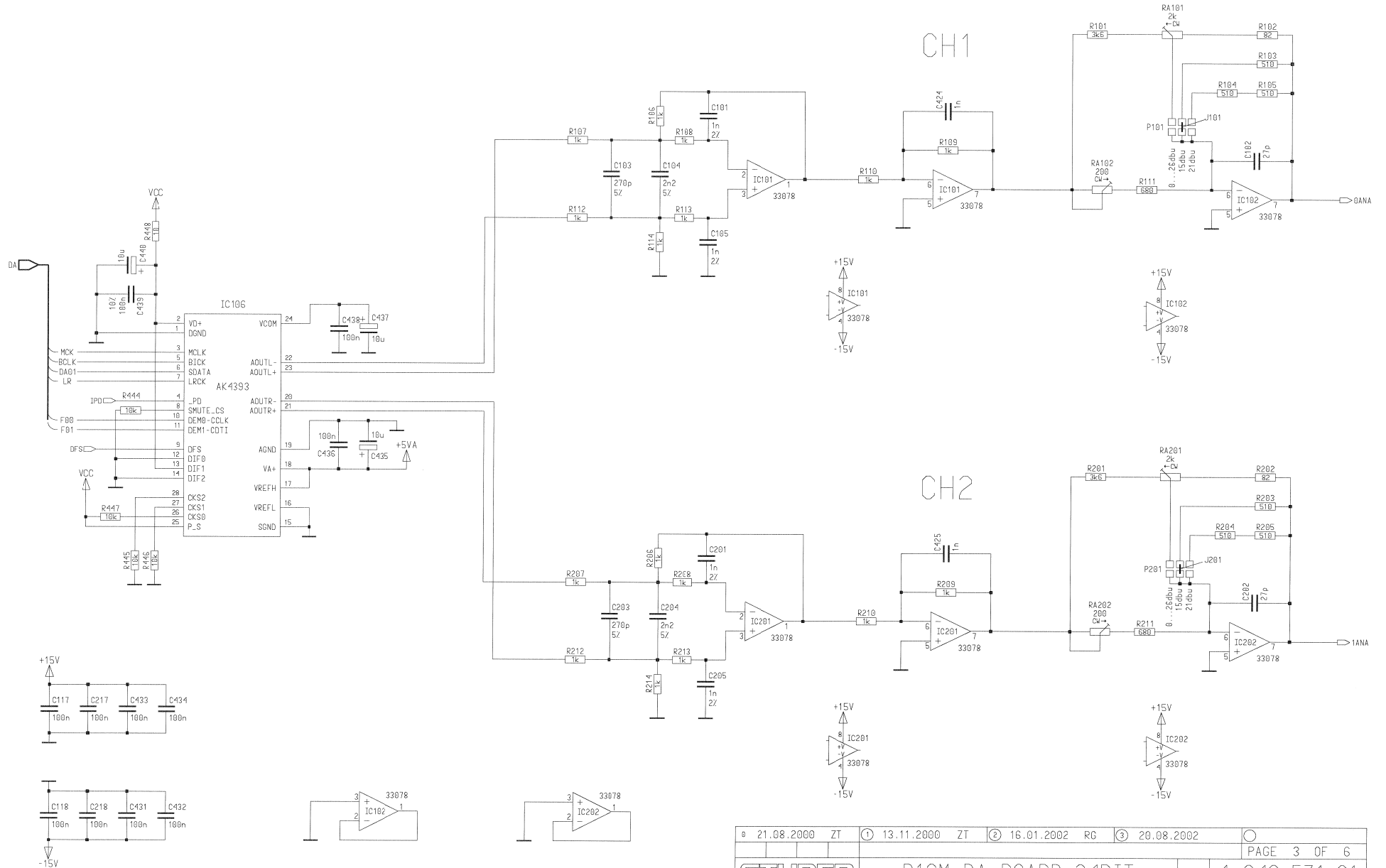


C4DA/24/96, 24 Bit D/A 1.940.571.21 ( 3 )



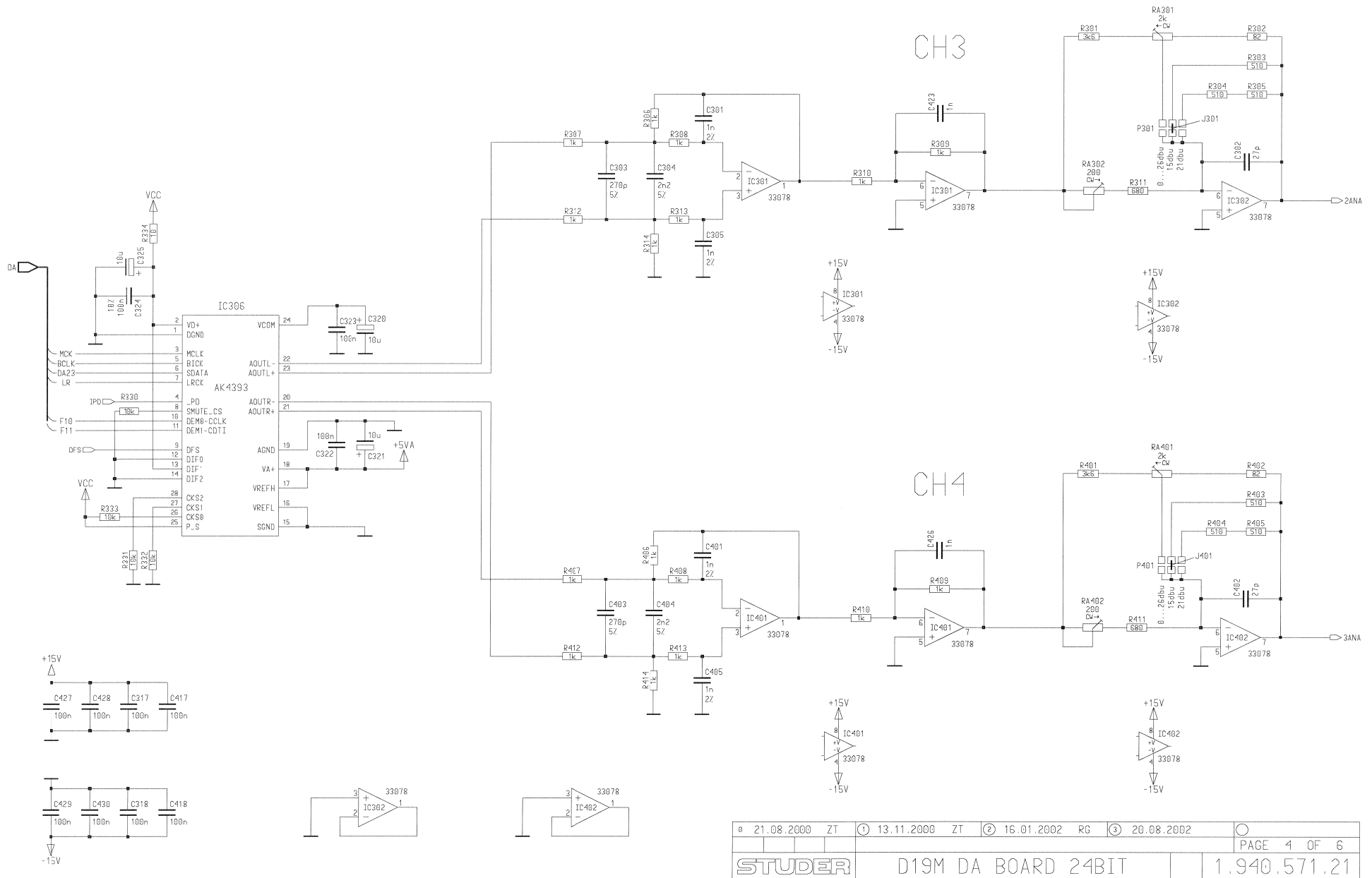
0	21.08.2000	ZT	1	13.11.2000	ZT	2	16.01.2002	RG	3	20.08.2002	
D19M											
STUDER										PAGE 2 OF 6	
D19M DA BOARD 24BIT										SC 1.940.571.21	

C4DA/24/96, 24 Bit D/A 1.940.571.21 ( 3 )

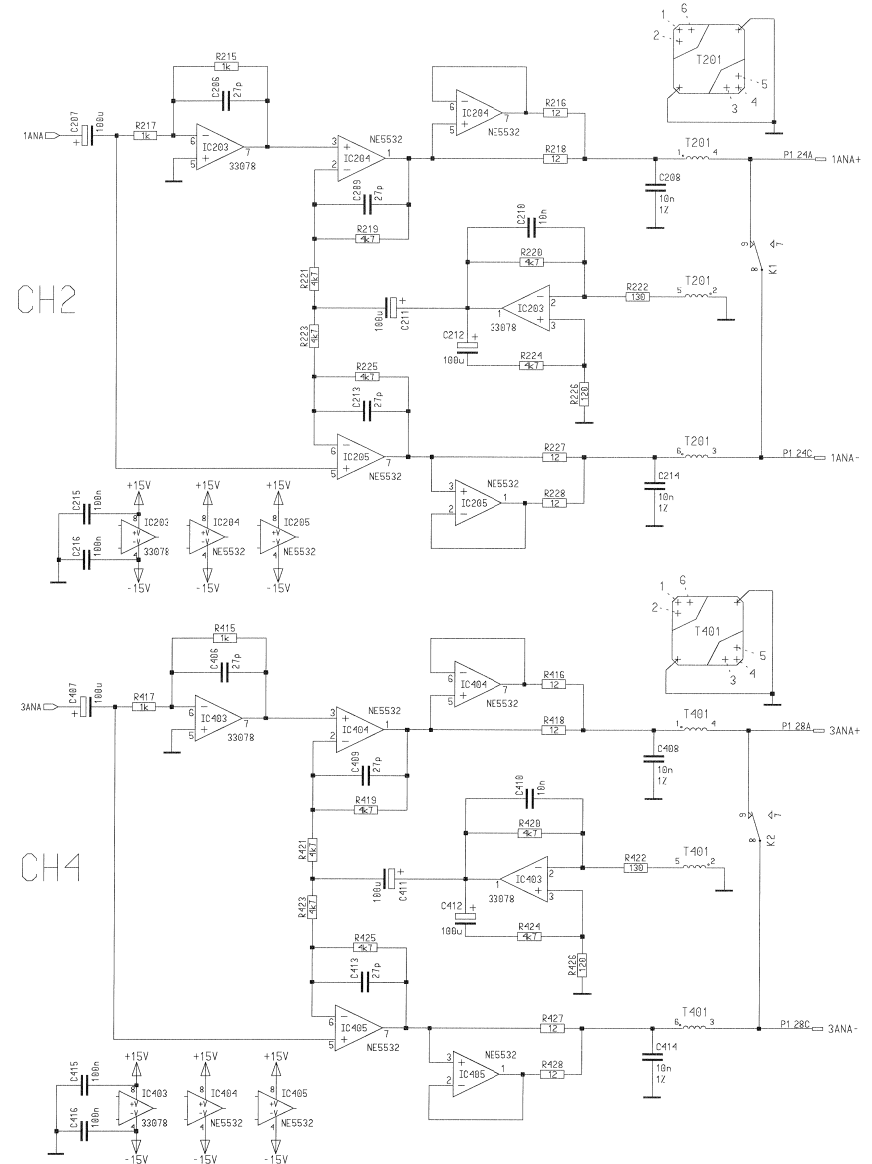
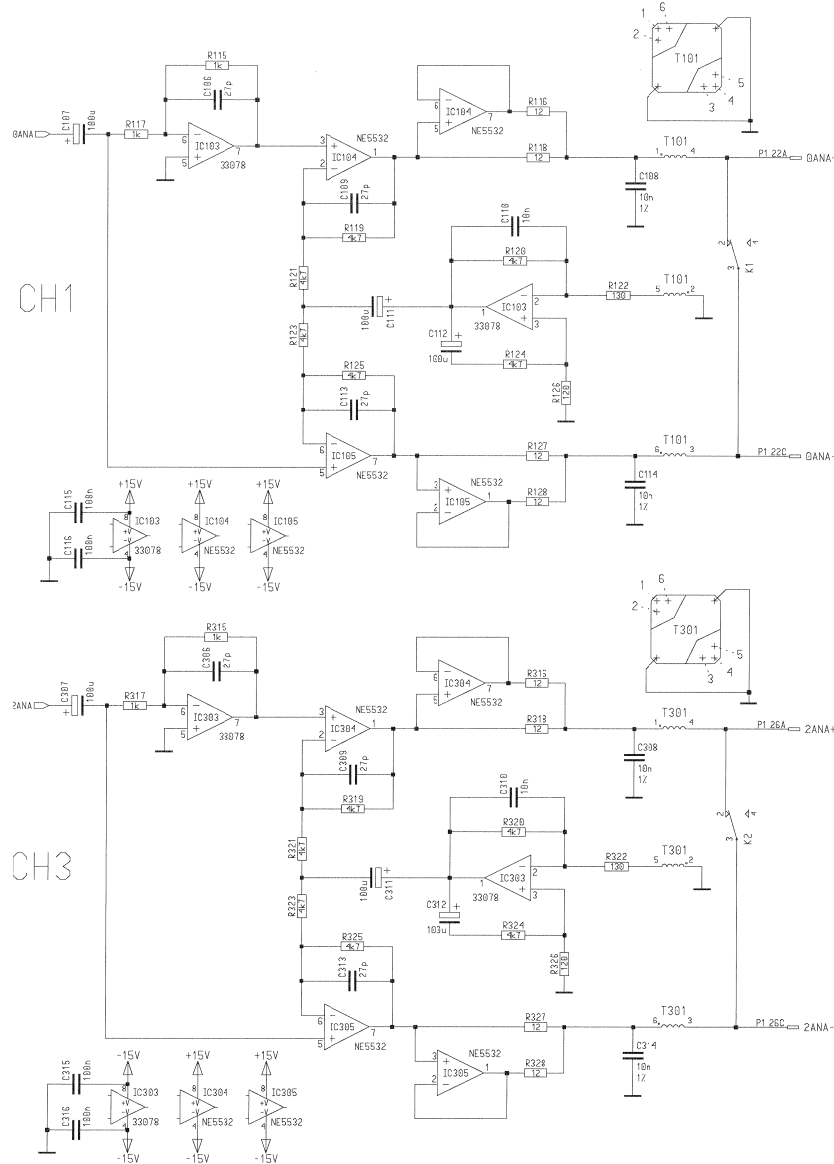


0	21.08.2000	ZT	1	13.11.2000	ZT	2	16.01.2002	RG	3	20.08.2002	
PAGE 3 OF 6											
STUDER			D19M DA BOARD 24BIT					1.940.571.21			

C4DA/24/96, 24 Bit D/A 1.940.571.21 ( 3 )



C4DA/24/96, 24 Bit D/A 1.940.571.21 ( 3 )



01	21.08.2000	ZT	02	13.11.2000	ZT	03	15.01.2002	RG	04	20.08.2002	
										PAGE 5 OF 6	
STUDER		D19M DA BOARD 24BIT						1.940.571.21			





C4DA/24/96, 24 Bit D/A 1.940.571.21 ( 4)

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 C 208	59.05.1103	1 pce	10n	PP, 1%, 63V
0 C 2	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 C 209	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 3	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 C 210	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 4	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 211	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0 C 5	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 212	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0 C 6	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 213	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 7	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 C 214	59.05.1103	1 pce	10n	PP, 1%, 63V
0 C 8	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 C 215	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 9	59.60.3335	1 pce	68n	CER 50V, 10%, X7R, 0805	0 C 216	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 10	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 217	not used	1 pce	100n	PETP, 63V, 10%, RM5
0 C 11	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 C 218	not used	1 pce	100n	PETP, 63V, 10%, RM5
0 C 12	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 C 301	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805
0 C 13	59.60.3335	1 pce	68n	CER 50V, 10%, X7R, 0805	0 C 302	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 14	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 303	59.60.2359	1 pce	270p	CER 50V, 5%, COG, 0805
0 C 15	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 C 304	59.63.0105	1 pce	2n2	PEN 50V, 5%, 1206
0 C 16	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 C 305	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805
0 C 17	59.60.3335	1 pce	68n	CER 50V, 10%, X7R, 0805	0 C 306	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 18	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 C 307	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0 C 19	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 308	59.05.1103	1 pce	10n	PP, 1%, 63V
0 C 20	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 309	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 21	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 310	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 311	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0 C 23	not used	1 pce	22u	EL 16V, 5.0*5.7	0 C 312	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0 C 24	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 313	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 25	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 314	59.05.1103	1 pce	10n	PP, 1%, 63V
0 C 28	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 315	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 27	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 316	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 28	not used	1 pce	22u	EL 16V, 5.0*5.7	0 C 317	not used	1 pce	100n	PETP, 63V, 10%, RM5
0 C 29	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 318	not used	1 pce	100n	PETP, 63V, 10%, RM5
0 C 30	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 320	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 31	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 321	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 32	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 322	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 33	not used	1 pce	22u	EL 16V, 5.0*5.7	0 C 323	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 34	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 324	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 325	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 36	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 401	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805
0 C 37	not used	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 402	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 38	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 403	59.60.2359	1 pce	270p	CER 50V, 5%, COG, 0805
0 C 39	59.68.0115	1 pce	100u	EL 35V, 8.0*10.7	0 C 404	59.63.0105	1 pce	2n2	PEN 50V, 5%, 1206
0 C 40	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 C 405	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805
0 C 41	not used	1 pce	22u	EL 16V, 5.0*5.7	0 C 406	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 42	not used	1 pce	10u	EL 16V, 4.0*5.7	0 C 407	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0 C 43	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 408	59.05.1103	1 pce	10n	PP, 1%, 63V
0 C 44	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 409	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 45	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 410	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 46	59.68.0115	1 pce	100u	EL 35V, 8.0*10.7	0 C 411	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0 C 47	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 C 412	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7
0 C 48	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 413	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603
0 C 49	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603	0 C 414	59.05.1103	1 pce	10n	PP, 1%, 63V
0 C 50	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 415	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 51	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 416	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 52	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 417	not used	1 pce	100n	PETP, 63V, 10%, RM5
0 C 53	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 C 418	not used	1 pce	100n	PETP, 63V, 10%, RM5
0 C 54	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 C 423	59.60.2373	1 pce	1n0	CER 50V, 5%, COG, 0805
0 C 55	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 C 424	59.60.2373	1 pce	1n0	CER 50V, 5%, COG, 0805
0 C 56	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 425	59.60.2373	1 pce	1n0	CER 50V, 5%, COG, 0805
0 C 57	not used	1 pce	33p	CER 50V, 5%, COG, 0603	0 C 426	59.60.2373	1 pce	1n0	CER 50V, 5%, COG, 0805
0 C 58	not used	1 pce	33p	CER 50V, 5%, COG, 0603	0 C 427	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 428	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 60	59.68.0067	1 pce	22u	EL 16V, 5.0*5.7	0 C 429	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 430	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 62	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 C 431	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 101	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805	0 C 432	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 102	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603	0 C 433	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 103	59.60.2359	1 pce	270p	CER 50V, 5%, COG, 0805	0 C 434	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 104	59.63.0105	1 pce	2n2	PEN 50V, 5%, 1206	0 C 435	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 105	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805	0 C 436	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 106	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603	0 C 437	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 107	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7	0 C 438	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 108	59.05.1103	1 pce	10n	PP, 1%, 63V	0 C 439	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 109	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603	0 C 440	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7
0 C 110	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 D 1	not used	1 pce	4448	200mA 75V 4ns SOD 80
0 C 111	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7	0 D 2	not used	1 pce	4448	200mA 75V 4ns SOD 80
0 C 112	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7	0 D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 113	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603	0 D 4	not used	1 pce	4448	200mA 75V 4ns SOD 80
0 C 114	59.05.1103	1 pce	10n	PP, 1%, 63V	0 D 5	50.60.8101	1 pce	BAS85	200mA 30V Schottky SOD 80
0 C 115	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 D 6	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 116	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 D 7	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 117	not used	1 pce	100n	PETP, 63V, 10%, RM5	0 DL 1	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN
0 C 118	not used	1 pce	100n	PETP, 63V, 10%, RM5	0 DL 2	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN
0 C 201	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805	0 DL 3	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN
0 C 202	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603	0 DL 4	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN
0 C 203	59.60.2359	1 pce	270p	CER 50V, 5%, COG, 0805	0 DV 1	50.60.9026	1 pce	24V	5%, 0.2W, SOT 23
0 C 204	59.63.0105	1 pce	2n2	PEN 50V, 5%, 1206	2 DV 2	50.04.1108	1 pce	5V6	Zener, 5%, 0.5W, DO-35
0 C 205	59.63.1113	1 pce	1n0	PPS 50V, 2%, 0805	0 IC 1	50.62.0915	1 pce	CS8414	Digital Audio Receiver 96kHz
0 C 206	59.60.2235	1 pce	27p	CER 50V, 5%, COG, 0603	0 IC 2	50.62.0915	1 pce	CS8414	Digital Audio Receiver 96kHz
0 C 207	59.68.0029	1 pce	100u	EL 6V, 6.3*5.7	0 IC 3	50.62.0915	1 pce	CS8414	Digital Audio Receiver 96kHz

C4DA/24/96, 24 Bit D/A 1.940.571.21 ( 4)

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	IC 4	not used	not used	not used	0	R 8	57.60.1270	1 pce	27R MF, 1%, 0204, E24
0	IC 5	not used	not used	not used	0	R 9	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	IC 6	not used	not used	not used	0	R 10	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	IC 7	not used	1 pce	LM317L Series regulator 100mA ...+37V	0	R 11	57.60.1270	1 pce	27R MF, 1%, 0204, E24
0	IC 8	50.14.1009	1 pce	7C128A SRAM 2K*8 35ns	0	R 12	57.60.1221	1 pce	220R MF, 1%, 0204, E24
0	IC 9	50.62.3166	1 pce	74HCT166 8bit parallel in/serial out	0	R 13	57.60.1221	1 pce	220R MF, 1%, 0204, E24
0	IC 10	50.62.3166	1 pce	74HCT166 8bit parallel in/serial out	0	R 14	not used	1 pce	10K MF, 1%, 0204, E24
0	IC 11	50.10.0104	1 pce	LM317SP Series regulator 1.5A ...+37V	0	R 15	not used	1 pce	22R MF, 1%, 0204, E24
0	IC 12	1.940.971.20	1 pce	SW 571 SICODAC (50.63.4205)	0	R 16	not used	1 pce	18K MF, 1%, 0204, E24
0	IC 13	50.62.1904	1 pce	74HCU04 Hex inverter unbuffered	0	R 17	not used	1 pce	10K MF, 1%, 0204, E24
0	IC 14	50.62.6014	1 pce	74ACT 14 Hex inverting Schmitt trigger	0	R 18	57.60.1221	1 pce	220R MF, 1%, 0204, E24
0	IC 15	50.61.9001	1 pce	LM393 Dual voltage comp. SO 8	0	R 19	57.60.1221	1 pce	220R MF, 1%, 0204, E24
0	IC 101	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 20	not used	1 pce	18K MF, 1%, 0204, E24
0	IC 102	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 21	not used	1 pce	10K MF, 1%, 0204, E24
0	IC 103	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 22	not used	1 pce	22R MF, 1%, 0204, E24
0	IC 104	50.09.0106	1 pce	5532A Dual Op-Amp,low noise	0	R 23	not used	1 pce	10K MF, 1%, 0204, E24
0	IC 105	50.09.0106	1 pce	5532A Dual Op-Amp,low noise	0	R 24	57.60.1221	1 pce	220R MF, 1%, 0204, E24
0	IC 106	50.61.8005	1 pce	AK4393 D/A Converter 24bit DS SOP28	0	R 25	57.60.1221	1 pce	220R MF, 1%, 0204, E24
0	IC 201	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 26	not used	1 pce	18K MF, 1%, 0204, E24
0	IC 202	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 27	not used	1 pce	10K MF, 1%, 0204, E24
0	IC 203	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 28	not used	1 pce	22R MF, 1%, 0204, E24
0	IC 204	50.09.0106	1 pce	5532A Dual Op-Amp,low noise	0	R 29	not used	1 pce	10K MF, 1%, 0204, E24
0	IC 205	50.09.0106	1 pce	5532A Dual Op-Amp,low noise	0	R 30	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	IC 301	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 31	not used	1 pce	10K MF, 1%, 0204, E24
0	IC 302	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 32	not used	1 pce	10K MF, 1%, 0204, E24
0	IC 303	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 33	57.60.1821	1 pce	820R MF, 1%, 0204, E24
0	IC 304	50.09.0106	1 pce	5532A Dual Op-Amp,low noise	0	R 34	57.60.1821	1 pce	820R MF, 1%, 0204, E24
0	IC 305	50.09.0106	1 pce	5532A Dual Op-Amp,low noise	0	R 35	57.60.1821	1 pce	820R MF, 1%, 0204, E24
0	IC 306	50.61.8005	1 pce	AK4393 D/A Converter 24bit DS SOP28	0	R 36	not used	1 pce	240R MF, 1%, 0204, E24
0	IC 401	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 37	not used	1 pce	390R MF, 1%, 0204, E24
0	IC 402	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 38	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	IC 403	50.61.0204	1 pce	MC33078 Dual Op-Amp low noise	0	R 39	57.60.1821	1 pce	820R MF, 1%, 0204, E24
0	IC 404	50.09.0106	1 pce	5532A Dual Op-Amp,low noise	4	R 40	57.60.1271	1 pce	270R MF, 1%, 0204, E24
0	IC 405	50.09.0106	1 pce	5532A Dual Op-Amp,low noise	0	R 41	57.60.1229	1 pce	2R2 MF, 1%, 0204, E24
0	J 2	54.01.0021	1 pce	Jumper 0.63*0.63mm, Au	0	R 42	57.60.1332	1 pce	3K3 MF, 1%, 0204, E24
0	J 5	54.01.0021	1 pce	Jumper 0.63*0.63mm, Au	0	R 43	57.60.1471	1 pce	470R MF, 1%, 0204, E24
0	J 6	54.01.0021	1 pce	Jumper 0.63*0.63mm, Au	0	R 44	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	J 101	54.01.0021	1 pce	Jumper 0.63*0.63mm, Au	0	R 45	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	J 201	54.01.0021	1 pce	Jumper 0.63*0.63mm, Au	0	R 46	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	J 301	54.01.0021	1 pce	Jumper 0.63*0.63mm, Au	4	R 47	57.60.1821	1 pce	820R MF, 1%, 0204, E24
0	J 401	54.01.0021	1 pce	Jumper 0.63*0.63mm, Au	0	R 48	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	K 1	56.04.0197	1 pce	2*u 24V 125V 2A Ag/Au	3	R 49	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	K 2	56.04.0197	1 pce	2*u 24V 125V 2A Ag/Au	0	R 50	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	L 1	62.02.3331	1 pce	330uH 10%, radial RM 5	0	R 51	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	L 2	62.02.3331	1 pce	330uH 10%, radial RM 5	0	R 52	not used	1 pce	1M MF, 1%, 0204, E24
0	L 3	62.03.0010	1 pce	48uH 2A Toroid Chocke	0	R 53	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	L 4	62.03.0010	1 pce	48uH 2A Toroid Chocke	0	R 54	57.60.1332	1 pce	3K3 MF, 1%, 0204, E24
1	MP 1	1.940.571.12	1 pce	D19M DA BOARD PCB	0	R 55	57.60.1472	1 pce	4k7 MF, 1%, 0204, E24
0	MP 2	1.940.571.04	1 pce	TYPENSCHILD	0	R 56	57.60.1153	1 pce	15K MF, 1%, 0204, E24
0	MP 3	43.01.0108	1 pce	Label ESE-WARNNSCHILD	0	R 57	57.60.1104	1 pce	100K MF, 1%, 0204, E24
0	MP 4	1.101.001.20	1 pce	Label TEXT-ETIK. 5*20 HARDWARE -20	0	R 58	57.60.1272	1 pce	2k7 MF, 1%, 0204, E24
0	MP 5	not used	1 pce	QUARZ - ISOLIERPLATTE	0	R 59	57.60.1223	1 pce	22K MF, 1%, 0204, E24
0	MP 6	50.20.3004	1 pce	Kühlkörper, TO 220, horizontal	0	R 60	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	MP 10	1.940.570.01	1 pce	FRONTPLATTE	0	R 61	57.60.1473	1 pce	47k MF, 1%, 0204, E24
0	MP 11	1.940.600.04	1 pce	GRIFFEINLAGE 4TE	0	R 62	57.60.1472	1 pce	4k7 MF, 1%, 0204, E24
0	MP 12	49.02.0520	2 pcs	M2.5*12 Rändelschraube (Rack)	0	R 63	57.60.1562	1 pce	5k6 MF, 1%, 0204, E24
0	MP 13	49.02.0521	2 pcs	M2.5*6 Metall-Buchse (Rack)	0	R 64	57.60.1683	1 pce	68k MF, 1%, 0204, E24
0	MP 14	49.02.0522	2 pcs	Kartenhalter mit Z-Schr	0	R 65	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	MP 15	49.02.0523	1 pce	M2.5*7 Senk-Schr, KS, Senkripp	0	R 66	57.60.1103	1 pce	10K MF, 1%, 0204, E24
0	MP 16	49.02.0504	1 pce	4TE Frontplatten-Griff	0	R 67	57.92.7019	1 pce	0.4A PTC 60V
0	MP 17	not used	2 pcs	M2.5*6 Z-Schraube Inbus Zn gb chr	0	R 68	57.92.7019	1 pce	0.4A PTC 60V
0	MP 18	21.53.0284	1 pce	Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten	0	R 101	57.60.1362	1 pce	3k6 MF, 1%, 0204, E24
0	MP 19	28.99.0119	2 pcs	M2.5*16 Z-Schraube Inbus Zn gb chr	0	R 102	57.60.1820	1 pce	82R MF, 1%, 0204, E24
4	MP 20	43.10.0112	1 pce	C ROHRNIETE D 2.5*0.15* 9	0	R 103	57.60.1511	1 pce	510R MF, 1%, 0204, E24
0	P 1	54.11.2009	1 pce	96p Revisions-Etikette 5mm h/blau	0	R 104	57.60.1511	1 pce	510R MF, 1%, 0204, E24
0	P 2	54.01.0020	1 pce	1p EU-R 3*32p	0	R 105	57.60.1511	1 pce	510R MF, 1%, 0204, E24
0	P 3	54.01.0020	1 pce	1p Pin, 1reihig, gerade	0	R 106	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	P 4	54.01.0020	1 pce	1p Pin, 1reihig, gerade	0	R 107	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	P 5	54.11.0136	1 pce	2*3p Pin, 1reihig, gerade	0	R 108	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	P 101	54.11.0136	1 pce	2*3p Pin 0.63*0.63, RM2.54	0	R 109	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	P 201	54.11.0136	1 pce	2*3p Pin 0.63*0.63, RM2.54	0	R 110	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	P 301	54.11.0136	1 pce	2*3p Pin 0.63*0.63, RM2.54	0	R 111	57.60.1681	1 pce	680R MF, 1%, 0204, E24
0	P 401	54.11.0136	1 pce	2*3p Pin 0.63*0.63, RM2.54	0	R 112	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	Q 1	not used	1 pce	BC847B NPN 45V 100mA SOT 23	0	R 113	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	Q 2	50.60.1050	1 pce	BC807-25 PNP 45V 800mA SOT 23	0	R 114	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	Q 3	50.60.0050	1 pce	BC817-25 NPN 45V 800mA SOT 23	0	R 115	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	Q 4	50.60.1001	1 pce	BC857B PNP 45V 100mA SOT 23	0	R 116	57.60.1120	1 pce	12R MF, 1%, 0204, E24
0	Q 5	50.60.1001	1 pce	BC857B PNP 45V 100mA SOT 23	0	R 117	57.60.1102	1 pce	1k0 MF, 1%, 0204, E24
0	Q 6	50.60.0001	1 pce	BC847B NPN 45V 100mA SOT 23	0	R 118	57.60.1120	1 pce	12R MF, 1%, 0204, E24
0	R 1	57.60.1471	1 pce	470R MF, 1%, 0204, E24	3	R 119	57.60.1472	1 pce	4k7 MF, 1%, 0204, E24
0	R 2	57.60.1471	1 pce	470R MF, 1%, 0204, E24	0	R 120	57.60.1472	1 pce	4k7 MF, 1%, 0204, E24
0	R 3	57.60.1471	1 pce	470R MF, 1%, 0204, E24	3	R 121	57.60.1472	1 pce	4k7 MF, 1%, 0204, E24
0	R 4	57.92.7053	1 pce	1.6A PTC 30V	0	R 122	57.60.1131	1 pce	130R MF, 1%, 0204, E24
0	R 5	57.60.1270	1 pce	27R MF, 1%, 0204, E24	3	R 123	57.60.1472	1 pce	4k7 MF, 1%, 0204, E24
0	R 6	57.60.1103	1 pce	10k MF, 1%, 0204, E24	0	R 124	57.60.1472	1 pce	4k7 MF, 1%, 0204, E24
0	R 7	57.60.1103	1 pce	10k MF, 1%, 0204, E24	3	R 125	57.60.1472	1 pce	4k7 MF, 1%, 0204, E24
					0	R 126	57.60.1121	1 pce	120R MF, 1%, 0204, E24



**C4DA/24/96, 24 Bit D/A 1.940.571.21 ( 4)**

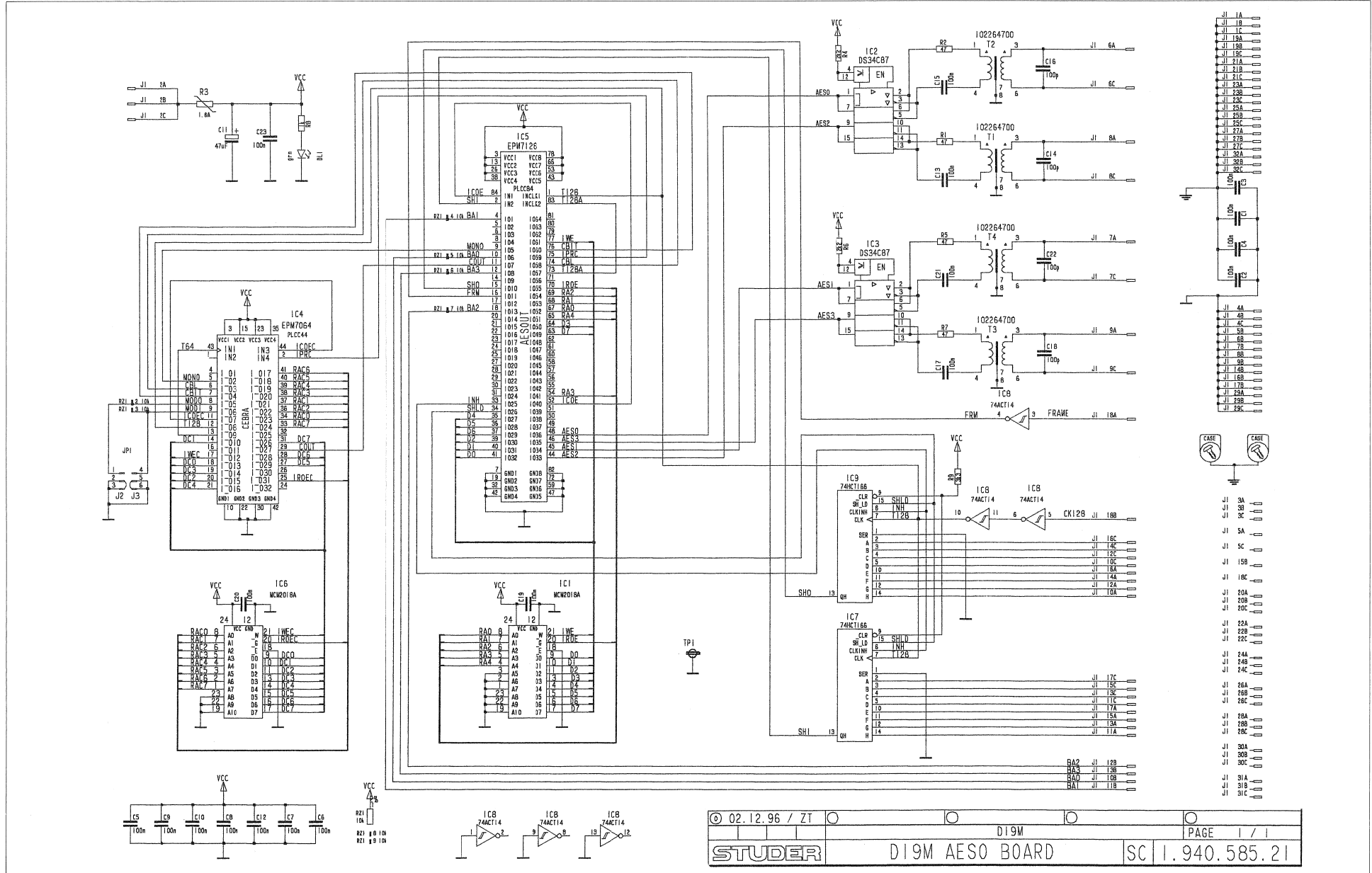
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 127	57.60.1120	1 pce	12R	MF, 1%, 0204, E24	3	R 425	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24
0	R 128	57.60.1120	1 pce	12R	MF, 1%, 0204, E24	0	R 426	57.60.1121	1 pce	120R	MF, 1%, 0204, E24
0	R 201	57.60.1362	1 pce	3k6	MF, 1%, 0204, E24	0	R 427	57.60.1120	1 pce	12R	MF, 1%, 0204, E24
0	R 202	57.60.1820	1 pce	82R	MF, 1%, 0204, E24	0	R 428	57.60.1120	1 pce	12R	MF, 1%, 0204, E24
0	R 203	57.60.1511	1 pce	510R	MF, 1%, 0204, E24	0	R 443	57.60.1391	1 pce	390R	MF, 1%, 0204, E24
0	R 204	57.60.1511	1 pce	510R	MF, 1%, 0204, E24	0	R 444	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 205	57.60.1511	1 pce	510R	MF, 1%, 0204, E24	0	R 445	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 206	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	R 446	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 207	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	R 447	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0	R 208	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	R 448	57.60.1100	1 pce	10R	MF, 1%, 0204, E24
0	R 209	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	RA 101	58.05.1202	1 pce	2k0	10%, 0.5W, Cermet
0	R 210	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	RA 102	58.05.1201	1 pce	200R	10%, 0.5W, Cermet
0	R 211	57.60.1681	1 pce	680R	MF, 1%, 0204, E24	0	RA 201	58.05.1202	1 pce	2k0	10%, 0.5W, Cermet
0	R 212	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	RA 202	58.05.1201	1 pce	200R	10%, 0.5W, Cermet
0	R 213	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	RA 301	58.05.1202	1 pce	2k0	10%, 0.5W, Cermet
0	R 214	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	RA 302	58.05.1201	1 pce	200R	10%, 0.5W, Cermet
0	R 215	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	RA 401	58.05.1202	1 pce	2k0	10%, 0.5W, Cermet
0	R 216	57.60.1120	1 pce	12R	MF, 1%, 0204, E24	0	RA 402	58.05.1201	1 pce	200R	10%, 0.5W, Cermet
0	R 217	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	R 218	57.60.1120	1 pce	12R	MF, 1%, 0204, E24	0	T 2	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER
3	R 219	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24	0	T 3	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER
0	R 220	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24	0	T 101	1.022.275.00	1 pce	0	TRIFILARTRAFO OUTPUT
3	R 221	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24	0	T 201	1.022.275.00	1 pce	0	TRIFILARTRAFO OUTPUT
0	R 222	57.60.1131	1 pce	130R	MF, 1%, 0204, E24	0	T 301	1.022.275.00	1 pce	0	TRIFILARTRAFO OUTPUT
3	R 223	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24	0	T 401	1.022.275.00	1 pce	0	TRIFILARTRAFO OUTPUT
0	R 224	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24	0	TP 1	54.02.0320	1 pce	1p	PCB-Flachst 2.8*0.8, gerade
3	R 225	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24	0	XDL 1	50.20.2501	1 pce	Spacer	LED-Sockel
0	R 226	57.60.1121	1 pce	120R	MF, 1%, 0204, E24	0	XDL 2	50.20.2501	1 pce	Spacer	LED-Sockel
0	R 227	57.60.1120	1 pce	12R	MF, 1%, 0204, E24	0	XDL 3	50.20.2501	1 pce	Spacer	LED-Sockel
0	R 228	57.60.1120	1 pce	12R	MF, 1%, 0204, E24	0	XDL 4	50.20.2501	1 pce	Spacer	LED-Sockel
0	R 301	57.60.1362	1 pce	3k6	MF, 1%, 0204, E24	0	XIC 12	53.03.2284	1 pce	84p	PLCC-Socket
0	R 302	57.60.1820	1 pce	82R	MF, 1%, 0204, E24	0	XIC 10	53.03.0166	1 pce	8p	DIL 0.3", lot, gerade
0	R 303	57.60.1511	1 pce	510R	MF, 1%, 0204, E24	0	XIC 10	53.03.0166	1 pce	8p	DIL 0.3", lot, gerade
0	R 304	57.60.1511	1 pce	510R	MF, 1%, 0204, E24	0	XIC 20	53.03.0166	1 pce	8p	DIL 0.3", lot, gerade
0	R 305	57.60.1511	1 pce	510R	MF, 1%, 0204, E24	0	XIC 20	53.03.0166	1 pce	8p	DIL 0.3", lot, gerade
0	R 306	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	XIC 30	53.03.0166	1 pce	8p	DIL 0.3", lot, gerade
0	R 307	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	XIC 30	53.03.0166	1 pce	8p	DIL 0.3", lot, gerade
0	R 308	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	XIC 40	53.03.0166	1 pce	8p	DIL 0.3", lot, gerade
0	R 309	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	XIC 40	53.03.0166	1 pce	8p	DIL 0.3", lot, gerade
0	R 310	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24	0	Y 1	not used	1 pce	12.288MHz	XTAL HC 49/U
0	R 311	57.60.1681	1 pce	680R	MF, 1%, 0204, E24						
0	R 312	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 313	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 314	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 315	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 316	57.60.1120	1 pce	12R	MF, 1%, 0204, E24						
0	R 317	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 318	57.60.1120	1 pce	12R	MF, 1%, 0204, E24						
3	R 319	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
0	R 320	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
3	R 321	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
0	R 322	57.60.1131	1 pce	130R	MF, 1%, 0204, E24						
3	R 323	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
0	R 324	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
3	R 325	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
0	R 326	57.60.1121	1 pce	120R	MF, 1%, 0204, E24						
0	R 327	57.60.1120	1 pce	12R	MF, 1%, 0204, E24						
0	R 328	57.60.1120	1 pce	12R	MF, 1%, 0204, E24						
0	R 330	57.60.1103	1 pce	10k	MF, 1%, 0204, E24						
0	R 331	57.60.1103	1 pce	10k	MF, 1%, 0204, E24						
0	R 332	57.60.1103	1 pce	10k	MF, 1%, 0204, E24						
0	R 333	57.60.1103	1 pce	10k	MF, 1%, 0204, E24						
0	R 334	57.60.1100	1 pce	10R	MF, 1%, 0204, E24						
0	R 401	57.60.1362	1 pce	3k6	MF, 1%, 0204, E24						
0	R 402	57.60.1820	1 pce	82R	MF, 1%, 0204, E24						
0	R 403	57.60.1511	1 pce	510R	MF, 1%, 0204, E24						
0	R 404	57.60.1511	1 pce	510R	MF, 1%, 0204, E24						
0	R 405	57.60.1511	1 pce	510R	MF, 1%, 0204, E24						
0	R 406	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 407	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 408	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 409	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 410	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 411	57.60.1681	1 pce	680R	MF, 1%, 0204, E24						
0	R 412	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 413	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 414	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 415	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 416	57.60.1120	1 pce	12R	MF, 1%, 0204, E24						
0	R 417	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24						
0	R 418	57.60.1120	1 pce	12R	MF, 1%, 0204, E24						
3	R 419	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
0	R 420	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
3	R 421	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
0	R 422	57.60.1131	1 pce	130R	MF, 1%, 0204, E24						
3	R 423	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						
0	R 424	57.60.1472	1 pce	4k7	MF, 1%, 0204, E24						

End of List

- (1) MP1: PCB Modification
- (2) Additionally D8 and MP20
- (3) Improvement of stability: Several resistors replaced
- (4) Improved +5VA stability in power down mode: R40 and R47 replaced

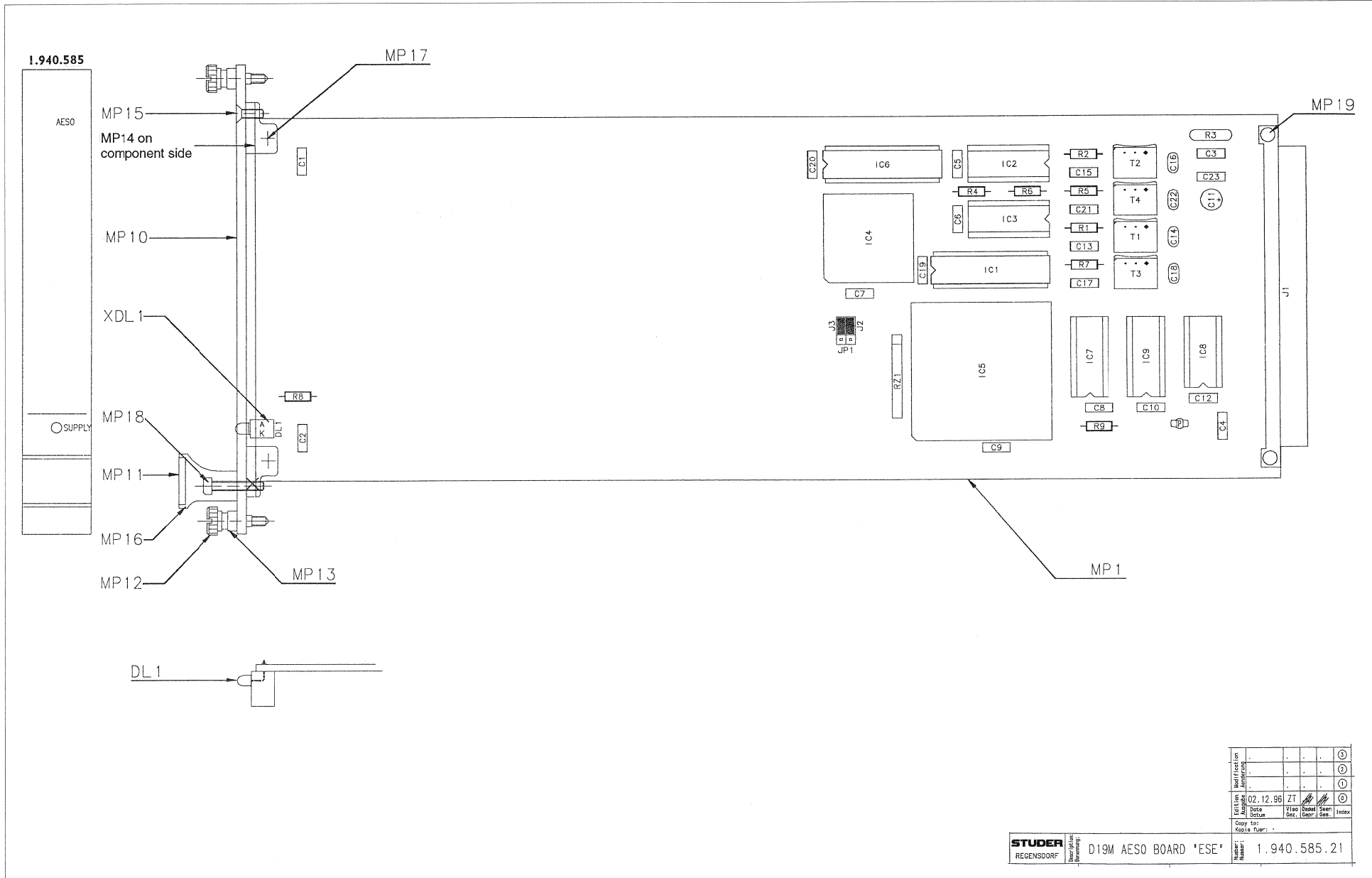


DI9M AESO Board 1.940.585.21





D19M AESO Board 1.940.585.21



Erstellt	02.12.96	ZT							
Notiz									
Gezeichnet									
Geprüft									
Freigegeben									



**D19m AESO Board I.940.585.22**

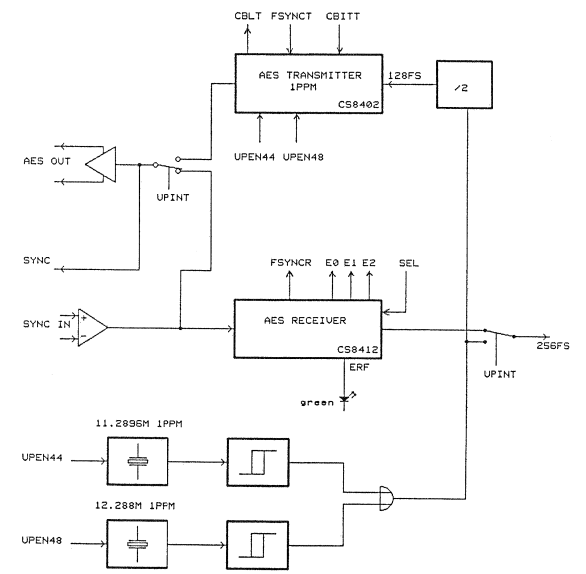
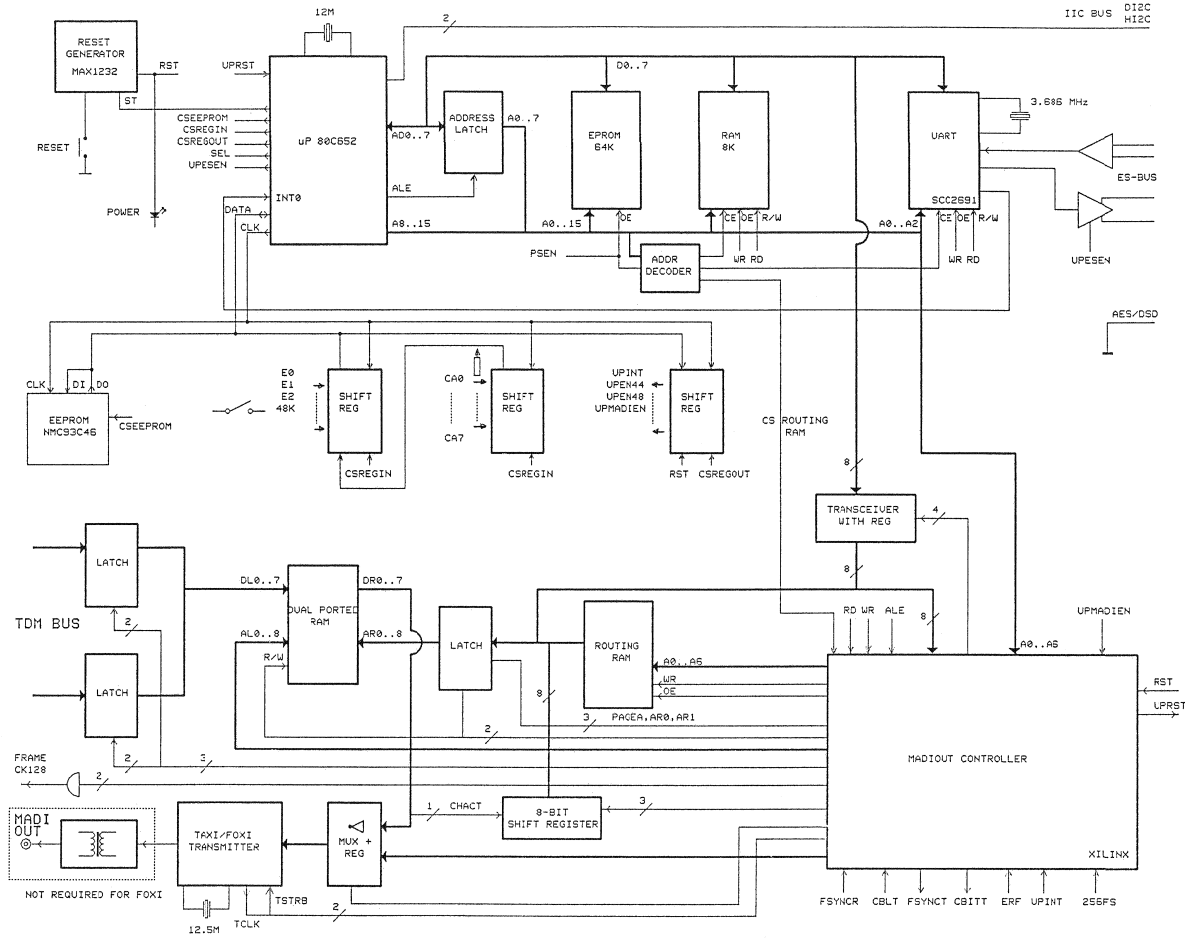
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0	C 1	59.06.0104		100n	PETP, 63V, 10%, RM5	0	TP 1	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	C 2	59.06.0104		100n	PETP, 63V, 10%, RM5	0	XDL 1	50.20.2501		Spacer	LED-Sockel
0	C 3	59.06.0104		100n	PETP, 63V, 10%, RM5	0	XIC 2	53.03.0168		16p	DIL 0.3", lötl, gerade
0	C 4	59.06.0104		100n	PETP, 63V, 10%, RM5	0	XIC 3	53.03.0168		16p	DIL 0.3", lötl, gerade
0	C 5	59.06.0104		100n	PETP, 63V, 10%, RM5	0	XIC 4	53.03.2244		PLCC44p	PLCC-Socket 44p
0	C 6	59.06.0104		100n	PETP, 63V, 10%, RM5	0	XIC 5	53.03.2284		PLCC84p	PLCC-Socket 84p
0	C 7	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 8	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 9	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 10	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 11	59.22.3470		47u	EL 10V, 20%, RM5						
0	C 12	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 13	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 14	59.34.4101		100p	CER 63V, 5%, N750						
0	C 15	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 16	59.34.4101		100p	CER 63V, 5%, N750						
0	C 17	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 18	59.34.4101		100p	CER 63V, 5%, N750						
0	C 19	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 20	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 21	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	C 22	59.34.4101		100p	CER 63V, 5%, N750						
0	C 23	59.06.0104		100n	PETP, 63V, 10%, RM5						
0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN						
0	IC 1	50.14.1009		CY7C128-35	IC MCM 2018 A - 35 ,A						
0	IC 2	50.15.0127		34C87	IC DS 34 C 87 TN, MC34C87P ,A						
0	IC 3	50.15.0127		34C87	IC DS 34 C 87 TN, MC34C87P ,A						
0	IC 4	1.940.962.21			SW 585 CEBRA (50.63.4202)						
0	IC 5	1.940.964.21			SW 585 AESOUT (50.63.4205)						
0	IC 6	50.14.1009		CY7C128-35	IC MCM 2018 A - 35 ,A						
0	IC 7	50.17.0166		74HCT166	8 Bit parallel in/serial out						
0	IC 8	50.17.7014		ACT14	.. 74 ACT 14 .						
0	IC 9	50.17.0166		74HCT166	8 Bit parallel in/serial out						
0	J 1	54.11.2009			J EU-R 3 * 32						
0	J 2	54.01.0021		Jumper	0.63 * 0.63mm						
0	J 3	54.01.0021		Jumper	0.63 * 0.63mm						
0	JP 1	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54						
0	MP 1	1.940.585.12			D19M AESO BOARD PCB						
0	MP 2	1.940.585.04			TYPENSCHILD						
0	MP 3	43.01.0108	mp	Label	ESE-WARNSCHILD						
0	MP 4	1.101.001.20	mp	Label	TEXT-ETIK. 5*20 HARDWARE -20						
0	MP 10	1.940.585.01	1 pce		FRONTPLATTE						
0	MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE						
0	MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)						
0	MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)						
0	MP 14	49.02.0522	2 pcs		Kartenhalter (Rack)						
0	MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp						
0	MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff						
0	MP 17	21.53.0279	2 pcs		Z - SCHR. IS , ZN , M2.5 * 6						
0	MP 18	21.53.0284	1 pce		Z - SCHR. IS , ZN , M2.5 * 16						
0	MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9						
0	R 1	57.11.3470		47R	MF, 1%, 0207						
0	R 2	57.11.3470		47R	MF, 1%, 0207						
0	R 3	57.92.7053		1.6A	POLY- PTC, 30V						
0	R 4	57.11.3222		2k2	MF, 1%, 0207						
0	R 5	57.11.3470		47R	MF, 1%, 0207						
0	R 6	57.11.3222		2k2	MF, 1%, 0207						
0	R 7	57.11.3470		47R	MF, 1%, 0207						
0	R 8	57.11.3102		1k0	MF, 1%, 0207						
0	R 9	57.11.3332		3k3	MF, 1%, 0207						
0	RZ 1	57.88.4103		8*10k	2%, SIP 9						
0	T 1	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU						
0	T 2	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU						
0	T 3	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU						
0	T 4	1.022.647.00		1:1.4	OUTPUT TRAF0 AES/EBU						

End of List

**Comments**

IC-Sockel XIC nn entsprechend den IC Nummern bestücken.  
LED-Sockel XDL nn entsprechend den DL Nummern bestücken.

**Block Diagram**  
**D19M Mado Coaxial 1.940.520**  
**Mado Optical 1.940.530**

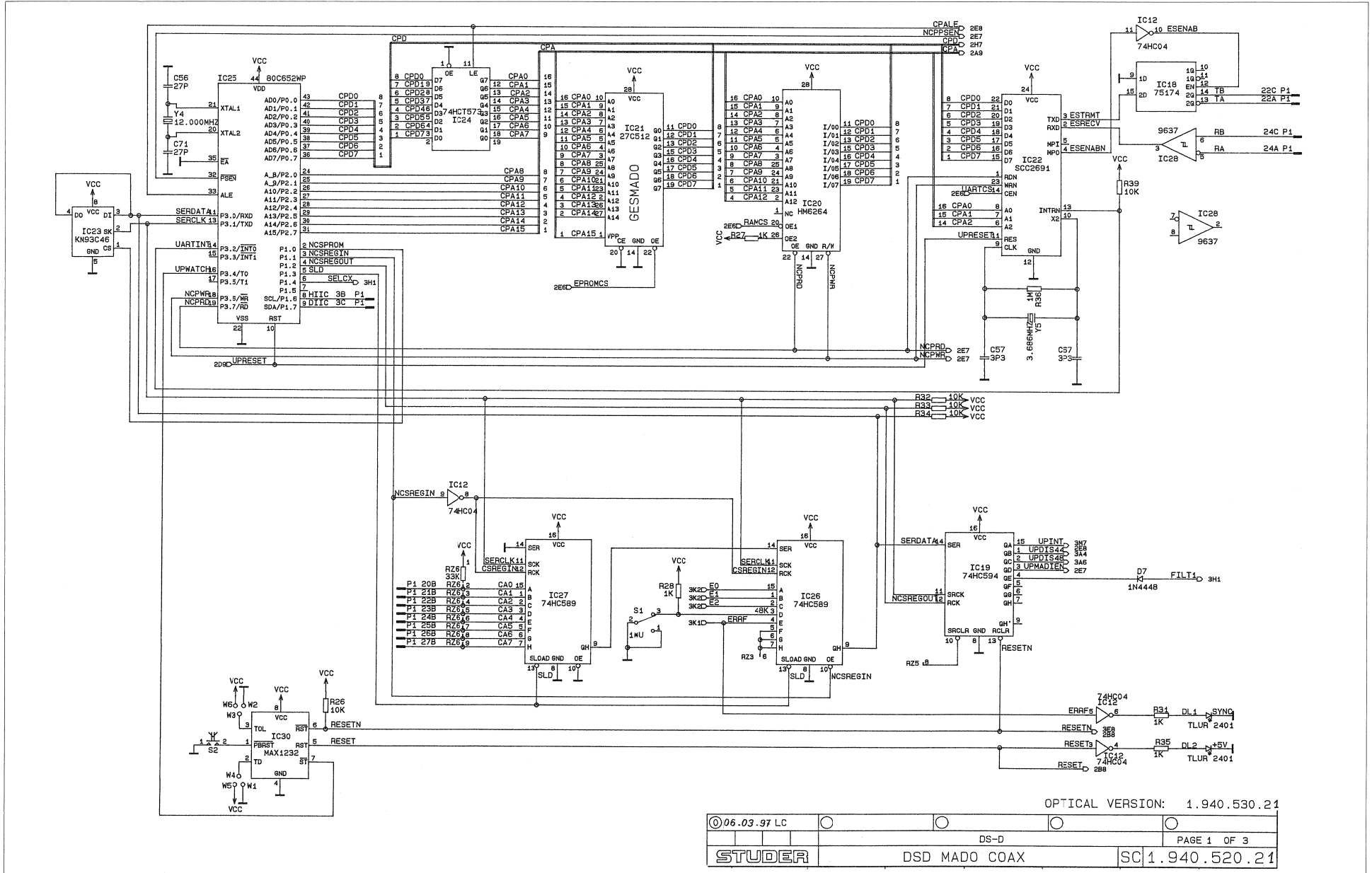


1.940.530.21

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D19M				PAGE 1 OF 2
<b>STUDER</b>	D19M MADI OUT	SC	1.940.520.21	

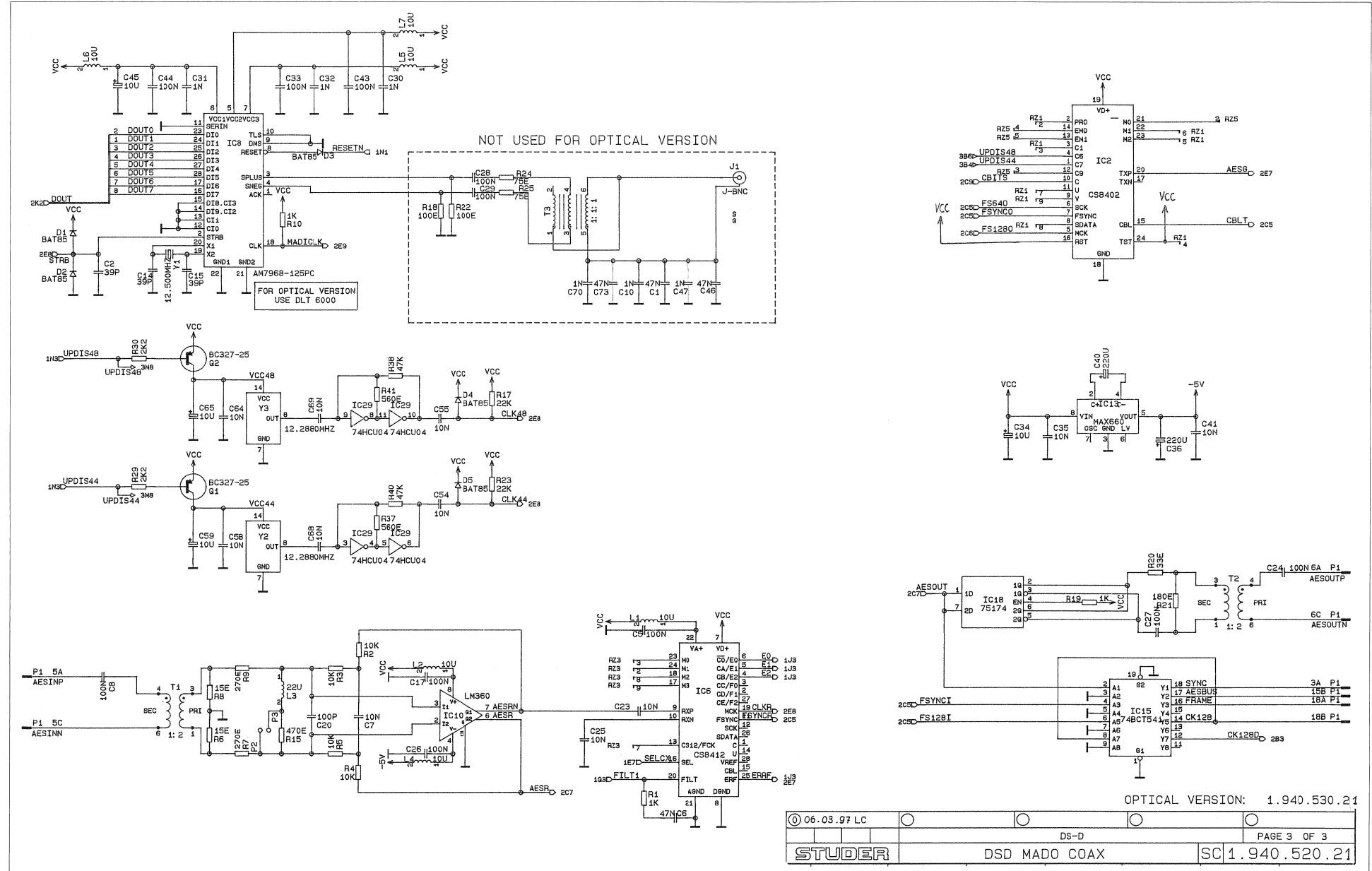
© 23.09.92 ML				
D19M				PAGE 2 OF 2
<b>STUDER</b>	D19M MADI OUT	SC	1.940.520.21	

D19M Mado Coaxial 1.940.520.21  
Mado Optical 1.940.530.21





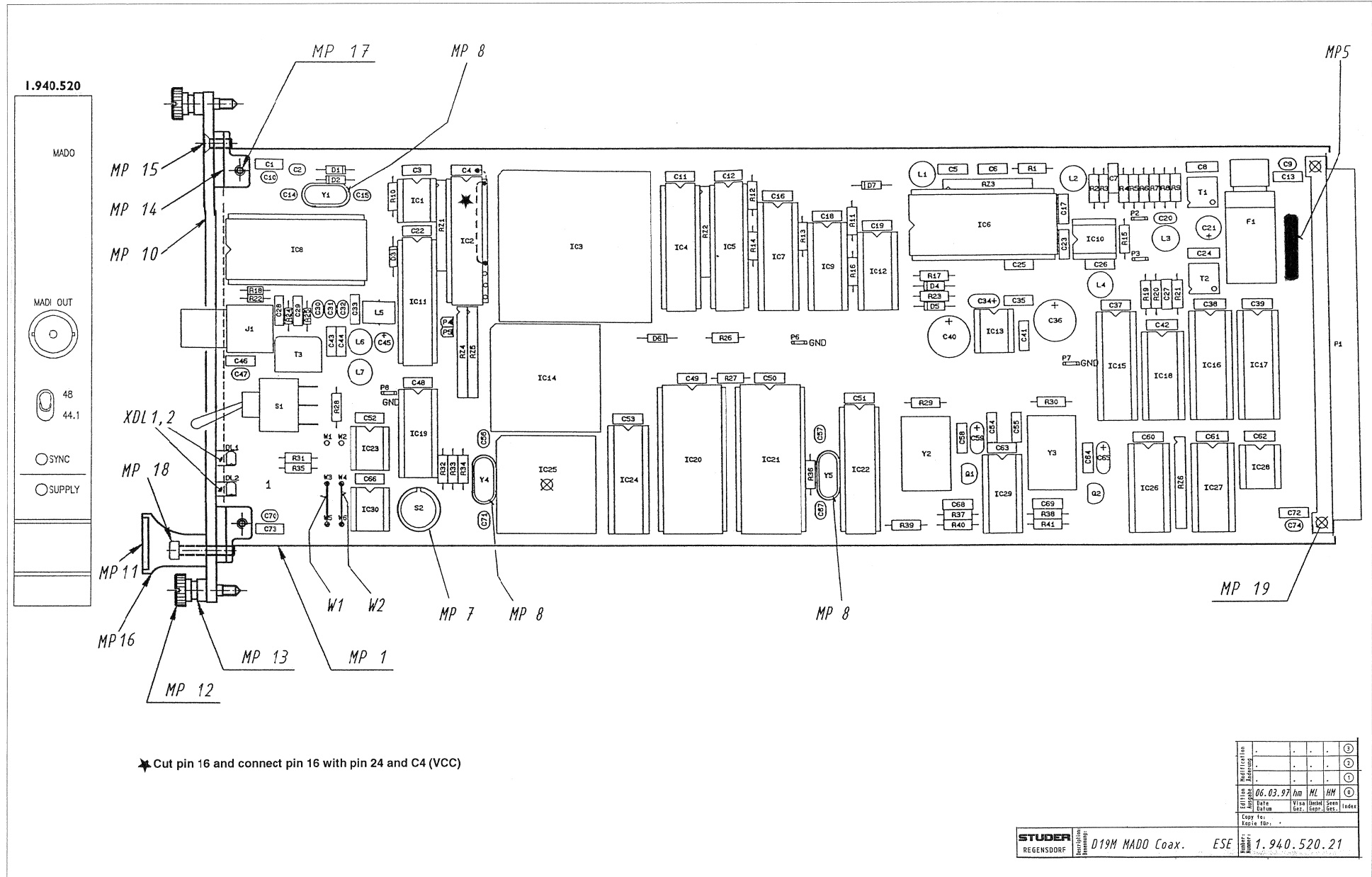
D19M Mado Coaxial 1.940.520.21  
 Mado Optical 1.940.530.21







D19M Mado Coaxial 1.940.520.21



★ Cut pin 16 and connect pin 16 with pin 24 and C4 (VCC)

Revision	1	1	1	1	1	1	1	1	1
Modification									
Author									
Editor									
Date	06.03.97	hm	ML	HM					
Checked		Visa	Index	Seen					
Approved		Exp.	Supp.	Est.	Index				



DI9M Mado Coaxial I.940.520.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0473		47n	PETP, 63V, 10%, RM5	0	IC 1	1.940.946.21			SW 520 MADIOUT (50.14.1501)
0	C 2	59.34.2390		39p	CER 63V, 5%, N150	0	IC 2	50.13.0203			IC CS 8402-CP ,A
0	C 3	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 3	50.63.4003			IC ATT3030-125, XC3030A-6 ,A
0	C 4	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 4	50.14.1009		CY7C128-35	IC MCM 2018 A - 35 ,A
0	C 5	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 5	50.17.8562		74AC652	IC .. 74 AC 652 . ,A
0	C 6	59.06.0473		47n	PETP, 63V, 10%, RM5	0	IC 6	50.13.0202		CS8412	IC CS 8412-CP ,A
0	C 7	59.06.0103		10n	PETP, 63V, 10%, RM5	0	IC 7	50.17.1574		74HC574	IC ... 74 HC 574 . , ,A
0	C 8	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 8	50.18.0701		AM7968-125P	IC AM 7968-125 PC ,A
0	C 9	59.32.4102		1n	C 1000 P , 20%, 50V , CER	0	IC 9	50.17.1595		74HC595	IC ... 74 HC 595 . , ,A
0	C 10	59.32.4102		1n	C 1000 P , 20%, 50V , CER	0	IC 10	50.11.1002		LM380	High speed Comparator
0	C 11	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 11	1.940.947.20			SW 520 TAXIREG (50.18.0101)
0	C 12	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 12	50.17.1004		74HC04	IC ... 74 HC 04 . , ,A
0	C 13	59.06.0473		47n	PETP, 63V, 10%, RM5	0	IC 13	50.10.0124		MAX660	V-Converter ... +5.5V to -5.5V
0	C 14	59.34.2390		39p	CER 63V, 5%, N150	0	IC 14	50.63.1702		CY7C130	IC CY7C 130 - 45 LC ,A
0	C 15	59.34.2390		39p	CER 63V, 5%, N150	0	IC 15	50.17.8541		74BCT541	Octal Buffer, tri
0	C 16	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 16	50.17.8574		74BCT574	Octal D-Type FF, tri
0	C 17	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 17	50.17.8574		74BCT574	Octal D-Type FF, tri
0	C 18	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 18	50.15.0121		75174	IC SN 75174 N
0	C 19	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 19	50.17.1594		74HC594	IC ... 74 HC 594 . , ,A
0	C 20	59.34.4101		100p	CER 63V, 5%, N750	0	IC 20	50.14.0133		5565	IC HM 6264LP-15 ,A
0	C 21	59.22.3470		47u	EL 10V, 20%, RM5	0	IC 21	1.940.945.20			SW 520 MADO (50.14.2002)
0	C 22	59.06.0683		68n	PETP, 63V, 10%, RM5	0	IC 22	50.16.0201		SCC2691	IC SCC 2691 AE 1 N 24 ,A
0	C 23	59.06.0103		10n	PETP, 63V, 10%, RM5	0	IC 23	50.14.2103		HY93C46S	EEPROM 64 * 16, serial
0	C 24	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 24	50.17.0573		74HCT573	IC ... 74 HCT573 . , ,A
0	C 25	59.06.0103		10n	PETP, 63V, 10%, RM5	0	IC 25	50.63.0009		80C652	8bit microcontroller
0	C 26	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 26	50.17.1589		74HC589	MC 74 HC 589 N
0	C 27	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 27	50.17.1589		74HC589	MC 74 HC 589 N
0	C 28	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 28	50.15.0114		9637	Dual diff Line Receiver
0	C 29	59.06.0104		100n	PETP, 63V, 10%, RM5	0	IC 29	50.17.1904		74HCU04	IC ... 74 HCU 04 . , ,A
0	C 30	59.32.4102		1n	C 1000 P , 20%, 50V , CER	0	IC 30	50.11.0159		MAX1232	IC MAX 1232 CPA, DS 1232
0	C 31	59.32.4102		1n	C 1000 P , 20%, 50V , CER	0	J 1	54.21.2031		BNC	J 1 POL PRINT/WINKEL BNC
0	C 32	59.32.4102		1n	C 1000 P , 20%, 50V , CER	0	L 1	62.02.3100		10uH	L 10 U , 10%, RAD., RM 5
0	C 33	59.06.0104		100n	PETP, 63V, 10%, RM5	0	L 2	62.02.3100		10uH	L 10 U , 10%, RAD., RM 5
0	C 34	59.22.6100		10u	EL 35V, 20%, RM5	0	L 3	62.02.3220		22uH	L 22 U , 10%, RAD., RM 5
0	C 35	59.06.0103		10n	PETP, 63V, 10%, RM5	0	L 4	62.02.3100		10uH	L 10 U , 10%, RAD., RM 5
0	C 36	59.22.4221		220u	EL 16V, 20%, RM5	0	L 5	62.03.0001		10uH	1A Toroid Choche
0	C 37	59.06.0683		68n	PETP, 63V, 10%, RM5	0	L 6	62.02.3100		10uH	L 10 U , 10%, RAD., RM 5
0	C 38	59.06.0683		68n	PETP, 63V, 10%, RM5	0	L 7	62.02.3100		10uH	L 10 U , 10%, RAD., RM 5
0	C 39	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 1	1.940.520.11			D19M MADO PCB
0	C 40	59.22.4221		220u	EL 16V, 20%, RM5	0	MP 2	1.010.057.43			Baugruppenschild
0	C 41	59.06.0103		10n	PETP, 63V, 10%, RM5	0	MP 3	43.01.0108		Label	ESE-WARNSCHILD
0	C 42	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 4	1.101.001.20		Label	TEXT-ETIK. 5*20 HARDWARE -20
0	C 43	59.06.0104		100n	PETP, 63V, 10%, RM5	0	MP 5	1.010.117.51			TEXT-ETIK. 5*20 (T1.60A)
0	C 44	59.06.0104		100n	PETP, 63V, 10%, RM5	0	MP 7	1.010.015.50		Spacer	ISOLIER-SCHEIBE ZU TO 5
0	C 45	59.22.6100		10u	EL 35V, 20%, RM5	0	MP 8	89.01.1499 3 pcs			QUARZ - ISOLIERPLATTE
0	C 46	59.06.0473		47n	PETP, 63V, 10%, RM5	0	MP 10	1.940.520.01 1 pce			FRONTPLATTE
0	C 47	59.32.4102		1n	C 1000 P , 20%, 50V , CER	0	MP 11	1.940.600.04 1 pce			GRIFFEINLAGE 4TE
0	C 48	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 12	49.02.0520 2 pcs		M2.5*12	Rändelschraube (Rack)
0	C 49	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 13	49.02.0521 2 pcs			Metall-Buchse (Rack)
0	C 50	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 14	49.02.0522 2 pcs			Kartenhalter (Rack)
0	C 51	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 15	49.02.0523 2 pcs		M2.5*7	Senk-Schr. KS, Senkripp
0	C 52	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 16	49.02.0504 1 pce		4TE	Frontplatten-Griff
0	C 53	59.06.0683		68n	PETP, 63V, 10%, RM5	0	MP 17	21.53.0279 2 pcs			Z - SCHR. IS , ZN , M2.5 * 6
0	C 54	59.06.0103		10n	PETP, 63V, 10%, RM5	0	MP 18	21.53.0284 1 pce			Z - SCHR. IS , ZN , M2.5 * 16
0	C 55	59.06.0103		10n	PETP, 63V, 10%, RM5	0	MP 19	28.99.0119 2 pcs			ROHRNIETE D 2.5*0.15* 9
0	C 56	59.34.2270		27p	CER 63V, 5%, N150	0	P 1	54.11.2009		96p	EU-R 3*32p
0	C 57	59.34.0339		3p3	CER 63V, 5%, P100	0	P 2	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	C 58	59.06.0103		10n	PETP, 63V, 10%, RM5	0	P 3	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	C 59	59.22.6100		10u	EL 35V, 20%, RM5	0	P 4	54.01.0020		1p	Pin 0.63*0.63
0	C 60	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 5	54.01.0020		1p	Pin 0.63*0.63
0	C 61	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 6	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	C 62	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 7	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	C 63	59.06.0683		68n	PETP, 63V, 10%, RM5	0	P 8	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	C 64	59.06.0103		10n	PETP, 63V, 10%, RM5	0	Q 1	50.03.0351		BC327-25	PNP, 800mA
0	C 65	59.22.6100		10u	EL 35V, 20%, RM5	0	Q 2	50.03.0351		BC327-25	PNP, 800mA
0	C 66	59.06.0683		68n	PETP, 63V, 10%, RM5	0	R 1	57.11.3102		1k0	MF, 1%, 0207
0	C 67	59.34.0339		3p3	CER 63V, 5%, P100	0	R 2	57.11.3103		10k	MF, 1%, 0207
0	C 68	59.06.0103		10n	PETP, 63V, 10%, RM5	0	R 3	57.11.3103		10k	MF, 1%, 0207
0	C 69	59.06.0103		10n	PETP, 63V, 10%, RM5	0	R 4	57.11.3103		10k	MF, 1%, 0207
0	C 70	59.32.4102		1n	C 1000 P , 20%, 50V , CER	0	R 5	57.11.3103		10k	MF, 1%, 0207
0	C 71	59.34.2270		27p	CER 63V, 5%, N150	0	R 6	57.11.3150		15R	MF, 1%, 0207
0	C 72	59.06.0473		47n	PETP, 63V, 10%, RM5	0	R 7	57.11.3271		270R	MF, 1%, 0207
0	C 73	59.06.0473		47n	PETP, 63V, 10%, RM5	0	R 8	57.11.3150		15R	MF, 1%, 0207
0	C 74	59.32.4102		1n	C 1000 P , 20%, 50V , CER	0	R 9	57.11.3271		270R	MF, 1%, 0207
0	D 1	50.04.0127		BAT85	200mA, Schottky	0	R 10	57.11.3102		1k0	MF, 1%, 0207
0	D 2	50.04.0127		BAT85	200mA, Schottky	0	R 11	57.11.3103		10k	MF, 1%, 0207
0	D 3	50.04.0127		BA185	200mA, Schottky	0	R 12	57.11.3102		1k0	MF, 1%, 0207
0	D 4	50.04.0127		BAT85	200mA, Schottky	0	R 13	57.11.3102		1k0	MF, 1%, 0207
0	D 5	50.04.0127		BAT85	200mA, Schottky	0	R 14	57.11.3102		1k0	MF, 1%, 0207
0	D 6	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 15	not used		470R	MF, 1%, 0207
0	D 7	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 16	57.11.3102		1k0	MF, 1%, 0207
0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0					
0	DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0					
0	F 1	51.01.0119		1.6A	T 5*20 L 250V	0					



**DI9M Mado Coaxial I.940.520.21**

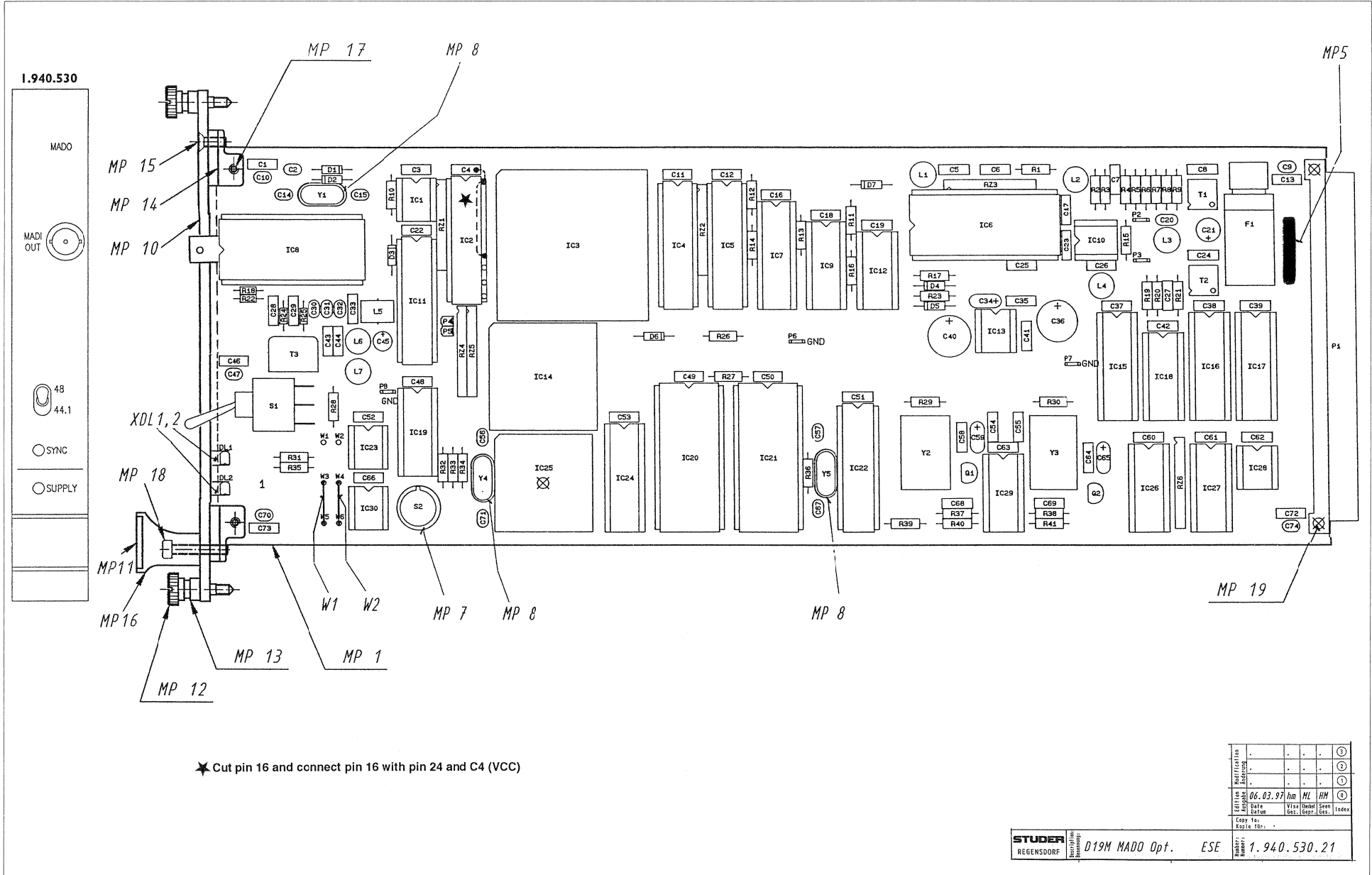
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 17	57.11.3223		22k	MF, 1%, 0207
0	R 18	57.10.1101		100R	MF, 1%, 0204
0	R 19	57.11.3102		1k0	MF, 1%, 0207
0	R 20	57.11.3330		33R	MF, 1%, 0207
0	R 21	57.11.3181		180R	MF, 1%, 0207
0	R 22	57.10.1101		100R	MF, 1%, 0204
0	R 23	57.11.3223		22k	MF, 1%, 0207
0	R 24	57.10.1750		75R	MF, 1%, 0204
0	R 25	57.10.1750		75R	MF, 1%, 0204
0	R 26	57.11.3103		10k	MF, 1%, 0207
0	R 27	57.11.3102		1k0	MF, 1%, 0207
0	R 28	57.11.3102		1k0	MF, 1%, 0207
0	R 29	57.11.3222		2k2	MF, 1%, 0207
0	R 30	57.11.3222		2k2	MF, 1%, 0207
0	R 31	57.11.3102		1k0	MF, 1%, 0207
0	R 32	57.11.3103		10k	MF, 1%, 0207
0	R 33	57.11.3103		10k	MF, 1%, 0207
0	R 34	57.11.3103		10k	MF, 1%, 0207
0	R 35	57.11.3102		1k0	MF, 1%, 0207
0	R 36	57.11.3105		1M0	MF, 1%, 0207
0	R 37	57.11.3561		560R	MF, 1%, 0207
0	R 38	57.11.3473		47k	MF, 1%, 0207
0	R 39	57.11.3103		10k	MF, 1%, 0207
0	R 40	57.11.3473		47k	MF, 1%, 0207
0	R 41	57.11.3561		560R	MF, 1%, 0207
0	RZ 1	57.88.4102		8*1k	2%, SIP 9
0	RZ 2	57.88.4102		8*1k	2%, SIP 9
0	RZ 3	57.88.4102		8*1k	2%, SIP 9
0	RZ 4	57.88.4102		8*1k	2%, SIP 9
0	RZ 5	57.88.4102		8*1k	2%, SIP 9
0	RZ 6	57.88.4333		8*33k	2%, SIP 9
0	S 1	55.11.0202		SPST	Toggle on - none - on
0	S 2	55.03.0122		1*a	S 1 TASTE, 1*A, PRINT,IMPULS
0	T 1	63.15.0021			RF - Trafo
0	T 2	63.15.0021			RF - Trafo
0	T 3	63.15.0001			IMPULSTRANSFORMATOR
0	W 1	1.010.324.64		Wire	DRAHTBRUECKE U, 4.3*10.2, 0.6
0	W 2	1.010.324.64		Wire	DRAHTBRUECKE U, 4.3*10.2, 0.6
0	XDL 1	50.20.2501		Spacer	LED-Sockel
0	XDL 2	50.20.2501		Spacer	LED-Sockel
0	XF 1	53.03.0118			XF 5 * 20, PRINT-LIEGEND
0	XIC 1	53.03.0166		8p	DIL 0.3", lötl, gerade
0	XIC 3	53.03.2284		PLCC84p	PLCC-Socket 84p
0	XIC 11	53.03.0182		24p	DIL 0.3", lötl, gerade
0	XIC 14	53.03.2252		PLCC52p	PLCC-Socket 52p
0	XIC 15	53.03.0165		20p	DIL 0.3", lötl, gerade
0	XIC 16	53.03.0165		20p	DIL 0.3", lötl, gerade
0	XIC 17	53.03.0165		20p	DIL 0.3", lötl, gerade
0	XIC 18	53.03.0168		16p	DIL 0.3", lötl, gerade
0	XIC 21	53.03.0173		28p	DIL 0.6", lötl, gerade
0	XIC 25	53.03.2244		PLCC44p	PLCC-Socket 44p
0	XIC 28	53.03.0166		8p	DIL 0.3", lötl, gerade
0	Y 1	89.01.1013		12.500MHz	12.500 000 MHz, HC 49/U
0	Y 2	89.01.1602		11.2896MHz	TCXO Xtal-Oscillator temp comp
0	Y 3	89.01.1601		12.288MHz	TCXO Xtal-Oscillator temp comp
0	Y 4	89.01.1014		12.000MHz	12.000 000 MHz, HC 49/U
0	Y 5	89.01.1002		3.686MHz	3.686 400 MHz, HC 18/U

----- End of List -----

**Comments:**  
new software 1.940.946-20 to -21



Mado Optical 1.940.530.21



★ Cut pin 16 and connect pin 16 with pin 24 and C4 (VCC)

Revision									
Modifications									
Author									
Checked									
Drawn									
Copy No.									
Apply to:									

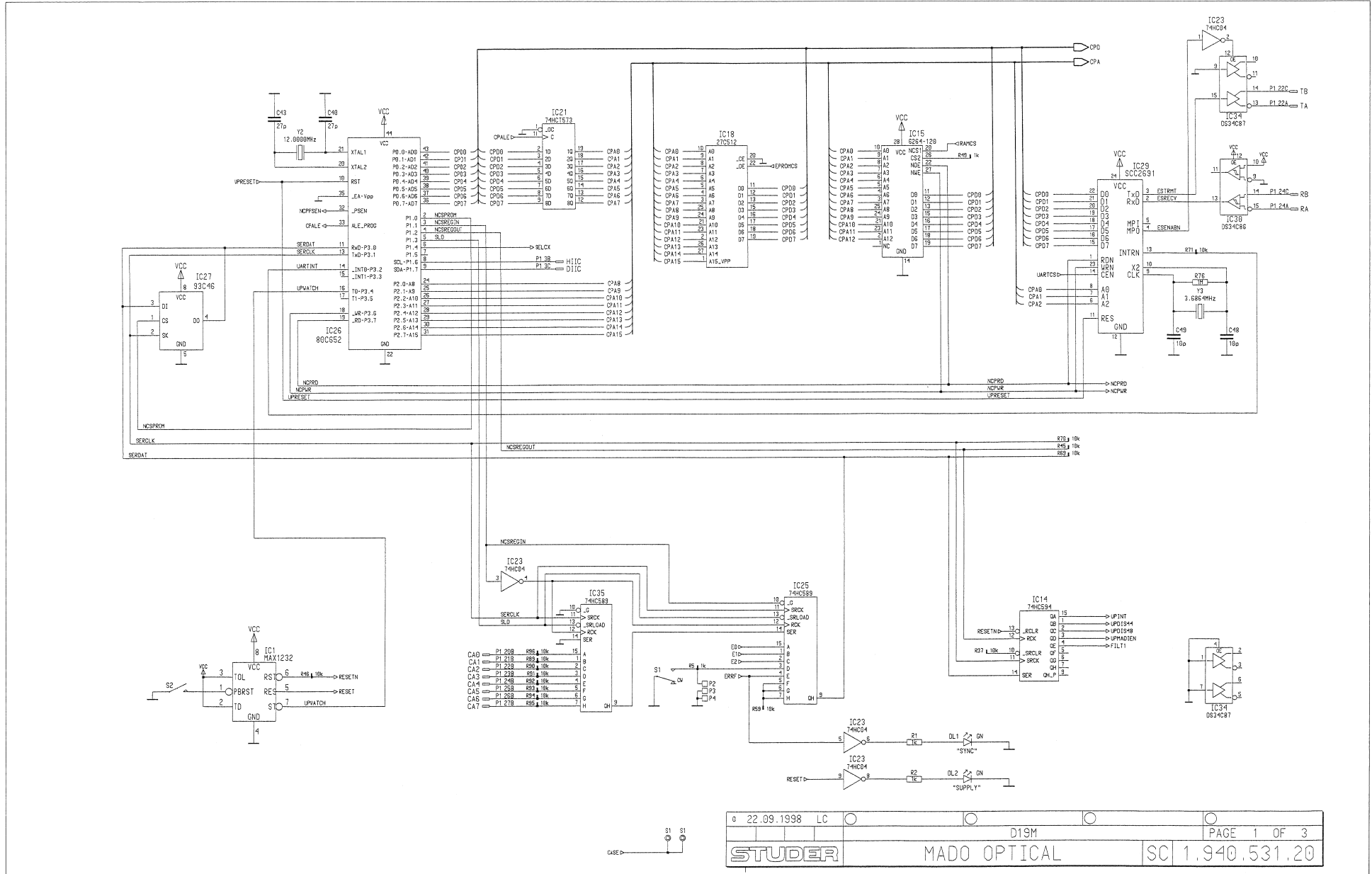


Mado Optical 1.940.530.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	not used	47n	PETP, 63V, 10%, RMS		0	IC 1	1.940.948.21		SW 520 MADUOUT (50.14.1601)	0	R 19	57.11.3102	1k0	MF, 1%, 0207		
0	C 2	59.34.2360	39p	CER 63V, 5%, N150		0	IC 2	50.13.0203		IC CS 8402-CP , A	0	R 20	57.11.3330	33R	MF, 1%, 0207		
0	C 3	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 3	50.63.4003		IC ATT3C0-125, KC3030A-6 A	0	R 21	57.11.3181	180R	MF, 1%, 0207		
0	C 4	59.06.0683	68n	PETP, 63V, 10%, RMS		0	C 4	50.14.1009	CY7C128-35	IC MCM 2018 A - 15 , A	0	R 22	not used	100R	MF, 1%, 0204		
0	C 5	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 5	50.17.5652	74AC852	IC ... 74 AC 652 , A	0	R 23	57.11.3223	22k	MF, 1%, 0207		
0	C 6	59.06.0473	47n	PETP, 63V, 10%, RMS		0	IC 6	50.13.0202	CS8412	IC CS 8412-CP , A	0	R 24	not used	75R	MF, 1%, 0204		
0	C 7	59.06.0103	10n	PETP, 63V, 10%, RMS		0	IC 7	50.17.1674	74HC574	IC ... 74 HC 574 , A	0	R 25	not used	75R	MF, 1%, 0204		
0	C 8	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 8	98.10.0001	DLT 8030 (LW1 - MODUL)	, A	0	R 26	57.11.3103	10k	MF, 1%, 0207		
0	C 9	59.32.4102	1n	C 1000 P, 20%, 50V, CER		0	IC 9	50.17.1555	74HC565	IC ... 74 HC 565 , A	0	R 27	57.11.3102	1k0	MF, 1%, 0207		
0	C 10	not used	1n	C 1000 P, 20%, 50V, CER		0	IC 10	50.11.1002	LM369	High speed Comparator	0	R 28	57.11.3102	1k0	MF, 1%, 0207		
0	C 11	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 11	1.940.947.20		SW 520 TAXIREG (50.18.0101)	0	R 29	57.11.3222	2k2	MF, 1%, 0207		
0	C 12	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 12	50.17.1004	74HC04	IC ... 74 HC 04 , A	0	R 30	57.11.3222	2k2	MF, 1%, 0207		
0	C 13	59.06.0473	47n	PETP, 63V, 10%, RMS		0	IC 13	50.10.0124	MAX860	V-Converter ... +5.5V to -5.5V	0	R 31	57.11.3102	1k0	MF, 1%, 0207		
0	C 14	59.34.2350	39p	CER 63V, 5%, N150		0	IC 14	50.63.1702	CY7C130	IC CY7C 130 - 45 LC , A	0	R 32	57.11.3103	10k	MF, 1%, 0207		
0	C 15	59.34.2350	39p	CER 63V, 5%, N150		0	IC 15	50.17.2541	74BCT541	Octal Buffer FF, tri	0	R 33	57.11.3103	10k	MF, 1%, 0207		
0	C 16	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 16	50.17.8574	74BCT574	Octal D-Type FF, tri	0	R 34	57.11.3103	10k	MF, 1%, 0207		
0	C 17	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 17	50.17.8574	74BCT574	Octal D-Type FF, tri	0	R 35	57.11.3102	1k0	MF, 1%, 0207		
0	C 18	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 18	50.15.0121	75174	IC SN 75174 N	0	R 36	57.11.3105	1M0	MF, 1%, 0207		
0	C 19	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 19	50.17.1594	74HC594	IC ... 74 HC 594 , A	0	R 37	57.11.3961	560R	MF, 1%, 0207		
0	C 20	59.34.4101	100p	CER 63V, 5%, N750		0	IC 20	50.14.0133	5555	IC HM 6234LP-15	, A	0	R 38	57.11.3473	47k	MF, 1%, 0207	
0	C 21	59.22.3470	47u	EL 10V, 20%, RMS		0	IC 21	1.940.945.20		SW 520 MADO (50.14.2002)	0	R 39	57.11.3103	10k	MF, 1%, 0207		
0	C 22	59.06.0683	68n	PETP, 63V, 10%, RMS		0	IC 22	50.16.0201	SCC2691	IC SCC 2691 AE 1 N 24 , A	0	R 40	57.11.3473	47k	MF, 1%, 0207		
0	C 23	59.06.0103	10n	PETP, 63V, 10%, RMS		0	IC 23	50.14.2103	HY53C46S	EFPROM64 * 16, serial	0	R 41	57.11.3561	560R	MF, 1%, 0207		
0	C 24	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 24	50.17.0573	74HCT573	IC ... 74 HCT573 , A	0	R 2	57.88.4102	8*1k	2%, SIP 9		
0	C 25	59.06.0103	10n	PETP, 63V, 10%, RMS		0	IC 25	50.63.0009	60C852	8bit microcontroller	0	R 2	57.88.4102	8*1k	2%, SIP 9		
0	C 26	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 26	50.17.1589	74HC589	MC 74 HC 589 N	0	R 2	57.88.4102	8*1k	2%, SIP 9		
0	C 27	59.06.0104	100n	PETP, 63V, 10%, RMS		0	IC 27	50.17.1589	74HC589	MC 74 HC 589 N	0	R 2	57.88.4102	8*1k	2%, SIP 9		
0	C 28	not used	100n	PETP, 63V, 10%, RMS		0	IC 28	50.15.0114	9337	Dual diff Line Receiver	0	R 2	57.88.4102	8*1k	2%, SIP 9		
0	C 29	not used	100n	PETP, 63V, 10%, RMS		0	IC 29	50.17.1904	74HCU04	IC ... 74 HCU 04 , A	0	R 2	57.88.4102	8*1k	2%, SIP 9		
0	C 30	59.32.4102	1n	C 1000 P, 20%, 50V, CER		0	IC 30	50.11.0159	MAX1232	IC MAX 1232 CPA, DS 1232	0	R 2	57.88.4333	8*33k	2%, SIP 9		
0	C 31	59.32.4102	1n	C 1000 P, 20%, 50V, CER		0	L 1	62.02.3100	10uH	L 10 u, 10%, RAD., RM 5	0	S 1	55.11.0202	SPST	Toggle on - none - on		
0	C 32	59.32.4102	1n	C 1000 P, 20%, 50V, CER		0	L 2	62.02.3100	10uH	L 10 u, 10%, RAD., RM 5	0	S 2	55.03.0122	1*a	S 1 TASTE, 1*A, PRINT,IMPULS		
0	C 33	59.06.0104	100n	PETP, 63V, 10%, RMS		0	L 3	62.02.3100	22uH	L 22 u, 10%, RAD., RM 5	0	T 1	63.15.0021		RF - Trafo		
0	C 34	59.22.8190	10u	EL 35V, 20%, RMS		0	L 4	62.02.3100	10uH	L 10 u, 10%, RAD., RM 5	0	T 2	63.15.0021		RF - Trafo		
0	C 35	59.06.0103	10n	PETP, 63V, 10%, RMS		0	L 5	62.03.0001	10uH	1A Toroid Choke	0	T 3	not used		IMPULSTRANSFORMATOR		
0	C 36	59.22.4221	220u	EL 16V, 20%, RMS		0	L 6	62.02.3100	10uH	L 10 u, 10%, RAD., RM 5	0	W 1	1.0*0.324.64	Wire	DRAHTBRUECKE U, 4.3*10.2, 0.6		
0	C 37	59.06.0683	68n	PETP, 63V, 10%, RMS		0	L 7	62.02.3100	10uH	L 10 u, 10%, RAD., RM 5	0	W 2	1.0*0.324.64	Wire	DRAHTBRUECKE U, 4.3*10.2, 0.6		
0	C 38	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 1	1.940.520.11		D19M MADO PCB	0	XD1 1	50.20.2501	Spacer	LED-Sockel		
0	C 39	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 2	1.010.057.43		Baugruppenschild	0	XD2 2	50.20.2501	Spacer	LED-Sockel		
0	C 40	59.22.4221	220u	EL 16V, 20%, RMS		0	MP 3	43.01.0108	Label	ESE-WARNschild	0	XF 1	53.03.0118	XF 5 * 20, PRINT-LIEGEND			
0	C 41	59.06.0103	10n	PETP, 63V, 10%, RMS		0	MP 4	1.101.001.20	Label	TEXT ETIK 5*20 HARDWARE-23	0	XIC 1	53.03.0169	8p	DIL 0.3", lot, gerade		
0	C 42	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 5	1.010.117.51	Spacer	TEXT-ETIK 5*20 (T1.65A)	0	XIC 2	53.03.0162	24p	DIL 0.3", lot, gerade		
0	C 43	59.06.0104	100n	PETP, 63V, 10%, RMS		0	MP 6	1.010.015.50	Spacer	ISOLIER-SCHIEBE ZU 6	0	XIC 3	53.03.2252	PLCC32p	PLCC-Socket 52p		
0	C 44	59.06.0104	100n	PETP, 63V, 10%, RMS		0	MP 7	1.010.015.50	Spacer	QUARZ - SOLIERPLATTE	0	XIC 4	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 45	59.22.8100	10u	EL 35V, 20%, RMS		0	MP 8	99.01.1499 3 pcs		QUARZ - SOLIERPLATTE	0	XIC 5	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 46	not used	47n	PETP, 63V, 10%, RMS		0	MP 9	99.01.1499 3 pcs		FRONTPLATTE	0	XIC 6	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 47	not used	1n	C 1000 P, 20%, 50V, CER		0	MP 10	1.940.530.01 1 pce		FRONTPLATTE	0	XIC 7	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 48	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 11	1.940.600.04 1 pce		FRONTPLATTE	0	XIC 8	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 49	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 12	49.02.0520 2 pcs	M2.5*7	Rändelschraube (Radk)	0	XIC 9	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 50	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 13	49.02.0521 2 pcs	M2.5*7	Metall-Röhre (Radk)	0	XIC 10	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 51	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 14	49.02.0522 2 pcs	M2.5*7	Kartenhalter (Radk)	0	XIC 11	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 52	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 15	49.02.0523 1 pce	M2.5*7	Senk-Schr. KS, Senkripp	0	XIC 12	53.03.0165	20p	DIL 0.3", lot, gerade		
0	C 53	59.06.0683	68n	PETP, 63V, 10%, RMS		0	MP 16	49.02.0504 1 pce	4TE	Frontplatten-Griff	0	XIC 13	53.03.0168	16p	DIL 0.3", lot, gerade		
0	C 54	59.06.0103	10n	PETP, 63V, 10%, RMS		0	MP 17	21.53.0279 2 pcs	4TE	Z - SCHR IS, ZN, M2.5 * 6	0	XIC 14	53.03.0173	28p	DIL 0.6", lot, gerade		
0	C 55	59.06.0103	10n	PETP, 63V, 10%, RMS		0	MP 18	21.53.0284 1 pce	4TE	Z - SCHR IS, ZN, M2.5 * 16	0	XIC 15	53.03.2244	PLCC44p	PLCC-Socket 44p		
0	C 56	59.34.2270	27p	CER 63V, 5%, N150		0	MP 19	28.99.0119 2 pcs		ROHRNIETE D 2.5*0.15* 9	0	XIC 16	53.03.0165	8p	DIL 0.3", lot, gerade		
0	C 57	59.34.0339	3p3	CER 63V, 5%, P100		0	P 1	54.11.2009 59p		EU-R 313p	0	Y 1	89.01.1013	12.500MHz	12.500 000 MHz, HC 49/U		
0	C 58	59.06.0103	10n	PETP, 63V, 10%, RMS		0	P 2	54.02.0320 1p		Flatpin, 2.9*0.8mm	0	Y 2	89.01.1602	11.286MHz	TCXO Xtal-Oscillator temp comp		
0	C 59	59.22.6100	10u	EL 35V, 20%, RMS		0	P 3	54.02.0320 1p		Flatpin, 2.9*0.8mm	0	Y 3	89.01.1601	12.288MHz	TCXO Xtal-Oscillator temp comp		
0	C 60	59.06.0683	68n	PETP, 63V, 10%, RMS		0	P 4	54.01.0020 1p		Pin 0.63*0.63	0	Y 4	89.01.1014	12.000MHz	12.000 000 MHz, HC 49/U		
0	C 61	59.06.0683	68n	PETP, 63V, 10%, RMS		0	P 5	54.01.0020 1p		Pin 0.63*0.63	0	Y 5	89.01.1002	3.686MHz	3.686 400 MHz, HC 19/U		
0	C 62	59.06.0683	68n	PETP, 63V, 10%, RMS		0	P 6	54.02.0320 1p		Flatpin, 2.9*0.8mm	0						
0	C 63	59.06.0683	68n	PETP, 63V, 10%, RMS		0	P 7	54.02.0320 1p		Flatpin, 2.9*0.8mm	0						
0	C 64	59.06.0103	10n	PETP, 63V, 10%, RMS		0	P 8	54.02.0									



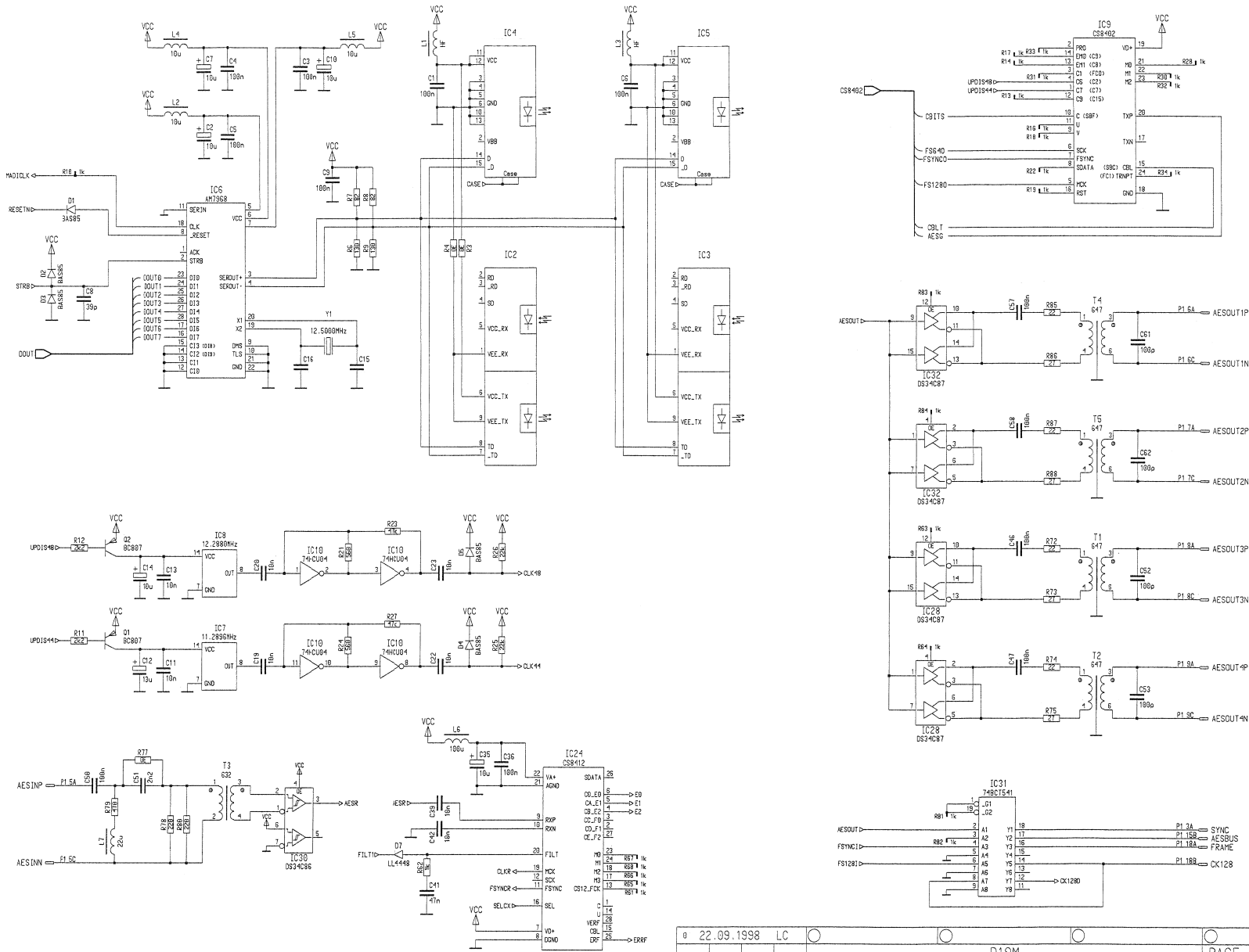
Mado Optical 1.940.531.20







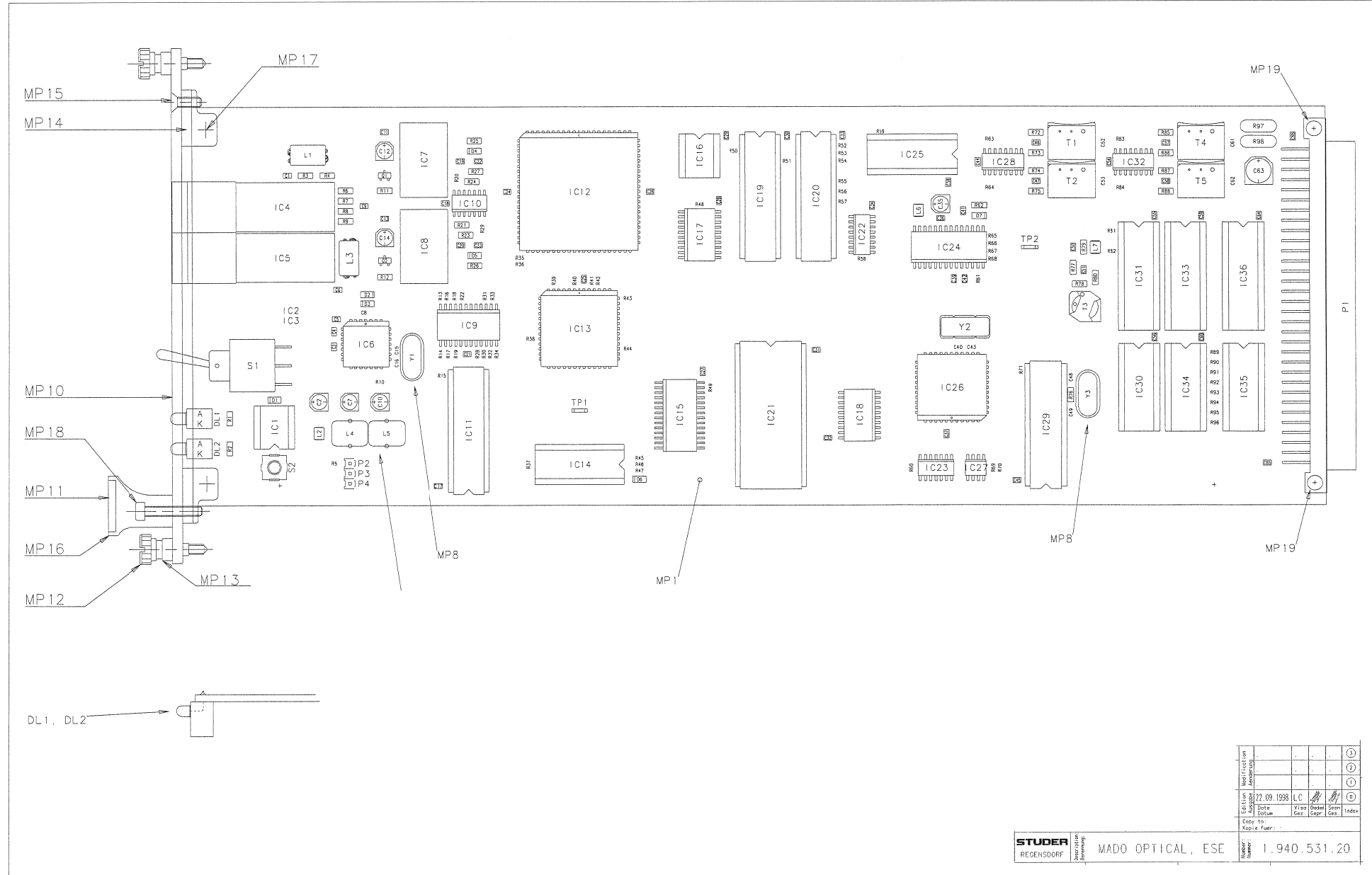
Mado Optical 1.940.531.20







Mado Optical 1.940.531.20



Rev. No.	1	2	3	4	5
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Date	27.09.1998	LC			
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**MADO optical 1.940.531.20 ( 2)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 13	50.63.1702	CY7C130	Dualport SRAM, 1K*8
0	C 2	59.68.0065	10u	EL 16V, 4.0*5.7	0	IC 14	50.17.1594	74HC594	IC ... 74 HC 594 .., .A
0	C 3	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 15	50.63.1502	6264	SRAM 8K*8, 120ns
0	C 4	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 16	1.940.946.21		SW 520 MADIOUT (50.14.1501)
0	C 5	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 17	50.62.1574	74HC574	Octal D-FF
0	C 6	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 18	50.62.3573	74HCT573	Octal D-type latch
0	C 7	59.68.0065	10u	EL 16V, 4.0*5.7	0	IC 19	50.17.5652	74AC652	Octal Bus Reg/Transceiver
0	C 8	59.60.2239	39p	CER 50V, 5%, COG, 0603	0	IC 20	50.14.1009	7C128A	SRAM 2K*8 35ns
0	C 9	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 21	1.940.945.20		SW 520 MADO (50.14.2002)
0	C 10	59.68.0065	10u	EL 16V, 4.0*5.7	0	IC 22	50.62.1595	74HC595	8bit shift/output register
0	C 11	59.60.3325	10n	CER 50V, 10%, X7R, 0805	0	IC 23	50.62.1004	74HC 04	Hex inverter
0	C 12	59.68.0065	10u	EL 16V, 4.0*5.7	0	IC 24	50.62.0913	CS8412	AES-Receiver
0	C 13	59.60.3325	10n	CER 50V, 10%, X7R, 0805	0	IC 25	50.17.1589	74HC589	MC 74 HC 589 N
0	C 14	59.68.0065	10u	EL 16V, 4.0*5.7	0	IC 26	50.63.0009	80C652	MPU 8bit
2	C 15	59.60.2249	100p	CER 50V, 5%, COG, 0603	0	IC 27	50.63.1108	93C46-W	EEPROM 64*16, SO 8
2	C 16	59.60.2249	100p	CER 50V, 5%, COG, 0603	0	IC 28	50.62.0464	DS34C87	4*RS 422 Line Driver
0	C 17	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 29	50.16.0201	SCC2691	IC SCC 2691 AE 1 N 24 .A
0	C 18	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 30	50.15.0128	34C86	IC DS 34 C 86 TN, MC34C86P .A
0	C 19	59.60.3325	10n	CER 50V, 10%, X7R, 0805	0	IC 31	50.17.8541	74BCT541	Octal buffer/line driver tri
0	C 20	59.60.3325	10n	CER 50V, 10%, X7R, 0805	0	IC 32	50.62.0464	DS34C87	4*RS 422 Line Driver
0	C 21	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 33	50.17.8574	74BCT574	Octal D-Type FF, tri
0	C 22	59.60.3325	10n	CER 50V, 10%, X7R, 0805	0	IC 34	50.15.0127	34C87	IC DS 34 C 87 TN, MC34C87P .A
0	C 23	59.60.3325	10n	CER 50V, 10%, X7R, 0805	0	IC 35	50.17.1589	74HC589	MC 74 HC 589 N
0	C 24	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	IC 36	50.17.8574	74BCT574	Octal D-Type FF, tri
0	C 25	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	L 1	62.60.0902		SMD Wideband choke
0	C 26	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	L 2	62.60.0113	10uH	SMD 10% 1210
0	C 27	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	L 3	not used		SMD Wideband choke
0	C 28	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	L 4	62.03.0001	10uH	1A Toroid Chocke
0	C 29	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	L 5	62.03.0001	10uH	1A Toroid Chocke
0	C 30	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	L 6	62.60.0125	100uH	SMD 10% 1210
0	C 31	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	L 7	not used		SMD 10% 1210
0	C 32	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	MP 1	1.940.531.11		MADO optical PCB
0	C 33	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	MP 2	1.940.531.04		TYPENSCHILD
0	C 34	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	MP 3	43.01.0108	Label	ESE-Warnschild
0	C 35	59.68.0065	10u	EL 16V, 4.0*5.7	0	MP 8	89.01.1499	2 pcs	QUARZ - ISOLIERPLATTE
0	C 36	59.60.3337	100n	CER 50V, 10%, X7R, 0805	2	MP 10	1.940.532.01	1 pce	Frontplatte MADO opt
0	C 37	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	MP 11	1.940.600.04	1 pce	GRIFFEINLAGE 4TE
0	C 38	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	MP 12	49.02.0520	2 pcs	Rändelschraube (Rack)
0	C 39	59.60.3325	10n	CER 50V, 10%, X7R, 0805	0	MP 13	49.02.0521	2 pcs	Metall-Buchse (Rack)
0	C 40	59.60.2235	27p	CER 50V, 5%, COG, 0603	0	MP 14	49.02.0522	2 pcs	Kartenhalter mit Z-Schr
0	C 41	59.60.3333	47n	CER 50V, 10%, X7R, 0805	0	MP 15	49.02.0523	1 pce	Senk-Schr, KS, Senkripp
0	C 42	59.60.3325	10n	CER 50V, 10%, X7R, 0805	0	MP 16	49.02.0504	1 pce	Frontplatten-Griff
0	C 43	59.60.2235	27p	CER 50V, 5%, COG, 0603	1	MP 17	not used	2 pcs	Z-Schraube Inbus Zn gb chr
0	C 44	59.60.3337	100n	CER 50V, 10%, X7R, 0805					<i>Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten</i>
0	C 45	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	MP 18	21.53.0284	1 pce	Z-Schraube Inbus Zn gb chr
0	C 46	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	MP 19	28.99.0119	2 pcs	ROHRNIETE D 2.5*0.15* 9
0	C 47	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	P 1	54.11.2009	96p	EU-R 3*32p
0	C 48	59.60.2225	10p	CER 50V, 5%, COG, 0603	0	P 2	not used	1p	Pin, 1reihig, gerade
0	C 49	59.60.2225	10p	CER 50V, 5%, COG, 0603	0	P 3	not used	1p	Pin, 1reihig, gerade
0	C 50	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	P 4	not used	1p	Pin, 1reihig, gerade
0	C 51	59.60.3317	2n2	CER 50V, 10%, X7R, 0805	0	Q 1	50.60.1050	BC807-25	PNP 45V 800mA SOT 23
0	C 52	59.60.2249	100p	CER 50V, 5%, COG, 0603	0	Q 2	50.60.1050	BC807-25	PNP 45V 800mA SOT 23
0	C 53	59.60.2249	100p	CER 50V, 5%, COG, 0603	0	R 1	57.60.1102	1k0	MF, 1%, 0204, E24
0	C 54	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	R 2	57.60.1102	1k0	MF, 1%, 0204, E24
0	C 55	59.60.3337	100n	CER 50V, 10%, X7R, 0805	2	R 3	57.60.1000	0R0	MF, 0204
0	C 56	59.60.3337	100n	CER 50V, 10%, X7R, 0805	2	R 4	57.60.1000	0R0	MF, 0204
0	C 57	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	R 5	57.69.1073	1k0	CF 5% 0603
0	C 58	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	R 6	57.60.1131	130R	MF, 1%, 0204, E24
0	C 59	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	R 7	57.60.1820	82R	MF, 1%, 0204, E24
0	C 60	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	R 8	57.60.1820	82R	MF, 1%, 0204, E24
0	C 61	59.60.2249	100p	CER 50V, 5%, COG, 0603	0	R 9	57.60.1131	130R	MF, 1%, 0204, E24
0	C 62	59.60.2249	100p	CER 50V, 5%, COG, 0603	0	R 10	57.69.1073	1k0	CF 5% 0603
0	C 63	59.68.0069	47u	EL 16V, 6.3*5.7	0	R 11	57.60.1222	2k2	MF, 1%, 0204, E24
0	C 64	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	R 12	57.60.1222	2k2	MF, 1%, 0204, E24
0	C 65	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	R 13	57.69.1073	1k0	CF 5% 0603
0	C 66	59.60.3337	100n	CER 50V, 10%, X7R, 0805	0	R 14	57.69.1073	1k0	CF 5% 0603
0	D 1	50.60.8101	BAS85	200mA 30V Schottky SOD 80	0	R 15	57.69.1073	1k0	CF 5% 0603
0	D 2	50.60.8101	BAS85	200mA 30V Schottky SOD 80	0	R 16	57.69.1073	1k0	CF 5% 0603
0	D 3	50.60.8101	BAS85	200mA 30V Schottky SOD 80	0	R 17	57.69.1073	1k0	CF 5% 0603
0	D 4	50.60.8101	BAS85	200mA 30V Schottky SOD 80	0	R 18	57.69.1073	1k0	CF 5% 0603
0	D 5	50.60.8101	BAS85	200mA 30V Schottky SOD 80	0	R 19	57.69.1073	1k0	CF 5% 0603
0	D 6	50.60.8001	4448	200mA 75V 4ns SOD 80	0	R 20	57.69.1073	1k0	CF 5% 0603
0	D 7	50.60.8001	4448	200mA 75V 4ns SOD 80	0	R 21	57.60.1561	560R	MF, 1%, 0204, E24
0	DL 1	50.04.2202	HLMP1790	DL HLMP - 1790 GN	0	R 22	57.69.1073	1k0	CF 5% 0603
0	DL 2	50.04.2202	HLMP1790	DL HLMP - 1790 GN	0	R 23	57.60.1473	47k	MF, 1%, 0204, E24
0	IC 1	50.11.0159	MAX1232	IC MAX 1232 CPA, DS 1232	0	R 24	57.60.1561	560R	MF, 1%, 0204, E24
2	IC 2	89.10.0021	HFBR5103	LWL Transceiver FDDI/MADI	0	R 25	57.60.1223	22k	MF, 1%, 0204, E24
0	IC 3	not used	HFBR5103	LWL Transceiver FDDI/MADI	0	R 26	57.60.1223	22k	MF, 1%, 0204, E24
0	IC 4	not used	HFBR11E5	LWL Transmitter FDDI	0	R 27	57.60.1473	47k	MF, 1%, 0204, E24
0	IC 5	not used	HFBR11E5	LWL Transmitter FDDI	0	R 28	57.69.1073	1k0	CF 5% 0603
0	IC 6	50.63.0204	AM7968	TAXI Chip Transmitter	0	R 29	57.69.1073	1k0	CF 5% 0603
0	IC 7	89.01.1602	11.2896MHz	TCXO Xtal-Oscillator temp comp	0	R 30	57.69.1073	1k0	CF 5% 0603
0	IC 8	89.01.1601	12.288MHz	TCXO Xtal-Oscillator temp comp	0	R 31	57.69.1073	1k0	CF 5% 0603
0	IC 9	50.62.0910	CS8402A	Dig audio interface transmitt	0	R 32	57.69.1073	1k0	CF 5% 0603
0	IC 10	50.62.1904	74HCU04	Hex inverter unbuffered	0	R 33	57.69.1073	1k0	CF 5% 0603
0	IC 11	1.940.947.20		SW 520 TAXIREG (50.18.0101)	0	R 34	57.69.1073	1k0	CF 5% 0603
0	IC 12	50.63.4002	XC3030A-7	LCA 3000 / 3000 PLCC84	0	R 35	not used	1k0	CF 5% 0603

**MADO optical 1.940.531.20 ( 2)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	R 36	57.69.1073	1k0	CF 5% 0603
0	R 37	57.69.1097	10k	CF 5% 0603
0	R 38	57.69.1073	1k0	CF 5% 0603
0	R 39	57.69.1073	1k0	CF 5% 0603
0	R 40	57.69.1073	1k0	CF 5% 0603
0	R 41	57.69.1073	1k0	CF 5% 0603
0	R 42	57.69.1073	1k0	CF 5% 0603
0	R 43	57.69.1073	1k0	CF 5% 0603
0	R 44	57.69.1073	1k0	CF 5% 0603
0	R 45	57.69.1097	10k	CF 5% 0603
0	R 46	57.69.1097	10k	CF 5% 0603
0	R 47	57.69.1097	10k	CF 5% 0603
0	R 48	57.69.1073	1k0	CF 5% 0603
0	R 49	57.69.1073	1k0	CF 5% 0603
0	R 50	57.69.1073	1k0	CF 5% 0603
0	R 51	57.69.1073	1k0	CF 5% 0603
0	R 52	57.69.1073	1k0	CF 5% 0603
0	R 53	57.69.1073	1k0	CF 5% 0603
0	R 54	57.69.1073	1k0	CF 5% 0603
0	R 55	57.69.1073	1k0	CF 5% 0603
0	R 56	57.69.1073	1k0	CF 5% 0603
0	R 57	57.69.1073	1k0	CF 5% 0603
0	R 58	57.69.1073	1k0	CF 5% 0603
0	R 59	57.69.1097	10k	CF 5% 0603
0	R 60	57.69.1073	1k0	CF 5% 0603
0	R 61	57.69.1073	1k0	CF 5% 0603
0	R 62	57.60.1102	1k0	MF, 1%, 0204, E24
0	R 63	57.69.1073	1k0	CF 5% 0603
0	R 64	57.69.1073	1k0	CF 5% 0603
0	R 65	57.69.1073	1k0	CF 5% 0603
0	R 66	57.69.1073	1k0	CF 5% 0603
0	R 67	57.69.1073	1k0	CF 5% 0603
0	R 68	57.69.1073	1k0	CF 5% 0603
0	R 69	57.69.1097	10k	CF 5% 0603
0	R 70	57.69.1097	10k	CF 5% 0603
0	R 71	57.69.1097	10k	CF 5% 0603
0	R 72	57.60.1220	22R	MF, 1%, 0204, E24
0	R 73	57.60.1270	27R	MF, 1%, 0204, E24
0	R 74	57.60.1220	22R	MF, 1%, 0204, E24
0	R 75	57.60.1270	27R	MF, 1%, 0204, E24
0	R 76	57.60.1105	1M0	MF, 1%, 0204, E24
0	R 77	57.60.1000	0R0	MF, 0204
0	R 78	57.60.1221	220R	MF, 1%, 0204, E24
0	R 79	not used	470R	MF, 1%, 0204, E24
0	R 80	57.60.1221	220R	MF, 1%, 0204, E24
0	R 81	57.69.1073	1k0	CF 5% 0603
0	R 82	57.69.1073	1k0	CF 5% 0603
0	R 83	57.69.1073	1k0	CF 5% 0603
0	R 84	57.69.1073	1k0	CF 5% 0603
0	R 85	57.60.1220	22R	MF, 1%, 0204, E24
0	R 86	57.60.1270	27R	MF, 1%, 0204, E24
0	R 87	57.60.1220	22R	MF, 1%, 0204, E24
0	R 88	57.60.1270	27R	MF, 1%, 0204, E24
0	R 89	57.69.1097	10k	CF 5% 0603
0	R 90	57.69.1097	10k	CF 5% 0603
0	R 91	57.69.1097	10k	CF 5% 0603
0	R 92	57.69.1097	10k	CF 5% 0603
0	R 93	57.69.1097	10k	CF 5% 0603
0	R 94	57.69.1097	10k	CF 5% 0603
0	R 95	57.69.1097	10k	CF 5% 0603
0	R 96	57.69.1097	10k	CF 5% 0603
0	R 97	57.92.7051	1.1A	PTC 30V
0	R 98	57.92.7051	1.1A	PTC 30V
0	S 1	55.11.0202	SPDT	Toggle 1 * on-none-on
0	S 2	55.60.0201	1*s	SMD Tactswitch
0	T 1	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU
0	T 2	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU
0	T 3	1.022.632.00	1:1	DI/DO TRANSFORMER
0	T 4	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU
0	T 5	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU
0	TP 1	54.33.6010	2.8*0.8	PCB-Flachstecker, gerade
0	TP 2	54.33.6010	2.8*0.8	PCB-Flachstecker, gerade
0	XDL 1	50.20.2501	Spacer	LED-Sockel
0	XDL 2	50.20.2501	Spacer	LED-Sockel
0	XIC 11	53.03.0182	24p	DIL 0.3", lot, gerade
0	XIC 16	53.03.0166	8p	DIL-socket 0.3"
0	XIC 21	53.03.0173	28p	DIL 0.6", lot, gerade
0	Y 1	89.01.1013	12.500MHz	XTAL HC 49/U
0	Y 2	89.60.1003	12.000MHz	SMD Quartz
0	Y 3	89.01.1002	3.6864MHz	XTAL HC 18 U

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
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End of List

**Comments:**

- (1) 12.04.00 MP 17 not used
- (2) 89.10.0022 replaced by 89.10.0021

**MADO optical dual output 1.940.532.20 ( 1)**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 13	50.63.1702		CY7C130	Dualport SRAM, 1K*8
0	C 2	59.68.0065	10u		EL 16V, 4.0*5.7	0	IC 14	50.17.1594		74HC594	IC ... 74 HC 594 .., .A
0	C 3	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 15	50.63.1502		6264	SRAM 8K*8, 120ns
0	C 4	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 16	1.940.946.21			SW 520 MADIOUT (50.14.1501)
0	C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 17	50.62.1574		74HC574	Octal D-FF
0	C 6	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 18	50.62.3573		74HCT573	Octal D-type latch
0	C 7	59.68.0065	10u		EL 16V, 4.0*5.7	0	IC 19	50.17.5652		74AC652	Octal Bus Reg/Transceiver
0	C 8	59.60.2239	39p		CER 50V, 5%, COG, 0603	0	IC 20	50.14.1009		7C128A	SRAM 2K*8 35ns
0	C 9	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 21	1.940.945.20			SW 520 MADO (50.14.2002)
0	C 10	59.68.0065	10u		EL 16V, 4.0*5.7	0	IC 22	50.62.1595		74HC595	8bit shift/output register
0	C 11	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	IC 23	50.62.1004		74HC 04	Hex inverter
0	C 12	59.68.0065	10u		EL 16V, 4.0*5.7	0	IC 24	50.62.0913		CS8412	AES-Receiver
0	C 13	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	IC 25	50.17.1589		74HC589	MC 74 HC 589 N
0	C 14	59.68.0065	10u		EL 16V, 4.0*5.7	0	IC 26	50.63.0009		80C652	MPU 8bit
1	C 15	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 27	50.63.1108		93C46-W	EEPROM 64*16, SO 8
1	C 16	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	IC 28	50.62.0464		DS34C87	4*RS 422 Line Driver
0	C 17	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 29	50.16.0201		SCC2691	IC SCC 2691 AE 1 N 24 .A
0	C 18	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 30	50.15.0128		34C86	IC DS 34 C 86 TN, MC34C86P .A
0	C 19	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	IC 31	50.17.8541		74BCT541	Octal buffer/line driver tri
0	C 20	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	IC 32	50.62.0464		DS34C87	4*RS 422 Line Driver
0	C 21	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 33	50.17.8574		74BCT574	Octal D-Type FF, tri
0	C 22	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	IC 34	50.15.0127		34C87	IC DS 34 C 87 TN, MC34C87P .A
0	C 23	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	IC 35	50.17.1589		74HC589	MC 74 HC 589 N
0	C 24	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	IC 36	50.17.8574		74BCT574	Octal D-Type FF, tri
0	C 25	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	L 1	62.60.0902			SMD Wideband choke
0	C 26	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	L 2	62.60.0113		10uH	SMD 10% 1210
0	C 27	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	L 3	62.60.0902			SMD Wideband choke
0	C 28	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	L 4	62.03.0001		10uH	1A Toroid Chocke
0	C 29	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	L 5	62.03.0001		10uH	1A Toroid Chocke
0	C 30	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	L 6	62.60.0125		100uH	SMD 10% 1210
0	C 31	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	L 7	not used		22uH	SMD 10% 1210
0	C 32	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 1	1.940.531.11			MADO optical PCB
0	C 33	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 2	1.940.532.04			TYPENSCHILD
0	C 34	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 3	43.01.0108		Label	ESE-Warnschild
0	C 35	59.68.0065	10u		EL 16V, 4.0*5.7	1	MP 4	54.01.0021		Jumper	0.63*0.63mm, Au
0	C 36	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 8	89.01.1499 2 pcs			QUARZ - ISOLIERPLATTE
0	C 37	59.60.3337	100n		CER 50V, 10%, X7R, 0805	1	MP 10	1.940.532.02 1 pce			Frontplatte MADO opt
0	C 38	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 11	1.940.600.04 1 pce			GRIFFEINLAGE 4TE
0	C 39	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	MP 12	49.02.0520 2 pcs		M2.5*12	Rändelschraube (Rack)
0	C 40	59.60.2235	27p		CER 50V, 5%, COG, 0603	0	MP 13	49.02.0521 2 pcs			Metall-Buchse (Rack)
0	C 41	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0	MP 14	49.02.0522 2 pcs			Kartenhalter mit Z-Schr
0	C 42	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0	MP 15	49.02.0523 1 pce		M2.5*7	Senk-Schr, KS, Senkripp
0	C 43	59.60.2235	27p		CER 50V, 5%, COG, 0603	0	MP 16	49.02.0504 1 pce		4TE	Frontplatten-Griff
0	C 44	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 17	not used 2 pcs		M2.5*6	Z-Schraube Inbus Zn gb chr
0	C 45	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 18	21.53.0284 1 pce		M2.5*16	Z-Schraube Inbus Zn gb chr
0	C 46	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	MP 19	28.99.0119 2 pcs			ROHRNIETE D 2.5*0.15* 9
0	C 47	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	P 1	54.11.2009		96p	EU-R 3*32p
0	C 48	59.60.2225	10p		CER 50V, 5%, COG, 0603	1	P 2	54.01.0020		1p	Pin, 1reihig, gerade
0	C 49	59.60.2225	10p		CER 50V, 5%, COG, 0603	1	P 3	54.01.0020		1p	Pin, 1reihig, gerade
0	C 50	59.60.3337	100n		CER 50V, 10%, X7R, 0805	1	P 4	54.01.0020		1p	Pin, 1reihig, gerade
0	C 51	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0	Q 1	50.60.1050		BC807-25	PNP 45V 800mA SOT 23
0	C 52	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	Q 2	50.60.1050		BC807-25	PNP 45V 800mA SOT 23
0	C 53	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	R 1	57.60.1102		1k0	MF, 1%, 0204, E24
0	C 54	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 2	57.60.1102		1k0	MF, 1%, 0204, E24
0	C 55	59.60.3337	100n		CER 50V, 10%, X7R, 0805	1	R 3	57.60.1000		0R0	MF, 0204
0	C 56	59.60.3337	100n		CER 50V, 10%, X7R, 0805	1	R 4	57.60.1000		0R0	MF, 0204
0	C 57	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 5	57.69.1073		1k0	CF 5% 0603
0	C 58	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 6	57.60.1131		130R	MF, 1%, 0204, E24
0	C 59	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 7	57.60.1820		82R	MF, 1%, 0204, E24
0	C 60	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 8	57.60.1820		82R	MF, 1%, 0204, E24
0	C 61	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	R 9	57.60.1131		130R	MF, 1%, 0204, E24
0	C 62	59.60.2249	100p		CER 50V, 5%, COG, 0603	0	R 10	57.69.1073		1k0	CF 5% 0603
0	C 63	59.68.0069	47u		EL 16V, 6.3*5.7	0	R 11	57.60.1222		2k2	MF, 1%, 0204, E24
0	C 64	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 12	57.60.1222		2k2	MF, 1%, 0204, E24
0	C 65	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 13	57.69.1073		1k0	CF 5% 0603
0	C 66	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0	R 14	57.69.1073		1k0	CF 5% 0603
0	D 1	50.60.8101		BAS85	200mA 30V Schottky SOD 80	0	R 15	57.69.1073		1k0	CF 5% 0603
0	D 2	50.60.8101		BAS85	200mA 30V Schottky SOD 80	0	R 16	57.69.1073		1k0	CF 5% 0603
0	D 3	50.60.8101		BAS85	200mA 30V Schottky SOD 80	0	R 17	57.69.1073		1k0	CF 5% 0603
0	D 4	50.60.8101		BAS85	200mA 30V Schottky SOD 80	0	R 18	57.69.1073		1k0	CF 5% 0603
0	D 5	50.60.8101		BAS85	200mA 30V Schottky SOD 80	0	R 19	57.69.1073		1k0	CF 5% 0603
0	D 6	50.60.8001		4448	200mA 75V 4ns SOD 80	0	R 20	57.69.1073		1k0	CF 5% 0603
0	D 7	50.60.8001		4448	200mA 75V 4ns SOD 80	0	R 21	57.60.1561		560R	MF, 1%, 0204, E24
0	DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	R 22	57.69.1073		1k0	CF 5% 0603
0	DL 2	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0	R 23	57.60.1473		47k	MF, 1%, 0204, E24
0	IC 1	50.11.0159		MAX1232	IC MAX 1232 CPA, DS 1232	0	R 24	57.60.1561		560R	MF, 1%, 0204, E24
1	IC 2	89.10.0021		HFBR5103	LWL Transceiver FDDI/MADI	0	R 25	57.60.1223		22k	MF, 1%, 0204, E24
1	IC 3	89.10.0021		HFBR5103	LWL Transceiver FDDI/MADI	0	R 26	57.60.1223		22k	MF, 1%, 0204, E24
0	IC 4	not used		HFBR11E5	LWL Transmitter FDDI	0	R 27	57.60.1473		47k	MF, 1%, 0204, E24
0	IC 5	not used		HFBR11E5	LWL Transmitter FDDI	0	R 28	57.69.1073		1k0	CF 5% 0603
0	IC 6	50.63.0204		AM7968	TAXI Chip Transmitter	0	R 29	57.69.1073		1k0	CF 5% 0603
0	IC 7	89.01.1602		11.2896MHz	TCXO Xtal-Oscillator temp comp	0	R 30	57.69.1073		1k0	CF 5% 0603
0	IC 8	89.01.1601		12.288MHz	TCXO Xtal-Oscillator temp comp	0	R 31	57.69.1073		1k0	CF 5% 0603
0	IC 9	50.62.0910		CS8402A	Dig audio interface transmitt	0	R 32	57.69.1073		1k0	CF 5% 0603
0	IC 10	50.62.1904		74HCU04	Hex inverter unbuffered	0	R 33	57.69.1073		1k0	CF 5% 0603
0	IC 11	1.940.947.20			SW 520 TAXIREG (50.18.0101)	0	R 34	57.69.1073		1k0	CF 5% 0603
0	IC 12	50.63.4002		XC3030A-7	LCA 3000 / 3000 PLCC84	0	R 35	not used		1k0	CF 5% 0603

**MADO optical dual output 1.940.532.20 ( 1)**

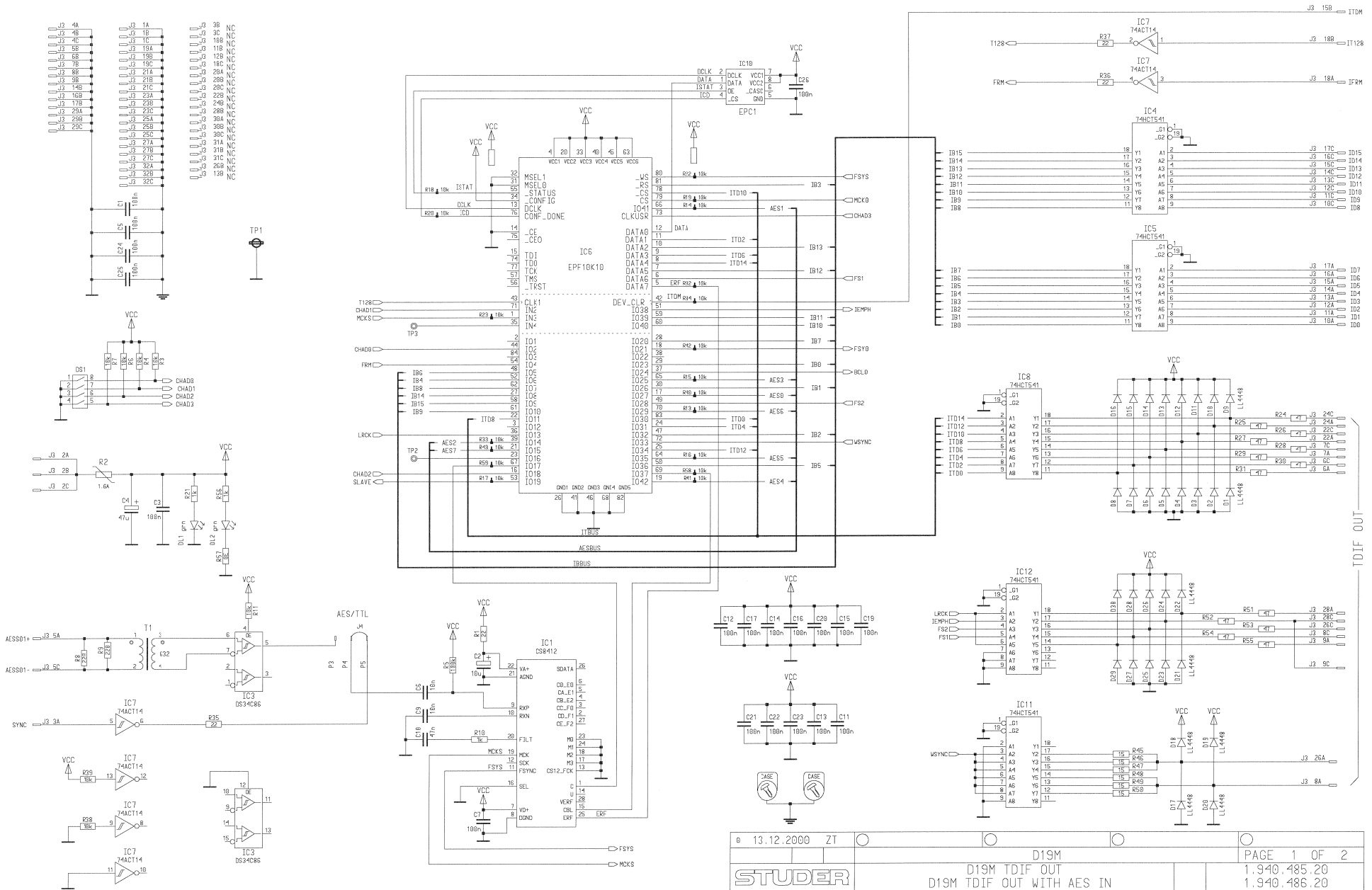
Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	R 36	57.69.1073	1k0	CF 5% 0603					
0	R 37	57.69.1097	10k	CF 5% 0603					
0	R 38	57.69.1073	1k0	CF 5% 0603					
0	R 39	57.69.1073	1k0	CF 5% 0603					
0	R 40	57.69.1073	1k0	CF 5% 0603					
0	R 41	57.69.1073	1k0	CF 5% 0603					
0	R 42	57.69.1073	1k0	CF 5% 0603					
0	R 43	57.69.1073	1k0	CF 5% 0603					
0	R 44	57.69.1073	1k0	CF 5% 0603					
0	R 45	57.69.1097	10k	CF 5% 0603					
0	R 46	57.69.1097	10k	CF 5% 0603					
0	R 47	57.69.1097	10k	CF 5% 0603					
0	R 48	57.69.1073	1k0	CF 5% 0603					
0	R 49	57.69.1073	1k0	CF 5% 0603					
0	R 50	57.69.1073	1k0	CF 5% 0603					
0	R 51	57.69.1073	1k0	CF 5% 0603					
0	R 52	57.69.1073	1k0	CF 5% 0603					
0	R 53	57.69.1073	1k0	CF 5% 0603					
0	R 54	57.69.1073	1k0	CF 5% 0603					
0	R 55	57.69.1073	1k0	CF 5% 0603					
0	R 56	57.69.1073	1k0	CF 5% 0603					
0	R 57	57.69.1073	1k0	CF 5% 0603					
0	R 58	57.69.1073	1k0	CF 5% 0603					
0	R 59	57.69.1097	10k	CF 5% 0603					
0	R 60	57.69.1073	1k0	CF 5% 0603					
0	R 61	57.69.1073	1k0	CF 5% 0603					
0	R 62	57.60.1102	1k0	MF, 1%, 0204, E24					
0	R 63	57.69.1073	1k0	CF 5% 0603					
0	R 64	57.69.1073	1k0	CF 5% 0603					
0	R 65	57.69.1073	1k0	CF 5% 0603					
0	R 66	57.69.1073	1k0	CF 5% 0603					
0	R 67	57.69.1073	1k0	CF 5% 0603					
0	R 68	57.69.1073	1k0	CF 5% 0603					
0	R 69	57.69.1097	10k	CF 5% 0603					
0	R 70	57.69.1097	10k	CF 5% 0603					
0	R 71	57.69.1097	10k	CF 5% 0603					
0	R 72	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 73	57.60.1270	27R	MF, 1%, 0204, E24					
0	R 74	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 75	57.60.1270	27R	MF, 1%, 0204, E24					
0	R 76	57.60.1105	1M0	MF, 1%, 0204, E24					
0	R 77	57.60.1000	0R0	MF, 0204					
0	R 78	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 79	not used	470R	MF, 1%, 0204, E24					
0	R 80	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 81	57.69.1073	1k0	CF 5% 0603					
0	R 82	57.69.1073	1k0	CF 5% 0603					
0	R 83	57.69.1073	1k0	CF 5% 0603					
0	R 84	57.69.1073	1k0	CF 5% 0603					
0	R 85	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 86	57.60.1270	27R	MF, 1%, 0204, E24					
0	R 87	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 88	57.60.1270	27R	MF, 1%, 0204, E24					
0	R 89	57.69.1097	10k	CF 5% 0603					
0	R 90	57.69.1097	10k	CF 5% 0603					
0	R 91	57.69.1097	10k	CF 5% 0603					
0	R 92	57.69.1097	10k	CF 5% 0603					
0	R 93	57.69.1097	10k	CF 5% 0603					
0	R 94	57.69.1097	10k	CF 5% 0603					
0	R 95	57.69.1097	10k	CF 5% 0603					
0	R 96	57.69.1097	10k	CF 5% 0603					
0	R 97	57.92.7051	1.1A	PTC 30V					
0	R 98	57.92.7051	1.1A	PTC 30V					
1	S 1	not used	SPDT	Toggle 1 * on-none-on					
0	S 2	55.60.0201	1*s	SMD Tactswitch					
0	T 1	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU					
0	T 2	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU					
0	T 3	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 4	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU					
0	T 5	1.022.647.00	1:1.4	OUTPUT TRAF0 AES/EBU					
0	TP 1	54.33.6010	2.8*0.8	PCB-Flachstecker, gerade					
0	TP 2	54.33.6010	2.8*0.8	PCB-Flachstecker, gerade					
0	XDL 1	50.20.2501	Spacer	LED-Sockel					
0	XDL 2	50.20.2501	Spacer	LED-Sockel					
0	XIC 11	53.03.0182	24p	DIL 0.3", lot, gerade					
0	XIC 16	53.03.0166	8p	DIL-socket 0.3"					
0	XIC 21	53.03.0173	28p	DIL 0.6", lot, gerade					
0	Y 1	89.01.1013	12.500MHz	XTAL HC 49/U					
0	Y 2	89.60.1003	12.000MHz	SMD Quartz					
0	Y 3	89.01.1002	3.6864MHz	XTAL HC 18 U					

End of List

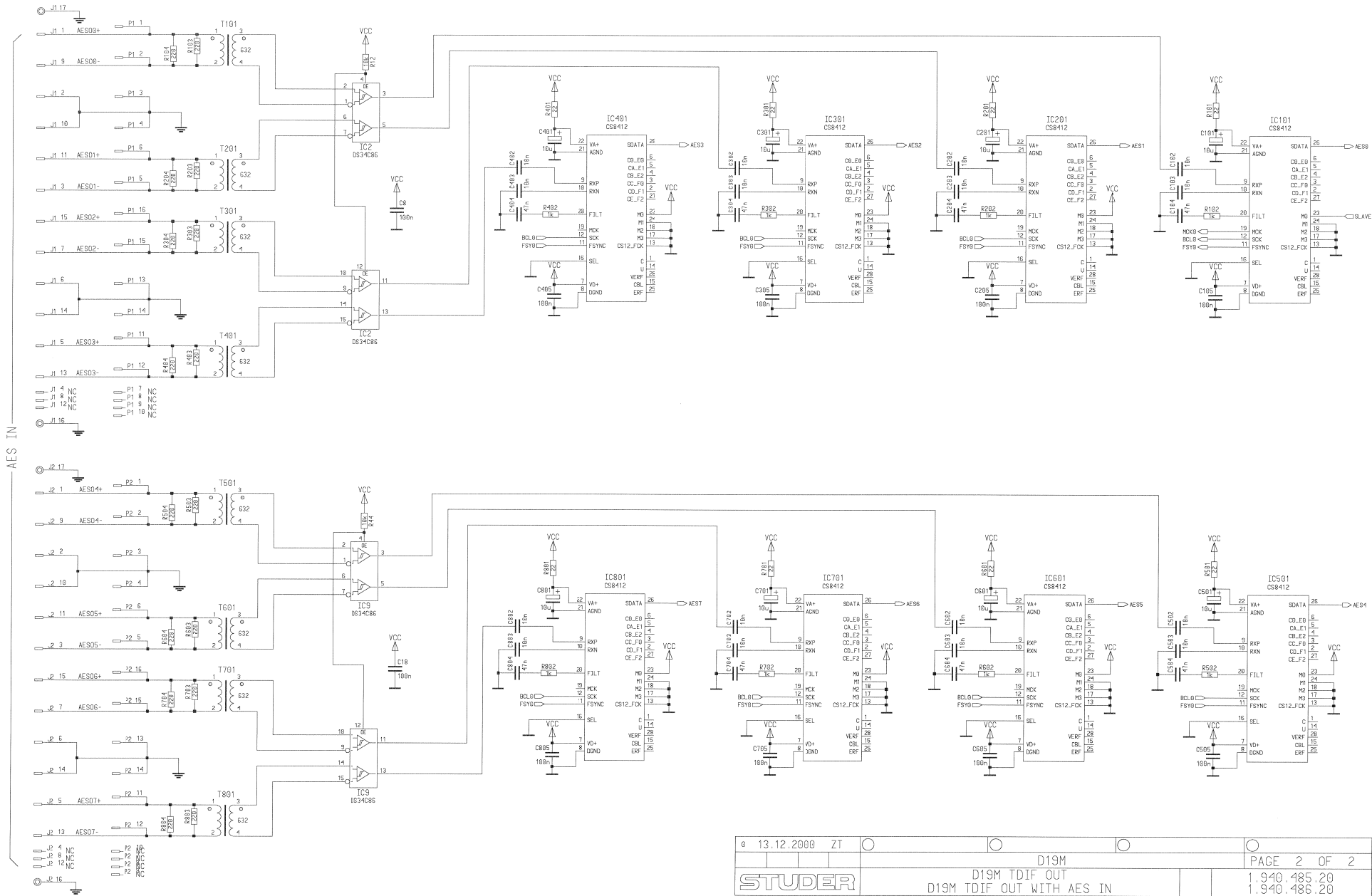
Comments:

(1) 89.10.022 replaced by 89.10.0021

TDIF0, TDIF Interface 1.940.485.20 ( 0); TDIF Interface w. AES In 1.940.486.20 ( 0)

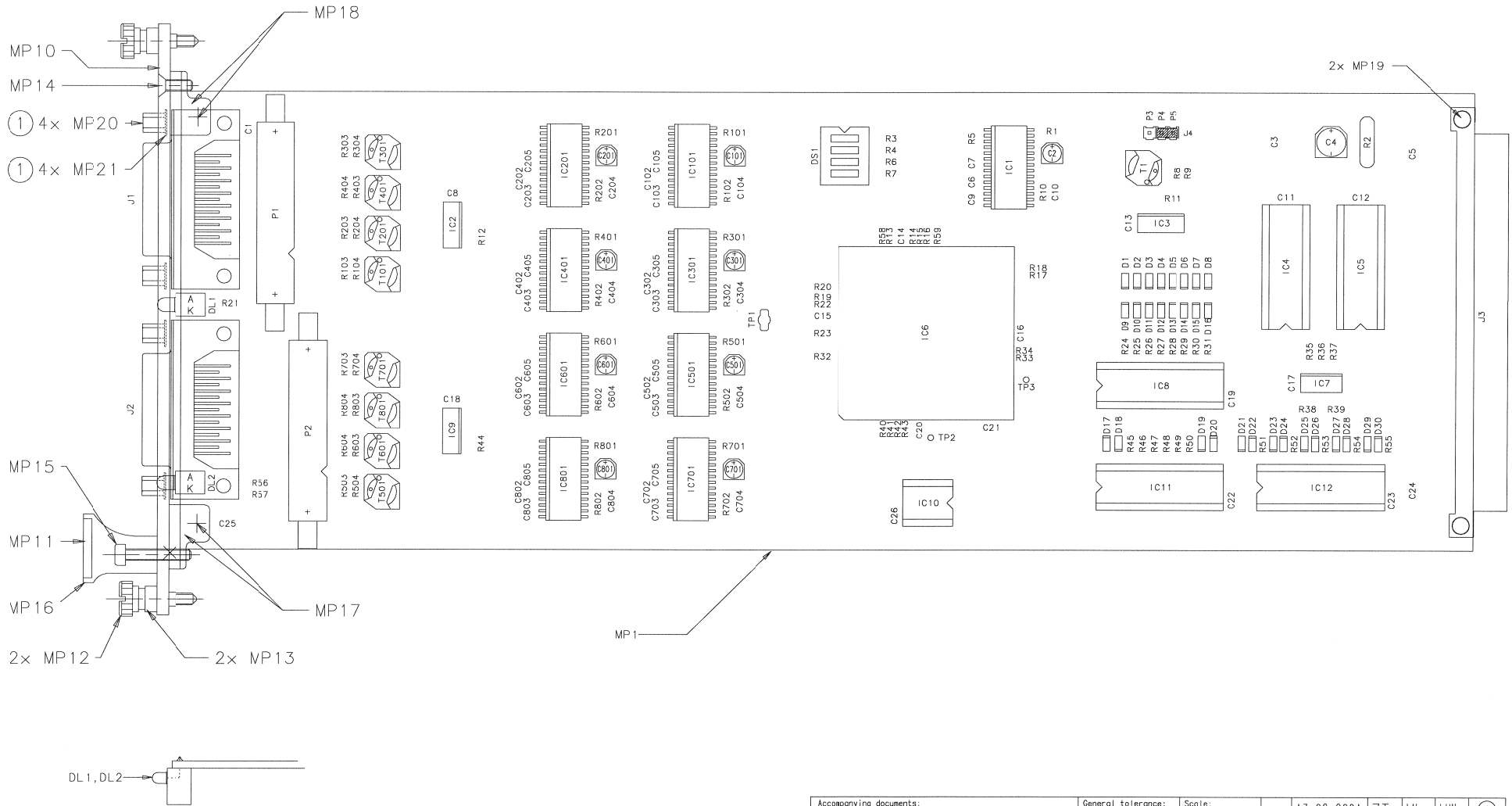


**TDIF0, TDIF Interface 1.940.485.20 ( 0); TDIF Interface w. AES In 1.940.486.20 ( 0)**



0 13.12.2000 ZT									
		D19m							
		D19m TDIF OUT							
		D19m TDIF OUT WITH AES IN							
<b>STUDER</b>								PAGE 2 OF 2	
								1.940.485.20	
								1.940.486.20	

**TDIFO, TDIF Interface 1.940.485.20 (0); TDIF Interface w. AES In 1.940.486.20 (0)**



Accompanying documents: Zugehörige Unterlagen: PL	General tolerance: Freimasstoleranz:	Scale: Massstab:	Edition Ausgabs 13.02.2001	ZT	ML	HW	①
Substitute for: Ersatz fuer:	1.940.485.20 / 486.20	Index 0	Date Datum	Visa Gez.	Checker Gepr.	Seen Ges.	Index
<b>STUDER</b> REGENSDORF			Description: Benennung: D19M TDIF OUT BOARD, ESE D19M TDIF OUT WITH AES IN BOARD, ESE		Page: Seite: 1 / 1		Number: Number: 1.940.485.20 1.940.486.20



**TDIFO, TDIF Out 1.940.485.20 ( 0 )**

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	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 3	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 4	59.68.0069	1 pce	47u	EL 16V, 6.3*5.7
0 C 5	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 6	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 7	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 8	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 9	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 10	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 11	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 12	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 13	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 14	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 15	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 16	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 17	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 18	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 19	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 20	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 21	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 22	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 23	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 24	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 25	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 26	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 101	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 102	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 103	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 104	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 105	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 201	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 202	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 203	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 204	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 205	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 301	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 302	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 303	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 304	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 305	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 401	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 402	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 403	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 404	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 405	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 501	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 502	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 503	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 504	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 505	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 601	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 602	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 603	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 604	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 605	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 701	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 702	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 703	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 704	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 705	not used	1 pce	100n	CER 50V, 10%, X7R, 0805
0 C 801	not used	1 pce	10u	EL 16V, 4.0*5.7
0 C 802	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 803	not used	1 pce	10n	CER 50V, 10%, X7R, 0805
0 C 804	not used	1 pce	47n	CER 50V, 10%, X7R, 0805
0 C 805	not used	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	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 13	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 14	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 15	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 16	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 17	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
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

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 D 22	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 23	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 24	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 25	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 26	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 27	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 28	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 29	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 D 30	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 DL 1	not used	1 pce	HLMP1790	DL HLMP - 1790 GN
0 DL 2	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN
0 DS 1	55.01.0164	1 pce	4*a	DIL-Switch, PCB
0 IC 1	not used	1 pce	CS8412	AES-Receiver
0 IC 2	not used	1 pce	DS34C86	4*RS 422 Line Receiver
0 IC 3	not used	1 pce	DS34C86	4*RS 422 Line Receiver
0 IC 4	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. A
0 IC 5	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. A
0 IC 6	50.63.4210	1 pce	EPF10K10	PLD 10 000 gates
0 IC 7	50.62.6014	1 pce	74ACT 14	Hex inverting Schmitt trigger
0 IC 8	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. A
0 IC 9	not used	1 pce	DS34C86	4*RS 422 Line Receiver
0 IC 10	1.940.986.20	1 pce		SW485 TDIFOUT (50.63.4298)
0 IC 11	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. A
0 IC 12	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. A
0 IC 101	not used	1 pce	CS8412	AES-Receiver
0 IC 201	not used	1 pce	CS8412	AES-Receiver
0 IC 301	not used	1 pce	CS8412	AES-Receiver
0 IC 401	not used	1 pce	CS8412	AES-Receiver
0 IC 501	not used	1 pce	CS8412	AES-Receiver
0 IC 601	not used	1 pce	CS8412	AES-Receiver
0 IC 701	not used	1 pce	CS8412	AES-Receiver
0 IC 801	not used	1 pce	CS8412	AES-Receiver
0 J 1	not used	1 pce	15p	D-Sub, PCB, Winkel
0 J 2	not used	1 pce	15p	D-Sub, PCB, Winkel
0 J 3	54.11.2009	1 pce	96p	EU-R 3*32p
0 J 4	not used	1 pce	Jumper	0.63*0.63mm, Au
0 MP 1	1.940.485.11	1 pce		D19M TDIF OUT PCB
0 MP 2	1.940.485.04	1 pce		TYPENSCHILD
0 MP 3	43.01.0108	1 pce	Label	ESE-WARNschild
0 MP 10	1.940.485.01	1 pce		FRONTPLATTE TDIF OUT
0 MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE
0 MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0 MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)
0 MP 14	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0 MP 15	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0 MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff
0 MP 17	49.02.0522	1 pce		Kartenhalter mit Z-Schr
0 MP 18	49.02.0522	1 pce		Kartenhalter mit Z-Schr
0 MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 P 1	not used	1 pce	16p	Stecker gerade Au
0 P 2	not used	1 pce	16p	Stecker gerade Au
0 P 3	not used	1 pce	1p	Pin, 1reihig, gerade
0 P 4	not used	1 pce	1p	Pin, 1reihig, gerade
0 P 5	not used	1 pce	1p	Pin, 1reihig, gerade
0 R 1	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 2	57.92.7053	1 pce	1.6A	PTC 30V
0 R 3	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 4	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 5	not used	1 pce	100k	MF, 1%, 0204, E24
0 R 6	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 7	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 R 8	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 9	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 10	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 11	not used	1 pce	10k	MF, 1%, 0204, E24
0 R 12	not used	1 pce	10k	MF, 1%, 0204, E24
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	57.69.1097	1 pce	10k	CF 5% 0603
0 R 18	57.69.1097	1 pce	10k	CF 5% 0603
0 R 19	57.69.1097	1 pce	10k	CF 5% 0603
0 R 20	57.69.1097	1 pce	10k	CF 5% 0603
0 R 21	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 22	57.69.1097	1 pce	10k	CF 5% 0603
0 R 23	57.69.1097	1 pce	10k	CF 5% 0603
0 R 24	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 25	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 26	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 27	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 28	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 29	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 30	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 31	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 32	57.69.1097	1 pce	10k	CF 5% 0603
0 R 33	57.69.1097	1 pce	10k	CF 5% 0603

**TDIFO, TDIF Out 1.940.485.20 ( 0 )**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 R 34	57.69.1097	1 pce	10k	CF 5% 0603
0 R 35	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 36	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 R 37	57.60.1220	1 pce	22R	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	57.69.1097	1 pce	10k	CF 5% 0603
0 R 41	57.69.1097	1 pce	10k	CF 5% 0603
0 R 42	57.69.1097	1 pce	10k	CF 5% 0603
0 R 43	57.69.1097	1 pce	10k	CF 5% 0603
0 R 44	not used	1 pce	10k	MF, 1%, 0204, E24
0 R 45	57.60.1150	1 pce	15R	MF, 1%, 0204, E24
0 R 46	57.60.1150	1 pce	15R	MF, 1%, 0204, E24
0 R 47	57.60.1150	1 pce	15R	MF, 1%, 0204, E24
0 R 48	57.60.1150	1 pce	15R	MF, 1%, 0204, E24
0 R 49	57.60.1150	1 pce	15R	MF, 1%, 0204, E24
0 R 50	57.60.1150	1 pce	15R	MF, 1%, 0204, E24
0 R 51	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 52	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 53	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 54	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 55	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 R 56	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 R 57	57.60.1000	1 pce	0R0	MF, 0204
0 R 58	57.69.1097	1 pce	10k	CF 5% 0603
0 R 59	57.69.1097	1 pce	10k	CF 5% 0603
0 R 101	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 102	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 103	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 104	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 201	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 202	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 203	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 204	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 301	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 302	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 303	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 304	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 401	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 402	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 403	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 404	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 501	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 502	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 503	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 504	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 601	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 602	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 603	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 604	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 701	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 702	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 703	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 704	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 801	not used	1 pce	22R	MF, 1%, 0204, E24
0 R 802	not used	1 pce	1k0	MF, 1%, 0204, E24
0 R 803	not used	1 pce	220R	MF, 1%, 0204, E24
0 R 804	not used	1 pce	220R	MF, 1%, 0204, E24
0 T 1	not used	1 pce	1:1	DI/DO TRANSFORMER
0 T 101	not used	1 pce	1:1	DI/DO TRANSFORMER
0 T 201	not used	1 pce	1:1	DI/DO TRANSFORMER
0 T 301	not used	1 pce	1:1	DI/DO TRANSFORMER
0 T 401	not used	1 pce	1:1	DI/DO TRANSFORMER
0 T 501	not used	1 pce	1:1	DI/DO TRANSFORMER
0 T 601	not used	1 pce	1:1	DI/DO TRANSFORMER
0 T 701	not used	1 pce	1:1	DI/DO TRANSFORMER
0 T 801	not used	1 pce	1:1	DI/DO TRANSFORMER
0 TP 1	54.02.0320	1 pce	1p	PCB-Flachst 2.8*0.8, gerade
0 XDL 2	50.20.2501	1 pce	Spacer	LED-Sockel
0 XIC 6	53.03.2284	1 pce	84p	PLCC-Sockel
0 XIC 10	53.03.0166	1 pce	8p	DIL 0.3", lötl, gerade

End of List

**TDIFO, TDIF Out with AES In 1.940.486.20 ( 1)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 D 22	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 2	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 D 23	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 3	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 D 24	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 4	59.68.0069	1 pce	47u	EL 16V, 6.3*5.7	0 D 25	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 5	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 D 26	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 6	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 D 27	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 7	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 D 28	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 8	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 D 29	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 9	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 D 30	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80
0 C 10	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 DL 1	50.04.2202	1 pce	HLMP1790	DL HLMP - 1790 GN
0 C 11	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 DL 2	not used	1 pce	HLMP1790	DL HLMP - 1790 GN
0 C 12	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 DS 1	55.01.0164	1 pce	4*a	DIL-Switch, PCB
0 C 13	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 1	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 14	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 2	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0 C 15	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 3	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0 C 16	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 4	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. , A
0 C 17	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 5	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. , A
0 C 18	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 6	50.63.4210	1 pce	EPF10K10	PLD 10 000 gates
0 C 19	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 7	50.62.6014	1 pce	74ACT 14	Hex inverting Schmitt trigger
0 C 20	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 8	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. , A
0 C 21	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 9	50.62.0463	1 pce	DS34C86	4*RS 422 Line Receiver
0 C 22	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 10	1.940.986.20	1 pce	SW485 TDIFOUT	(50.63.4298)
0 C 23	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 11	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. , A
0 C 24	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 12	50.17.0541	1 pce	74HCT541	IC .. 74 HCT541 .. , A
0 C 25	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 101	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 26	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 201	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 101	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 IC 301	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 102	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 IC 401	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 103	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 IC 501	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 104	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 IC 601	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 105	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 IC 701	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 201	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 IC 801	50.62.0913	1 pce	CS8412	AES-Receiver
0 C 202	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 J 1	54.13.0072	1 pce	15p	D-Sub, PCB, Winkel
0 C 203	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 J 2	54.13.0072	1 pce	15p	D-Sub, PCB, Winkel
0 C 204	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 J 3	54.11.2009	1 pce	96p	EU-R 3*32p
0 C 205	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 J 4	54.01.0021	1 pce	Jumper	0.63*0.63mm, Au
0 C 301	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 MP 1	1.940.485.11	1 pce		D19M TDIF OUT PCB
0 C 302	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 2	1.940.486.04	1 pce		TYPENSCHILD
0 C 303	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 3	43.01.0108	1 pce	Label	ESE WARNschild
0 C 304	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 MP 10	1.940.486.01	1 pce		FRONTPLATTE TDIF OUT/AES IN
0 C 305	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE
0 C 401	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0 C 402	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)
0 C 403	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 14	not used	1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0 C 404	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 MP 15	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 405	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff
0 C 501	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 MP 17	49.02.0522	1 pce		Kartenhalter mit Z-Schr
0 C 502	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 18	not used	1 pce		Kartenhalter mit Z-Schr
0 C 503	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 C 504	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	1 MP 20	54.13.0081	4 pcs	4.85mm	Bolzen UNC 4-40
0 C 505	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	1 MP 21	24.16.2025	4 pcs	2.7/5.5	Fächerscheibe Form A
0 C 601	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 P 1	not used	1 pce	16p	Stecker gerade Au
0 C 602	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 P 2	not used	1 pce	16p	Stecker gerade Au
0 C 603	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 P 3	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 604	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 P 4	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 605	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 P 5	54.01.0020	1 pce	1p	Pin, 1reihig, gerade
0 C 701	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 1	57.60.1220	1 pce	22R	MF, 1%, 0204, E24
0 C 702	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 R 2	57.92.7053	1 pce	1.6A	PTC 30V
0 C 703	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 R 3	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 704	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 R 4	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 705	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 5	57.60.1104	1 pce	100k	MF, 1%, 0204, E24
0 C 801	59.68.0065	1 pce	10u	EL 16V, 4.0*5.7	0 R 6	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 802	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 R 7	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 C 803	59.60.3325	1 pce	10n	CER 50V, 10%, X7R, 0805	0 R 8	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0 C 804	59.60.3333	1 pce	47n	CER 50V, 10%, X7R, 0805	0 R 9	57.60.1221	1 pce	220R	MF, 1%, 0204, E24
0 C 805	59.60.3337	1 pce	100n	CER 50V, 10%, X7R, 0805	0 R 10	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 D 1	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 11	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 D 2	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 12	57.60.1103	1 pce	10k	MF, 1%, 0204, E24
0 D 3	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 13	57.69.1097	1 pce	10k	CF 5% 0603
0 D 4	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 14	57.69.1097	1 pce	10k	CF 5% 0603
0 D 5	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 15	57.69.1097	1 pce	10k	CF 5% 0603
0 D 6	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 16	57.69.1097	1 pce	10k	CF 5% 0603
0 D 7	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 17	57.69.1097	1 pce	10k	CF 5% 0603
0 D 8	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 18	57.69.1097	1 pce	10k	CF 5% 0603
0 D 9	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 19	57.69.1097	1 pce	10k	CF 5% 0603
0 D 10	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 20	57.69.1097	1 pce	10k	CF 5% 0603
0 D 11	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 21	57.60.1102	1 pce	1k0	MF, 1%, 0204, E24
0 D 12	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 22	57.69.1097	1 pce	10k	CF 5% 0603
0 D 13	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 23	57.69.1097	1 pce	10k	CF 5% 0603
0 D 14	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 24	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 D 15	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 25	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 D 16	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 26	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 D 17	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 27	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 D 18	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 28	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 D 19	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 29	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 D 20	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 30	57.60.1470	1 pce	47R	MF, 1%, 0204, E24
0 D 21	50.60.8001	1 pce	4448	200mA 75V 4ns SOD 80	0 R 31	57.60.1470	1 pce	47R	MF, 1%, 0204, E24

**TDIFO, TDIF Out with AES In 1.940.486.20 ( 1)**

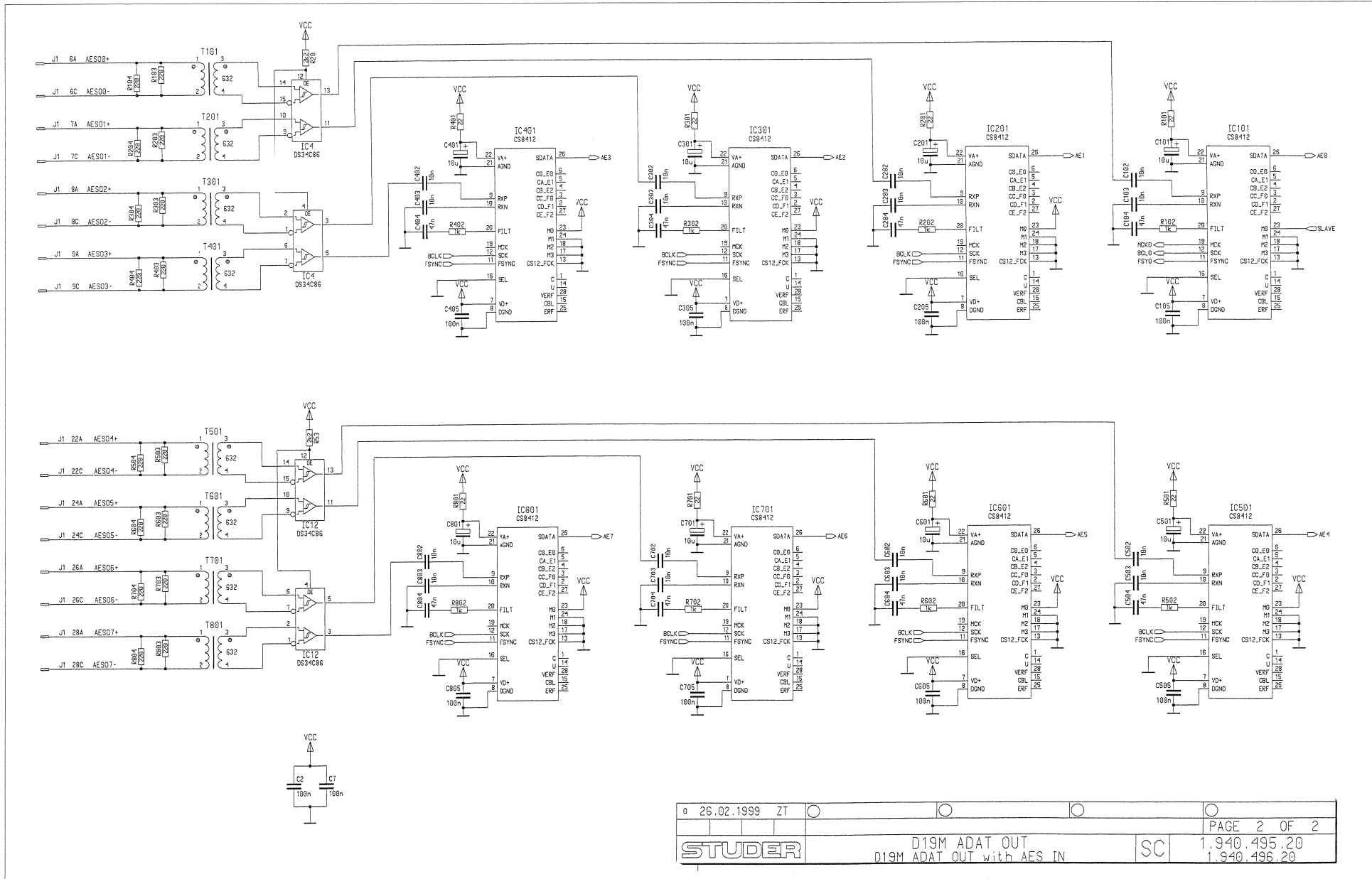
Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	R 32	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 33	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 34	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 35	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 36	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 37	57.60.1220	1 pce	22R	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	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 41	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 42	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 43	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 44	57.60.1103	1 pce	10k	MF	1%	0204, E24		
0	R 45	57.60.1150	1 pce	15R	MF	1%	0204, E24		
0	R 46	57.60.1150	1 pce	15R	MF	1%	0204, E24		
0	R 47	57.60.1150	1 pce	15R	MF	1%	0204, E24		
0	R 48	57.60.1150	1 pce	15R	MF	1%	0204, E24		
0	R 49	57.60.1150	1 pce	15R	MF	1%	0204, E24		
0	R 50	57.60.1150	1 pce	15R	MF	1%	0204, E24		
0	R 51	57.60.1470	1 pce	47R	MF	1%	0204, E24		
0	R 52	57.60.1470	1 pce	47R	MF	1%	0204, E24		
0	R 53	57.60.1470	1 pce	47R	MF	1%	0204, E24		
0	R 54	57.60.1470	1 pce	47R	MF	1%	0204, E24		
0	R 55	57.60.1470	1 pce	47R	MF	1%	0204, E24		
0	R 56	not used	1 pce	1k0	MF	1%	0204, E24		
0	R 57	not used	1 pce	0R0	MF		0204		
0	R 58	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 59	57.69.1097	1 pce	10k	CF	5%	0603		
0	R 101	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 102	57.60.1102	1 pce	1k0	MF	1%	0204, E24		
0	R 103	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 104	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 201	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 202	57.60.1102	1 pce	1k0	MF	1%	0204, E24		
0	R 203	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 204	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 301	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 302	57.60.1102	1 pce	1k0	MF	1%	0204, E24		
0	R 303	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 304	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 401	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 402	57.60.1102	1 pce	1k0	MF	1%	0204, E24		
0	R 403	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 404	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 501	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 502	57.60.1102	1 pce	1k0	MF	1%	0204, E24		
0	R 503	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 504	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 601	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 602	57.60.1102	1 pce	1k0	MF	1%	0204, E24		
0	R 603	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 604	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 701	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 702	57.60.1102	1 pce	1k0	MF	1%	0204, E24		
0	R 703	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 704	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 801	57.60.1220	1 pce	22R	MF	1%	0204, E24		
0	R 802	57.60.1102	1 pce	1k0	MF	1%	0204, E24		
0	R 803	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	R 804	57.60.1221	1 pce	220R	MF	1%	0204, E24		
0	T 1	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	T 101	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	T 201	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	T 301	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	T 401	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	T 501	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	T 601	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	T 701	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	T 801	1.022.632.00	1 pce	1:1	DI/DO TRANSFORMER				
0	TP 1	54.02.0320	1 pce	1p	PCB-Flachst 2.8*0.8, gerade				
0	XDL 1	50.20.2501	1 pce	Spacer	LED-Socket				
0	XIC 6	53.03.2284	1 pce	84p	PLCC-Socket				
0	XIC 10	53.03.0166	1 pce	8p	DIL 0.3", l0t, gerade				

End of List

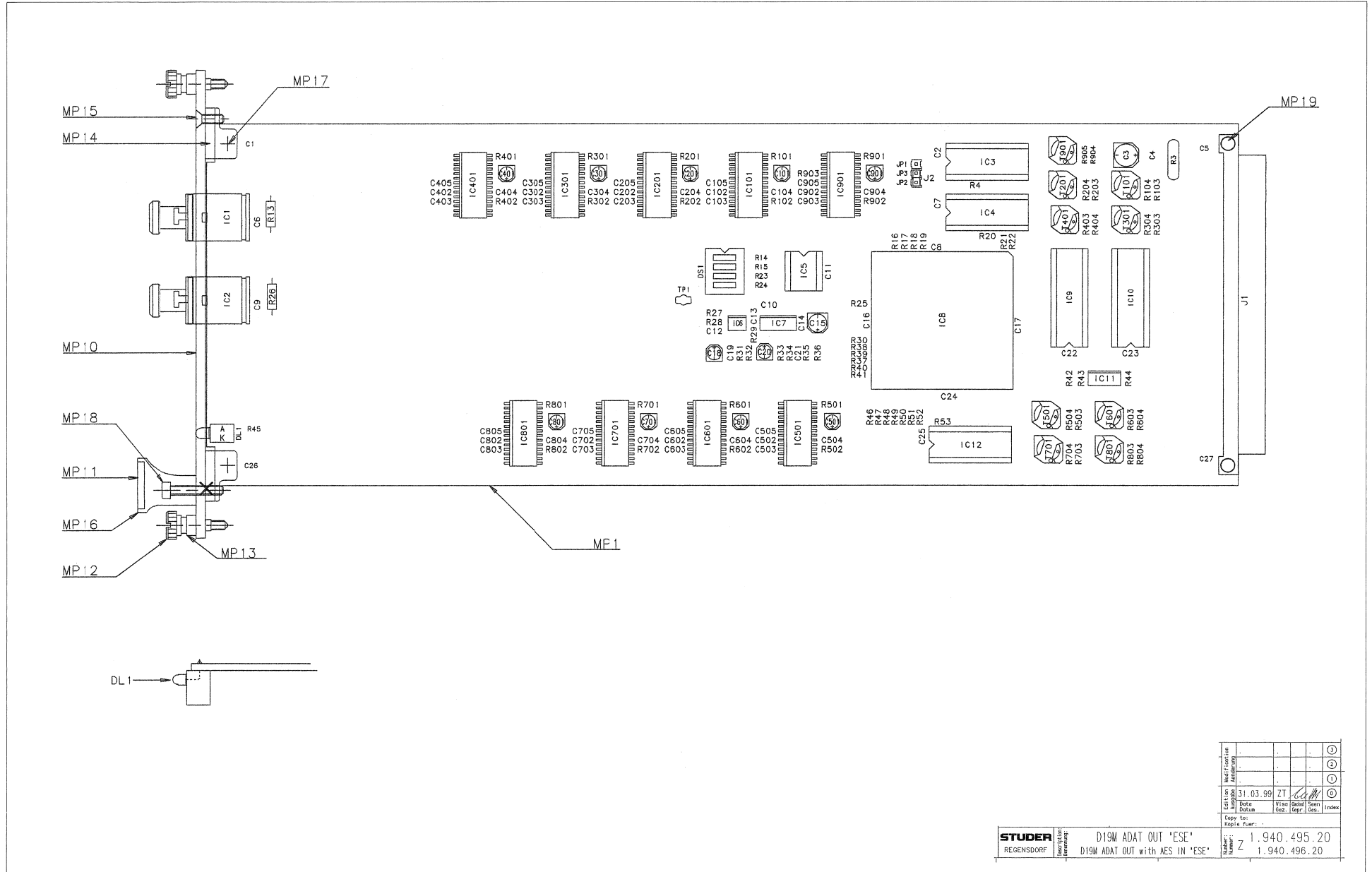
(01) Additionally MP20 and MP21



D19m ADAT Out 1.940.495.20  
 D19m ADAT Out with AES In 1.940.496.20



D19m ADAT Out 1.940.495.20  
 D19m ADAT Out with AES In 1.940.496.20



Edition	Modifications				
1					
2					
3					
4					

**STUDER**  
 REGENSDORF

D19M ADAT OUT 'ESE'  
 D19M ADAT OUT with AES IN 'ESE'

Number: Z 1.940.495.20  
 Revision: Z 1.940.496.20

Date: 31.03.99  
 Drawn: [Signature]  
 Checked: [Signature]  
 Approved: [Signature]

D19M ADAT OUT 1.940.495.20 ( 1 )

Idx. Pos.	Part No.	Qty.	Tvpe/Val.	Description	Idx. Pos.	Part No.	Qty.	Tvpe/Val.	Description
0 C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 201	not used		CS8412	AES-Receiver
0 C 2	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 301	not used		CS8412	AES-Receiver
0 C 3	59.68.0069	47u		EL 16V, 6.3*5.7	0 IC 401	not used		CS8412	AES-Receiver
0 C 4	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 501	not used		CS8412	AES-Receiver
0 C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 601	not used		CS8412	AES-Receiver
0 C 6	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 701	not used		CS8412	AES-Receiver
0 C 7	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 801	not used		CS8412	AES-Receiver
0 C 8	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 901	not used		CS8412	AES-Receiver
0 C 9	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 J 1	54.11.2009	96p		EU-R 3*32p
0 C 10	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 J 2	not used		Jumper	0.63*0.63mm, Au
0 C 11	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 JP 1	not used		1p	Pin, 1reihtig, gerade
0 C 12	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 JP 2	not used		1p	Pin, 1reihtig, gerade
0 C 13	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 JP 3	not used		1p	Pin, 1reihtig, gerade
0 C 14	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 1	1.940.495.11			D19M ADAT OUT PCB
0 C 15	59.68.0067	22u		EL 16V, 5.0*5.7	0 MP 2	1.940.495.04			TYPENSCHILD
0 C 16	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 3	1.101.001.20			TEXT-ETIK. 5*20 HARDWARE -20
0 C 17	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 4	43.01.0108			ESE-WARNschild
0 C 18	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 10	1.940.495.01	1 pce		FRONTPLATTE ADATO
0 C 19	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 MP 11	1.940.600.04	1 pce		GRIFFEINLAGE 4TE
0 C 20	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0 C 21	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)
0 C 22	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 14	49.02.0522	2 pcs		Kartenhalter mit Z-Schr
0 C 23	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0 C 24	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff
0 C 25	59.60.3337	100n		CER 50V, 10%, X7R, 0805	1 MP 17	not used	2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr
0 C 26	59.60.3337	100n		CER 50V, 10%, X7R, 0805					Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten
0 C 27	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 101	not used	10u		EL 16V, 4.0*5.7	0 MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 C 102	not used	10n		CER 50V, 10%, X7R, 0805	0 R 3	57.92.7053		1.6A	PTC 30V
0 C 103	not used	10n		CER 50V, 10%, X7R, 0805	0 R 4	not used		10k	MF, 1%, 0204, E24
0 C 104	not used	47n		CER 50V, 10%, X7R, 0805	0 R 13	57.11.3822		8k2	MF, 1%, 0207
0 C 105	not used	100n		CER 50V, 10%, X7R, 0805	0 R 14	57.60.1103		10k	MF, 1%, 0204, E24
0 C 201	not used	10u		EL 16V, 4.0*5.7	0 R 15	57.60.1103		10k	MF, 1%, 0204, E24
0 C 202	not used	10n		CER 50V, 10%, X7R, 0805	0 R 16	57.69.1097		10k	CF 5% 0603
0 C 203	not used	10n		CER 50V, 10%, X7R, 0805	0 R 17	57.69.1097		10k	CF 5% 0603
0 C 204	not used	47n		CER 50V, 10%, X7R, 0805	0 R 18	57.69.1097		10k	CF 5% 0603
0 C 205	not used	100n		CER 50V, 10%, X7R, 0805	0 R 19	57.69.1097		10k	CF 5% 0603
0 C 301	not used	10u		EL 16V, 4.0*5.7	0 R 20	not used		2k2	MF, 1%, 0204, E24
0 C 302	not used	10n		CER 50V, 10%, X7R, 0805	0 R 21	57.69.1097		10k	CF 5% 0603
0 C 303	not used	10n		CER 50V, 10%, X7R, 0805	0 R 22	57.69.1097		10k	CF 5% 0603
0 C 304	not used	47n		CER 50V, 10%, X7R, 0805	0 R 23	57.60.1103		10k	MF, 1%, 0204, E24
0 C 305	not used	100n		CER 50V, 10%, X7R, 0805	0 R 24	57.60.1103		10k	MF, 1%, 0204, E24
0 C 401	not used	10u		EL 16V, 4.0*5.7	0 R 25	57.69.1097		10k	CF 5% 0603
0 C 402	not used	10n		CER 50V, 10%, X7R, 0805	0 R 26	57.11.3822		8k2	MF, 1%, 0207
0 C 403	not used	10n		CER 50V, 10%, X7R, 0805	0 R 27	57.60.1103		10k	MF, 1%, 0204, E24
0 C 404	not used	47n		CER 50V, 10%, X7R, 0805	0 R 28	57.60.1103		10k	MF, 1%, 0204, E24
0 C 405	not used	100n		CER 50V, 10%, X7R, 0805	0 R 29	57.60.1103		10k	MF, 1%, 0204, E24
0 C 501	not used	10u		EL 16V, 4.0*5.7	0 R 30	57.69.1097		10k	CF 5% 0603
0 C 502	not used	10n		CER 50V, 10%, X7R, 0805	0 R 31	57.60.1562		5k6	MF, 1%, 0204, E24
0 C 503	not used	10n		CER 50V, 10%, X7R, 0805	0 R 32	57.60.1101		100R	MF, 1%, 0204, E24
0 C 504	not used	47n		CER 50V, 10%, X7R, 0805	0 R 33	57.60.1392		3k9	MF, 1%, 0204, E24
0 C 505	not used	100n		CER 50V, 10%, X7R, 0805	0 R 34	57.60.1123		12k	MF, 1%, 0204, E24
0 C 601	not used	10u		EL 16V, 4.0*5.7	0 R 35	57.60.1104		100k	MF, 1%, 0204, E24
0 C 602	not used	10n		CER 50V, 10%, X7R, 0805	0 R 36	57.60.1100		10k	MF, 1%, 0204, E24
0 C 603	not used	10n		CER 50V, 10%, X7R, 0805	0 R 37	57.69.1097		10k	CF 5% 0603
0 C 604	not used	47n		CER 50V, 10%, X7R, 0805	0 R 38	57.69.1097		10k	CF 5% 0603
0 C 605	not used	100n		CER 50V, 10%, X7R, 0805	0 R 39	57.69.1097		10k	CF 5% 0603
0 C 701	not used	10u		EL 16V, 4.0*5.7	0 R 40	57.69.1097		10k	CF 5% 0603
0 C 702	not used	10n		CER 50V, 10%, X7R, 0805	0 R 41	57.69.1097		10k	CF 5% 0603
0 C 703	not used	10n		CER 50V, 10%, X7R, 0805	0 R 42	not used		22R	MF, 1%, 0204, E24
0 C 704	not used	47n		CER 50V, 10%, X7R, 0805	0 R 43	57.60.1103		10k	MF, 1%, 0204, E24
0 C 705	not used	100n		CER 50V, 10%, X7R, 0805	0 R 44	57.60.1103		10k	MF, 1%, 0204, E24
0 C 801	not used	10u		EL 16V, 4.0*5.7	0 R 45	57.60.1102		1k0	MF, 1%, 0204, E24
0 C 802	not used	10n		CER 50V, 10%, X7R, 0805	0 R 46	57.69.1097		10k	CF 5% 0603
0 C 803	not used	10n		CER 50V, 10%, X7R, 0805	0 R 47	57.69.1097		10k	CF 5% 0603
0 C 804	not used	47n		CER 50V, 10%, X7R, 0805	0 R 48	57.69.1097		10k	CF 5% 0603
0 C 805	not used	100n		CER 50V, 10%, X7R, 0805	0 R 49	57.69.1097		10k	CF 5% 0603
0 C 901	not used	10u		EL 16V, 4.0*5.7	0 R 50	57.69.1097		10k	CF 5% 0603
0 C 902	not used	10n		CER 50V, 10%, X7R, 0805	0 R 51	57.69.1097		10k	CF 5% 0603
0 C 903	not used	10n		CER 50V, 10%, X7R, 0805	0 R 52	57.69.1097		10k	CF 5% 0603
0 C 904	not used	47n		CER 50V, 10%, X7R, 0805	0 R 53	not used		2k2	MF, 1%, 0204, E24
0 C 905	not used	100n		CER 50V, 10%, X7R, 0805	0 R 101	not used		22R	MF, 1%, 0204, E24
0 DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0 R 102	not used		1k0	MF, 1%, 0204, E24
0 DS 1	55.01.0164		*a	DIL-Switch, PCB	0 R 103	not used		220R	MF, 1%, 0204, E24
0 IC 1	89.10.0111		TOTX173	Toslink Transmitter	0 R 104	not used		220R	MF, 1%, 0204, E24
0 IC 2	89.10.0111		TOTX173	Toslink Transmitter	0 R 201	not used		22R	MF, 1%, 0204, E24
0 IC 3	not used		34C86	IC DS 34 C 86 TN, MC34C86P, A	0 R 202	not used		1k0	MF, 1%, 0204, E24
0 IC 4	not used		34C86	IC DS 34 C 86 TN, MC34C86P, A	0 R 203	not used		220R	MF, 1%, 0204, E24
0 IC 5	1.940.954.20			SW 495 ADATO (50.63.4298)	0 R 204	not used		220R	MF, 1%, 0204, E24
0 IC 6	50.61.0205		TS272CD	Dual Op-Amp CMOS SO 8	0 R 301	not used		22R	MF, 1%, 0204, E24
0 IC 7	50.62.4946		74HCT9046	PLL with bandgap contr VCO	0 R 302	not used		1k0	MF, 1%, 0204, E24
0 IC 8	50.63.4210		EPF10K10	PLD 10 000 gates	0 R 303	not used		220R	MF, 1%, 0204, E24
0 IC 9	50.17.0541		74HCT541	IC .. 74 HCT541 .. , A	0 R 304	not used		220R	MF, 1%, 0204, E24
0 IC 10	50.17.0541		74HCT541	IC .. 74 HCT541 .. , A	0 R 401	not used		22R	MF, 1%, 0204, E24
0 IC 11	50.62.6014		74ACT 14	Hex inverting Schmitt trigger	0 R 402	not used		1k0	MF, 1%, 0204, E24
0 IC 12	not used		34C86	IC DS 34 C 86 TN, MC34C86P, A	0 R 403	not used		220R	MF, 1%, 0204, E24
0 IC 101	not used		CS8412	AES-Receiver	0 R 404	not used		220R	MF, 1%, 0204, E24



**D19M ADAT OUT 1.940.495.20 ( 1)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	R 501	not used	22R	MF, 1%, 0204, E24
0	R 502	not used	1k0	MF, 1%, 0204, E24
0	R 503	not used	220R	MF, 1%, 0204, E24
0	R 504	not used	220R	MF, 1%, 0204, E24
0	R 601	not used	22R	MF, 1%, 0204, E24
0	R 602	not used	1k0	MF, 1%, 0204, E24
0	R 603	not used	220R	MF, 1%, 0204, E24
0	R 604	not used	220R	MF, 1%, 0204, E24
0	R 701	not used	22R	MF, 1%, 0204, E24
0	R 702	not used	1k0	MF, 1%, 0204, E24
0	R 703	not used	220R	MF, 1%, 0204, E24
0	R 704	not used	220R	MF, 1%, 0204, E24
0	R 801	not used	22R	MF, 1%, 0204, E24
0	R 802	not used	1k0	MF, 1%, 0204, E24
0	R 803	not used	220R	MF, 1%, 0204, E24
0	R 804	not used	220R	MF, 1%, 0204, E24
0	R 901	not used	22R	MF, 1%, 0204, E24
0	R 902	not used	1k0	MF, 1%, 0204, E24
0	R 903	not used	100k	MF, 1%, 0204, E24
0	R 904	not used	220R	MF, 1%, 0204, E24
0	R 905	not used	220R	MF, 1%, 0204, E24
0	T 101	not used	1:1	DI/DO TRANSFORMER
0	T 201	not used	1:1	DI/DO TRANSFORMER
0	T 301	not used	1:1	DI/DO TRANSFORMER
0	T 401	not used	1:1	DI/DO TRANSFORMER
0	T 501	not used	1:1	DI/DO TRANSFORMER
0	T 601	not used	1:1	DI/DO TRANSFORMER
0	T 701	not used	1:1	DI/DO TRANSFORMER
0	T 801	not used	1:1	DI/DO TRANSFORMER
0	T 901	not used	1:1	DI/DO TRANSFORMER
0	TP 1	54.33.8010	2.8*0.8	PCB-Flachstecker, gerade
0	XDL 1	50.20.2501	Spacer	LED-Sockel
0	XIC 3	not used	16p	DIL 0.3", lötl, gerade
0	XIC 4	not used	16p	DIL 0.3", lötl, gerade
0	XIC 5	53.03.0166	8p	DIL 0.3", lötl, gerade
0	XIC 8	53.03.2284	84p	PLCC-Socket
0	XIC 9	53.03.0165	20p	DIL 0.3", lötl, gerade
0	XIC 10	53.03.0165	20p	DIL 0.3", lötl, gerade
0	XIC 12	not used	16p	DIL 0.3", lötl, gerade

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
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End of List

(1) 12.04.00 MP 17 not used

D19M ADATO with AES IN 1.940.496.20 ( 1 )

Idx. Pos.	Part No.	Qty.	Tvpe/Val.	Description	Idx. Pos.	Part No.	Qty.	Tvpe/Val.	Description
0 C 1	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 201	50.62.0913		CS8412	AES-Receiver
0 C 2	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 301	50.62.0913		CS8412	AES-Receiver
0 C 3	59.68.0069	47u		EL 16V, 6.3*5.7	0 IC 401	50.62.0913		CS8412	AES-Receiver
0 C 4	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 501	50.62.0913		CS8412	AES-Receiver
0 C 5	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 601	50.62.0913		CS8412	AES-Receiver
0 C 6	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 701	50.62.0913		CS8412	AES-Receiver
0 C 7	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 801	50.62.0913		CS8412	AES-Receiver
0 C 8	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 IC 901	50.62.0913		CS8412	AES-Receiver
0 C 9	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 J 1	54.11.2009		96p	EU-R 3*32p
0 C 10	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 J 2	54.01.0021		Jumper	0.63*0.63mm, Au
0 C 11	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 JP 1	54.01.0020		1p	Pin, 1reihtig, gerade
0 C 12	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 JP 2	54.01.0020		1p	Pin, 1reihtig, gerade
0 C 13	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 JP 3	54.01.0020		1p	Pin, 1reihtig, gerade
0 C 14	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 1	1.940.495.11			D19M ADAT OUT PCB
0 C 15	59.68.0067	22u		EL 16V, 5.0*5.7	0 MP 2	1.940.496.04			TYPENSCHILD
0 C 16	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 3	1.101.001.20		Label	TEXT-ETIK. 5*20 HARDWARE -20
0 C 17	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 4	43.01.0108		Label	ESE-WARNschild
0 C 18	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 10	1.940.495.01	1 pce		FRONTPLATTE ADATO
0 C 19	59.60.3317	2n2		CER 50V, 10%, X7R, 0805	0 MP 11	1.940.600.04	1 pce		GRIFFEINLAGE
0 C 20	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 12	49.02.0520	2 pcs	M2.5*12	Rändelschraube (Rack)
0 C 21	59.60.2249	100p		CER 50V, 5%, COG, 0603	0 MP 13	49.02.0521	2 pcs		Metall-Buchse (Rack)
0 C 22	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 14	49.02.0522	2 pcs		Kartenhalter mit Z-Schr
0 C 23	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 15	49.02.0523	1 pce	M2.5*7	Senk-Schr, KS, Senkripp
0 C 24	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 16	49.02.0504	1 pce	4TE	Frontplatten-Griff
0 C 25	59.60.3337	100n		CER 50V, 10%, X7R, 0805	1 MP 17	not used	2 pcs	M2.5*6	Z-Schraube Inbus Zn gb chr
0 C 26	59.60.3337	100n		CER 50V, 10%, X7R, 0805					Schraube ist in MP14 (49.02.0522 Kartenhalter) enthalten
0 C 27	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 MP 18	21.53.0284	1 pce	M2.5*16	Z-Schraube Inbus Zn gb chr
0 C 101	59.68.0065	10u		EL 16V, 4.0*5.7	0 MP 19	28.99.0119	2 pcs		ROHRNIETE D 2.5*0.15* 9
0 C 102	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 3	57.92.7053		1.6A	PTC 30V
0 C 103	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 4	57.60.1103		10k	MF, 1%, 0204, E24
0 C 104	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 13	57.11.3822		8k2	MF, 1%, 0207
0 C 105	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 14	57.60.1103		10k	MF, 1%, 0204, E24
0 C 201	59.68.0065	10u		EL 16V, 4.0*5.7	0 R 15	57.60.1103		10k	MF, 1%, 0204, E24
0 C 202	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 16	57.69.1097		10k	CF 5% 0603
0 C 203	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 17	57.69.1097		10k	CF 5% 0603
0 C 204	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 18	57.69.1097		10k	CF 5% 0603
0 C 205	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 19	57.69.1097		10k	CF 5% 0603
0 C 301	59.68.0065	10u		EL 16V, 4.0*5.7	0 R 20	57.60.1222		2k2	MF, 1%, 0204, E24
0 C 302	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 21	57.69.1097		10k	CF 5% 0603
0 C 303	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 22	57.69.1097		10k	CF 5% 0603
0 C 304	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 23	57.60.1103		10k	MF, 1%, 0204, E24
0 C 305	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 24	57.60.1103		10k	MF, 1%, 0204, E24
0 C 401	59.68.0065	10u		EL 16V, 4.0*5.7	0 R 25	57.69.1097		10k	CF 5% 0603
0 C 402	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 26	57.11.3822		8k2	MF, 1%, 0207
0 C 403	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 27	57.60.1103		10k	MF, 1%, 0204, E24
0 C 404	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 28	57.60.1103		10k	MF, 1%, 0204, E24
0 C 405	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 29	57.60.1103		10k	MF, 1%, 0204, E24
0 C 501	59.68.0065	10u		EL 16V, 4.0*5.7	0 R 30	57.69.1097		10k	CF 5% 0603
0 C 502	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 31	57.60.1562		5k6	MF, 1%, 0204, E24
0 C 503	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 32	57.60.1101		100R	MF, 1%, 0204, E24
0 C 504	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 33	57.60.1392		3k9	MF, 1%, 0204, E24
0 C 505	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 34	57.60.1123		12k	MF, 1%, 0204, E24
0 C 601	59.68.0065	10u		EL 16V, 4.0*5.7	0 R 35	57.60.1104		100k	MF, 1%, 0204, E24
0 C 602	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 36	57.60.1100		10R	MF, 1%, 0204, E24
0 C 603	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 37	57.69.1097		10k	CF 5% 0603
0 C 604	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 38	57.69.1097		10k	CF 5% 0603
0 C 605	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 39	57.69.1097		10k	CF 5% 0603
0 C 701	59.68.0065	10u		EL 16V, 4.0*5.7	0 R 40	57.69.1097		10k	CF 5% 0603
0 C 702	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 41	57.69.1097		10k	CF 5% 0603
0 C 703	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 42	57.60.1220		22R	MF, 1%, 0204, E24
0 C 704	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 43	57.60.1103		10k	MF, 1%, 0204, E24
0 C 705	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 44	57.60.1103		10k	MF, 1%, 0204, E24
0 C 801	59.68.0065	10u		EL 16V, 4.0*5.7	0 R 45	57.60.1102		1k0	MF, 1%, 0204, E24
0 C 802	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 46	57.69.1097		10k	CF 5% 0603
0 C 803	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 47	57.69.1097		10k	CF 5% 0603
0 C 804	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 48	57.69.1097		10k	CF 5% 0603
0 C 805	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 49	57.69.1097		10k	CF 5% 0603
0 C 901	59.68.0065	10u		EL 16V, 4.0*5.7	0 R 50	57.69.1097		10k	CF 5% 0603
0 C 902	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 51	57.69.1097		10k	CF 5% 0603
0 C 903	59.60.3325	10n		CER 50V, 10%, X7R, 0805	0 R 52	57.69.1097		10k	CF 5% 0603
0 C 904	59.60.3333	47n		CER 50V, 10%, X7R, 0805	0 R 53	57.60.1222		2k2	MF, 1%, 0204, E24
0 C 905	59.60.3337	100n		CER 50V, 10%, X7R, 0805	0 R 101	57.60.1220		22R	MF, 1%, 0204, E24
0 DL 1	50.04.2202		HLMP1790	DL HLMP - 1790 GN	0 R 102	57.60.1102		1k0	MF, 1%, 0204, E24
0 DS 1	55.01.0164		4*a	DIL-Switch, PCB	0 R 103	57.60.1221		220R	MF, 1%, 0204, E24
0 IC 1	89.10.0111		TOTX173	Toslink Transmitter	0 R 104	57.60.1221		220R	MF, 1%, 0204, E24
0 IC 2	89.10.0111		TOTX173	Toslink Transmitter	0 R 201	57.60.1220		22R	MF, 1%, 0204, E24
0 IC 3	50.15.0128		34C86	IC DS 34 C 86 TN, MC34C86P ,A	0 R 202	57.60.1102		1k0	MF, 1%, 0204, E24
0 IC 4	50.15.0128		34C86	IC DS 34 C 86 TN, MC34C86P ,A	0 R 203	57.60.1221		220R	MF, 1%, 0204, E24
0 IC 5	1.940.954.20			SW 495 ADATO (50.63.4298)	0 R 204	57.60.1221		220R	MF, 1%, 0204, E24
0 IC 6	50.61.0205		TS272CD	Dual Op-Amp CMOS SO 8	0 R 301	57.60.1220		22R	MF, 1%, 0204, E24
0 IC 7	50.62.4946		74HCT9046	PLL with bandgap contr VCO	0 R 302	57.60.1102		1k0	MF, 1%, 0204, E24
0 IC 8	50.63.4210		EPF10K10	PLD 10 000 gates	0 R 303	57.60.1221		220R	MF, 1%, 0204, E24
0 IC 9	50.17.0541		74HCT541	IC .. 74 HCT541 .. ,A	0 R 304	57.60.1221		220R	MF, 1%, 0204, E24
0 IC 10	50.17.0541		74HCT541	IC .. 74 HCT541 .. ,A	0 R 401	57.60.1220		22R	MF, 1%, 0204, E24
0 IC 11	50.62.8014		74ACT 14	Hex inverting Schmitt trigger	0 R 402	57.60.1102		1k0	MF, 1%, 0204, E24
0 IC 12	50.15.0128		34C86	IC DS 34 C 86 TN, MC34C86P ,A	0 R 403	57.60.1221		220R	MF, 1%, 0204, E24
0 IC 101	50.62.0913		CS8412	AES-Receiver	0 R 404	57.60.1221		220R	MF, 1%, 0204, E24

**D19M ADATO with AES IN 1.940.496.20 ( 1)**

Idx. Pos.	Part No.	Qty.	Tvpe/Val.	Description	Idx. Pos.	Part No.	Qty.	Tvpe/Val.	Description
0	R 501	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 502	57.60.1102	1k0	MF, 1%, 0204, E24					
0	R 503	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 504	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 601	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 602	57.60.1102	1k0	MF, 1%, 0204, E24					
0	R 603	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 604	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 701	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 702	57.60.1102	1k0	MF, 1%, 0204, E24					
0	R 703	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 704	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 801	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 802	57.60.1102	1k0	MF, 1%, 0204, E24					
0	R 803	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 804	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 901	57.60.1220	22R	MF, 1%, 0204, E24					
0	R 902	57.60.1102	1k0	MF, 1%, 0204, E24					
0	R 903	57.60.1104	100k	MF, 1%, 0204, E24					
0	R 904	57.60.1221	220R	MF, 1%, 0204, E24					
0	R 905	57.60.1221	220R	MF, 1%, 0204, E24					
0	T 101	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 201	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 301	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 401	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 501	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 601	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 701	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 801	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	T 901	1.022.632.00	1:1	DI/DO TRANSFORMER					
0	TP 1	54.33.6010	2.8*0.8	PCB-Flachstecker, gerade					
0	XDL 1	50.20.2501	Spacer	LED-Sockel					
0	XIC 3	53.03.0168	16p	DIL 0.3", lötl, gerade					
0	XIC 4	53.03.0168	16p	DIL 0.3", lötl, gerade					
0	XIC 5	53.03.0168	8p	DIL 0.3", lötl, gerade					
0	XIC 8	53.03.2284	84p	PLCC-Socket					
0	XIC 9	53.03.0165	20p	DIL 0.3", lötl, gerade					
0	XIC 10	53.03.0165	20p	DIL 0.3", lötl, gerade					
0	XIC 12	53.03.0168	16p	DIL 0.3", lötl, gerade					

End of List

Comments:

(1) 12.04.00 MP 17 not used

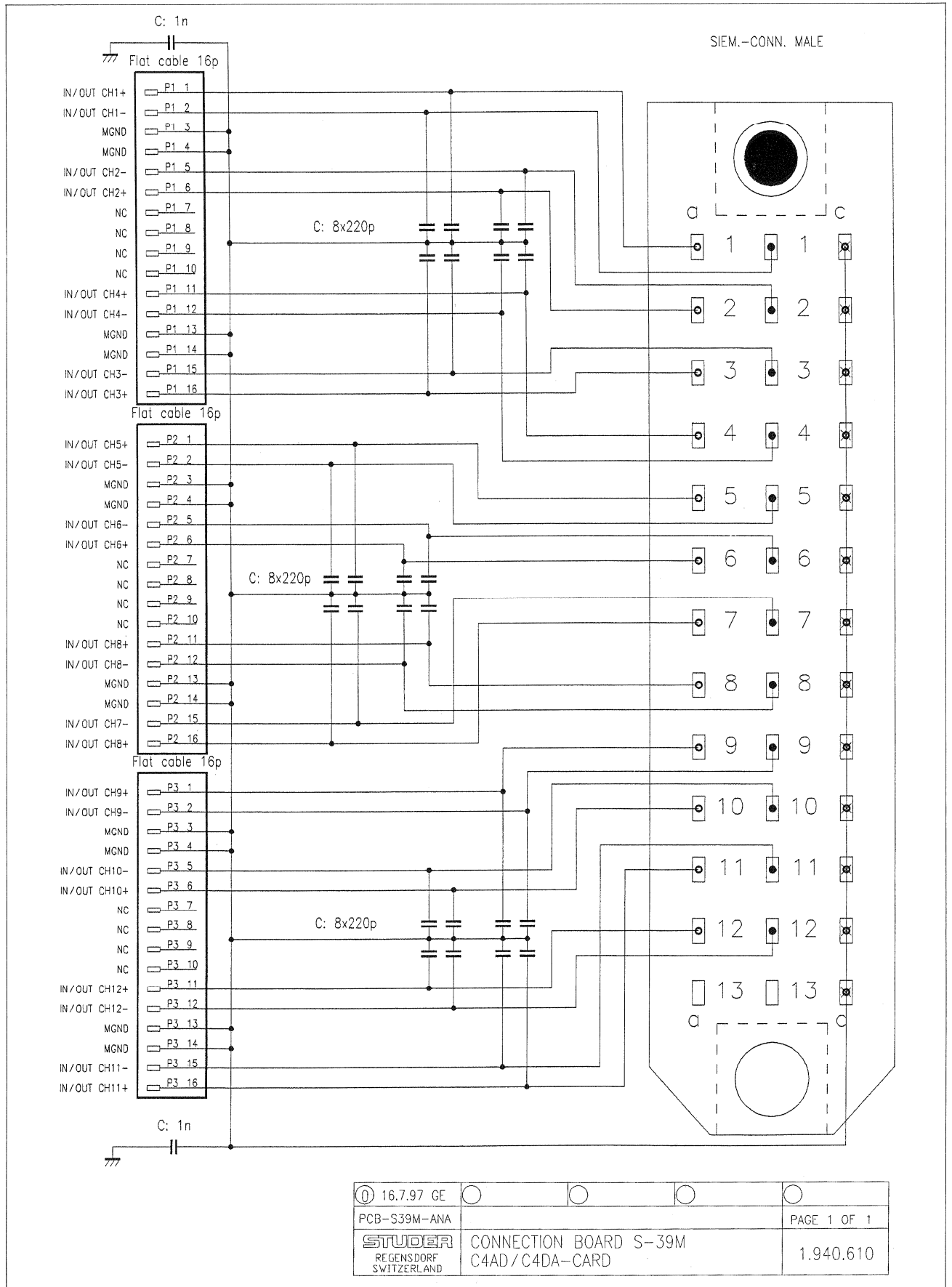
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**CIRCUIT DIAGRAMS: D19m CONNECTION UNITS**

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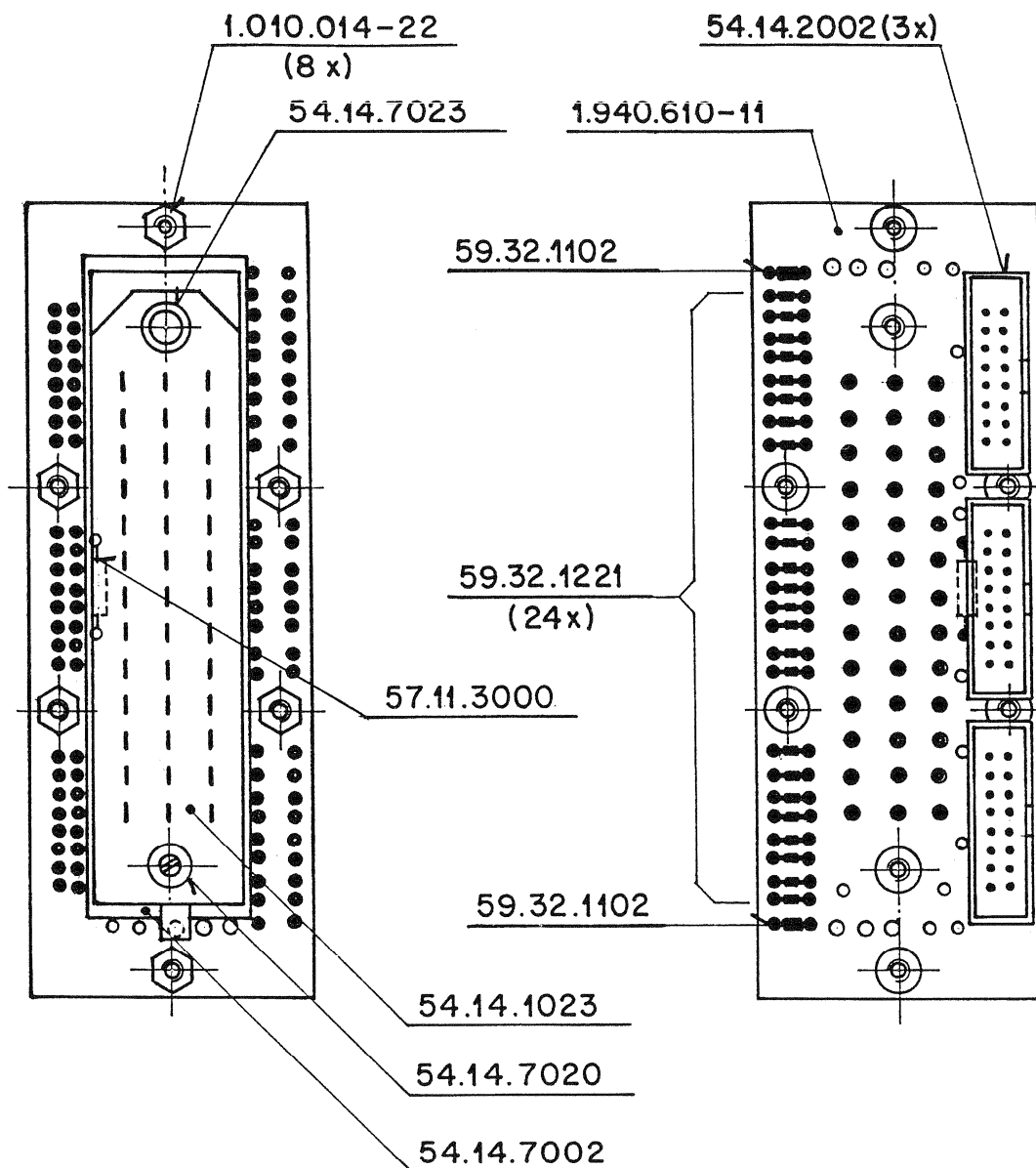
* Connection Unit S39m, gold contacts (analog I/O).....	1.940.609
Connection Unit S39m (analog I/O).....	1.940.610
<i>(* identical with 1.940.610 except the gold contacts)</i>	
Connection Unit 4 × BNC (AES/EBU In).....	1.940.611
Connection Unit 4 × BNC (AES/EBU Out) .....	1.940.612
Connection Unit S30f (analog In).....	1.940.613
Connection Unit S30m (analog Out) .....	1.940.614
Connection Unit D15f (AES/EBU In) .....	1.940.615
Connection Unit D15m (AES/EBU Out).....	1.940.616
Connection Unit 4 × XLR3f (AES/EBU In).....	1.940.617
Connection Unit 4 × XLR3m (AES/EBU Out) .....	1.940.618
Connection Unit 2 × D25f (GPI/O) .....	1.940.619
Connection Unit D15f (analog In) .....	1.940.625
Connection Unit D15m (analog Out).....	1.940.626
Connection Unit 4 × XLR3f (analog In).....	1.940.627
Connection Unit 4 × XLR3m (analog Out) .....	1.940.628
Connection Unit 2 × D25f (control port).....	1.940.630
Connection Unit 4 × Bantam Jack (analog insert).....	1.940.631
Connection Unit 4 × D25m (dual TDIF I/O).....	1.940.632
Connection Unit 4 × BNC (WCLK Out).....	1.940.633
Connection Unit 2 × D15f (AES/EBU or analog In).....	1.940.635
Connection Unit 2 × D15m (AES/EBU or analog Out) .....	1.940.636
Connection Unit 4 × XLR3f (AES/EBU In).....	1.940.637
Connection Unit 4 × XLR3m (AES/EBU Out) .....	1.940.638
Connection Unit S30f, gold contacts (analog Out) .....	1.940.640
Connection Unit 4 × BNC (AES/EBU In).....	1.940.641
Connection Unit 4 × BNC (AES/EBU Out) .....	1.940.642

Connection Board S-39M C4AD / C4DA-Card 1.940.610.00



16.7.97 GE			
PCB-S39M-ANA			PAGE 1 OF 1
STUDER REGENSDORF SWITZERLAND	CONNECTION BOARD S-39M C4AD / C4DA-CARD		1.940.610

**Connection Board S-39M C4AD / C4DA-Card 1.940.610.00**



Ausgabe					③
Änderung					②
					①
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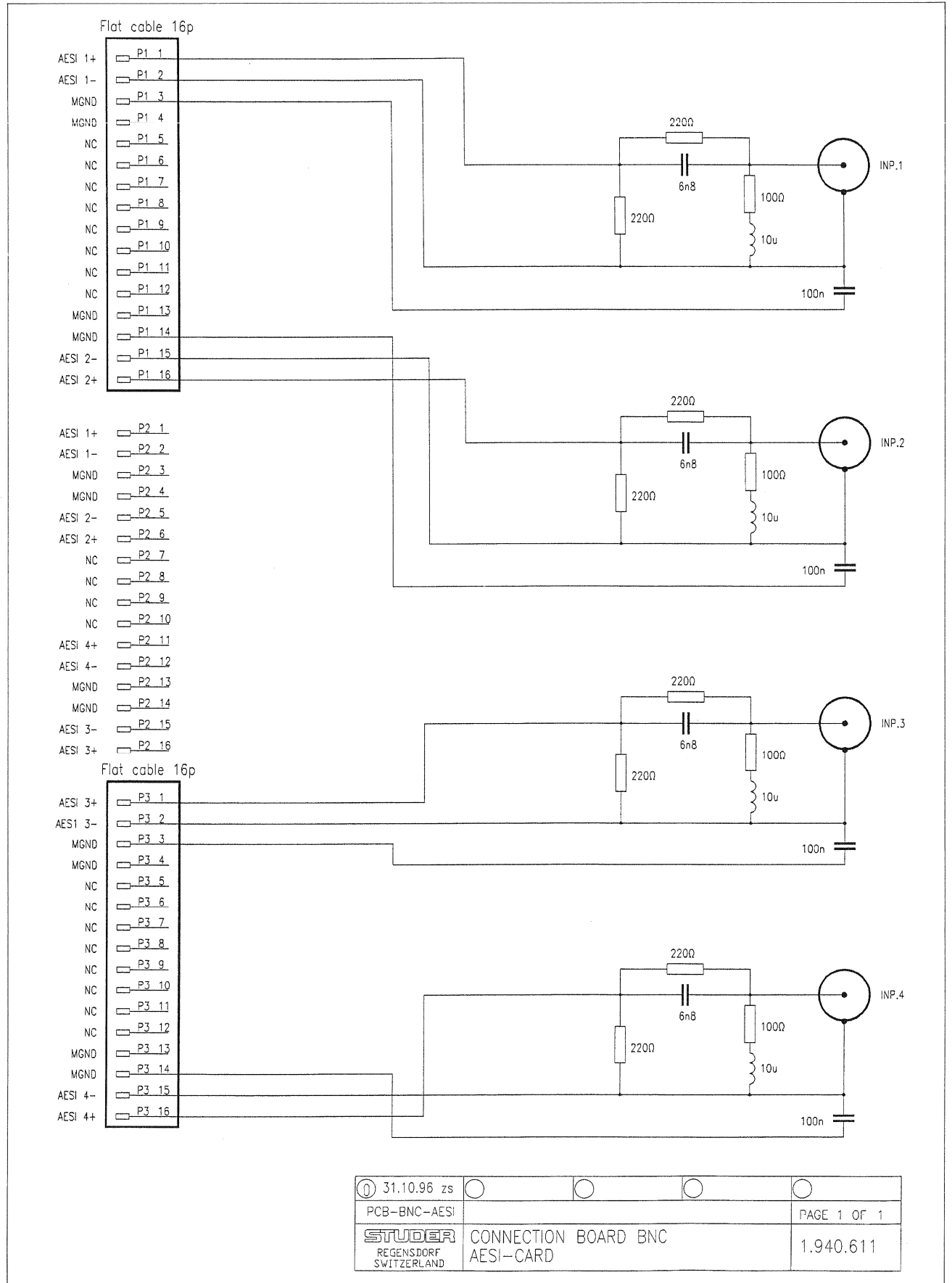
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**STUDER**  
REGENSDORF  
ZÜRICH

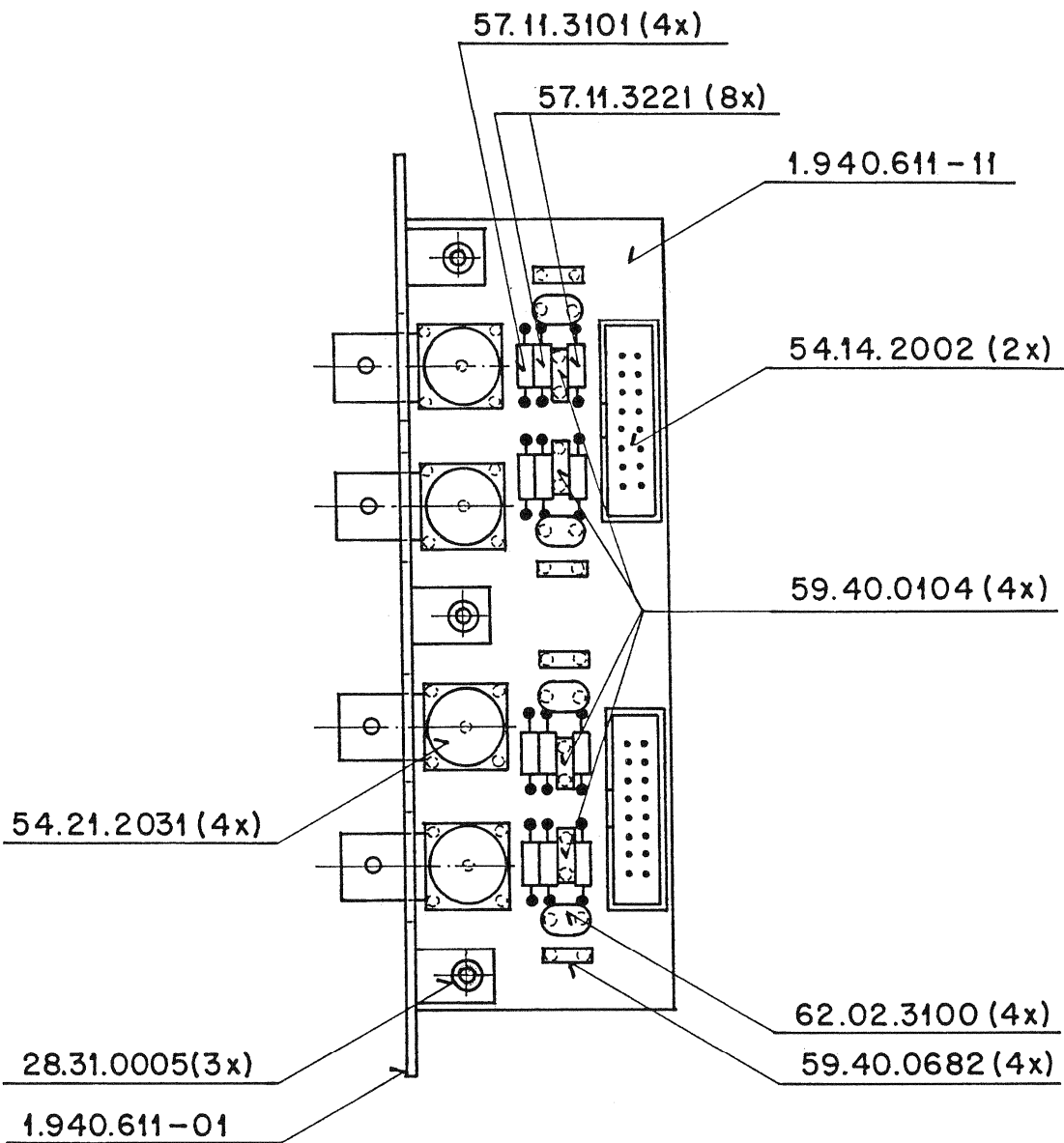
Benennung: **S 39 M CONNECTION UNIT**

Nummer: **1.940.610-00**

Connection Board BNC AESI-Card 1.940.611.00



**Connection Board BNC AESI-Card 1.940.611.00**



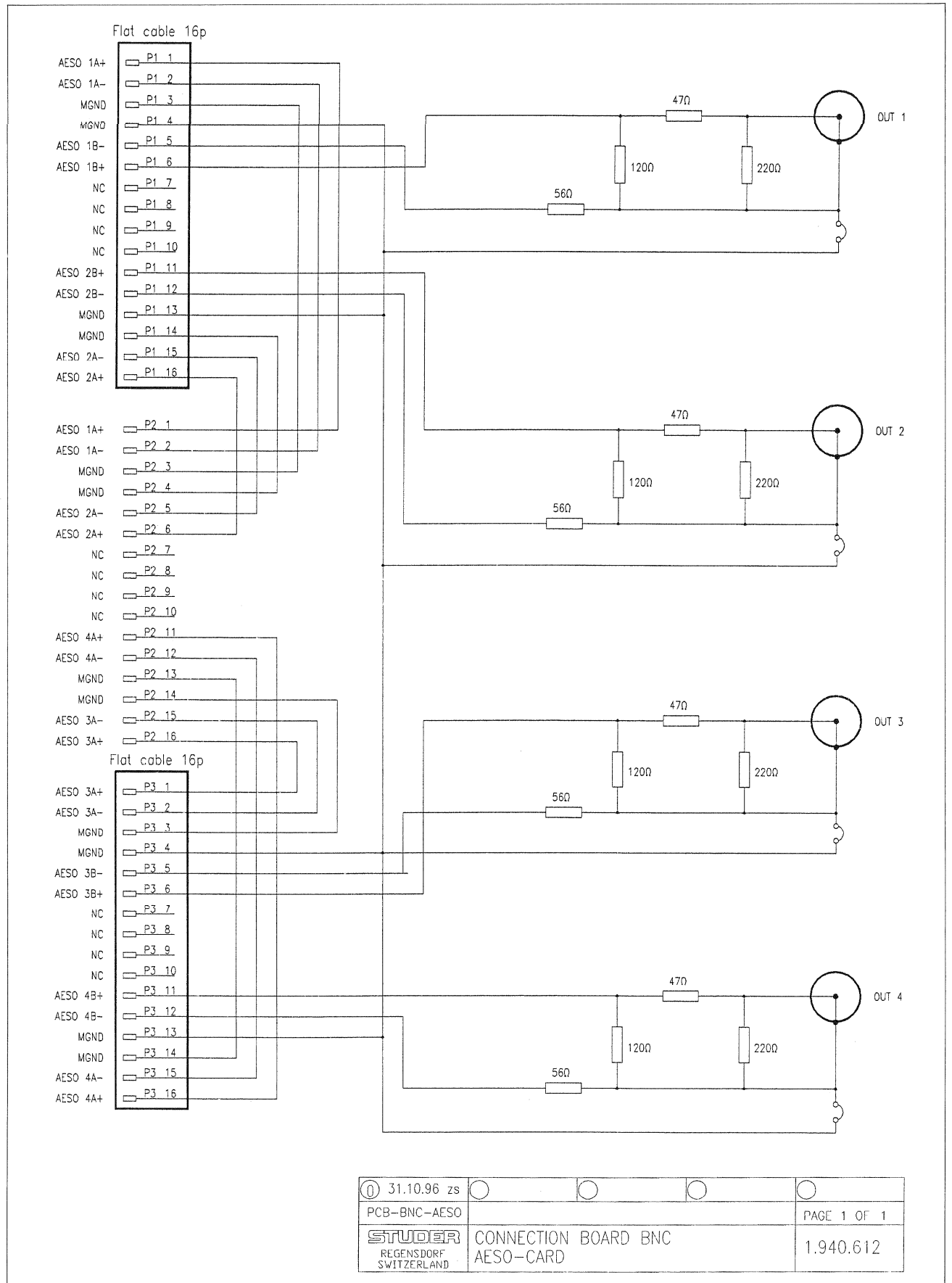
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Datum	Gez.	Gepr.	Ges.	Index	

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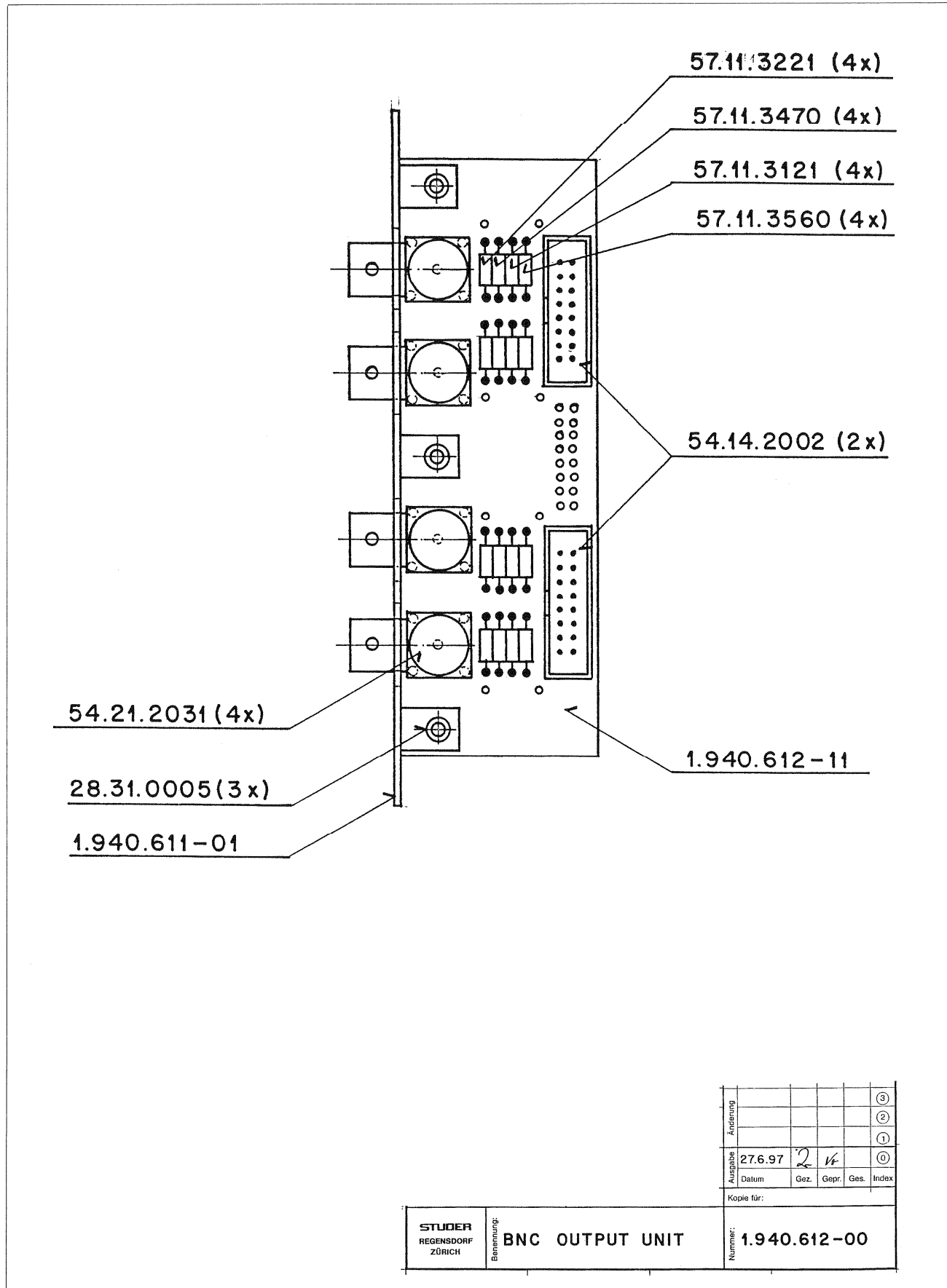
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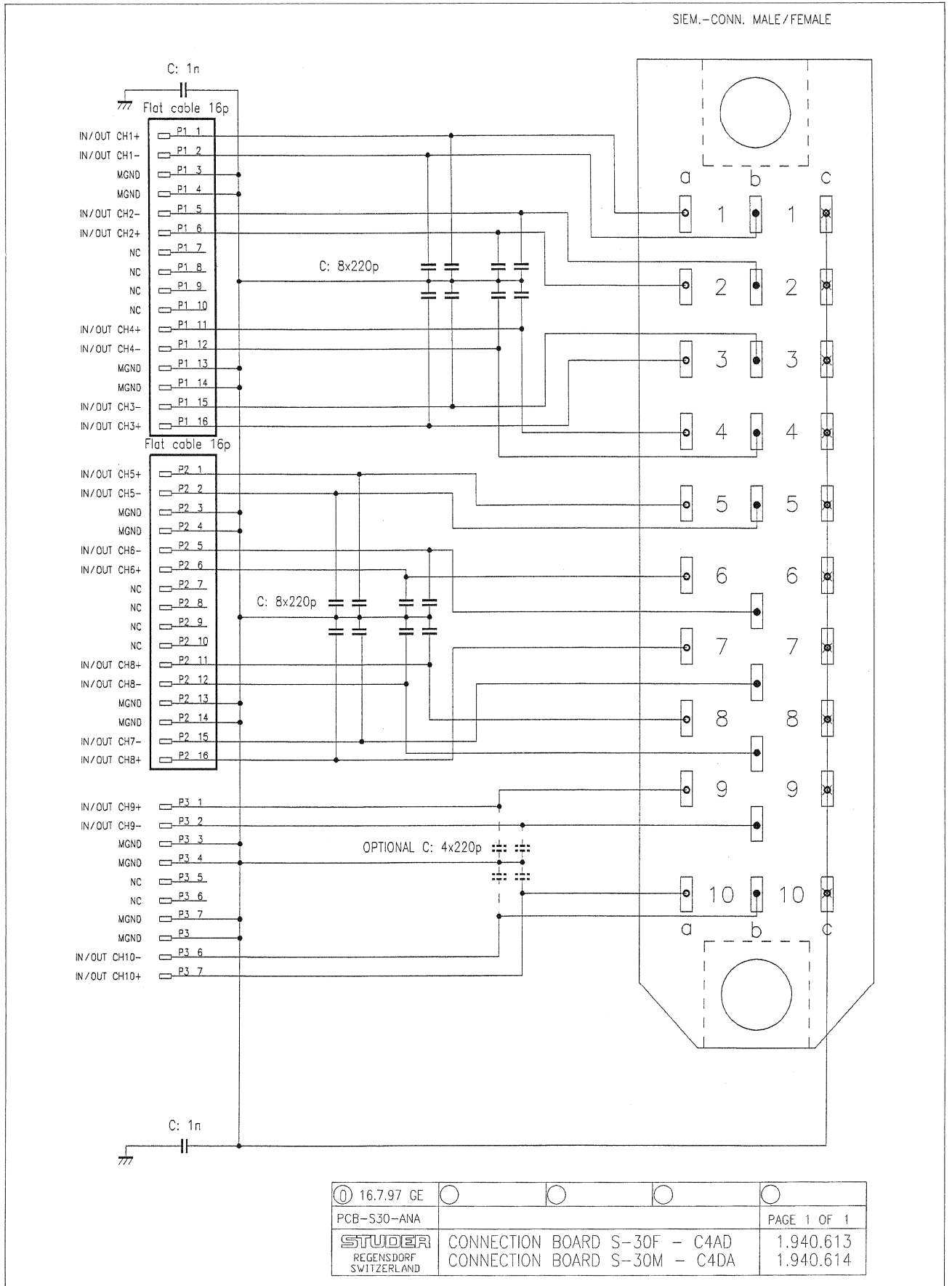
Connection Board BNC AESO-Card 1.940.612.00



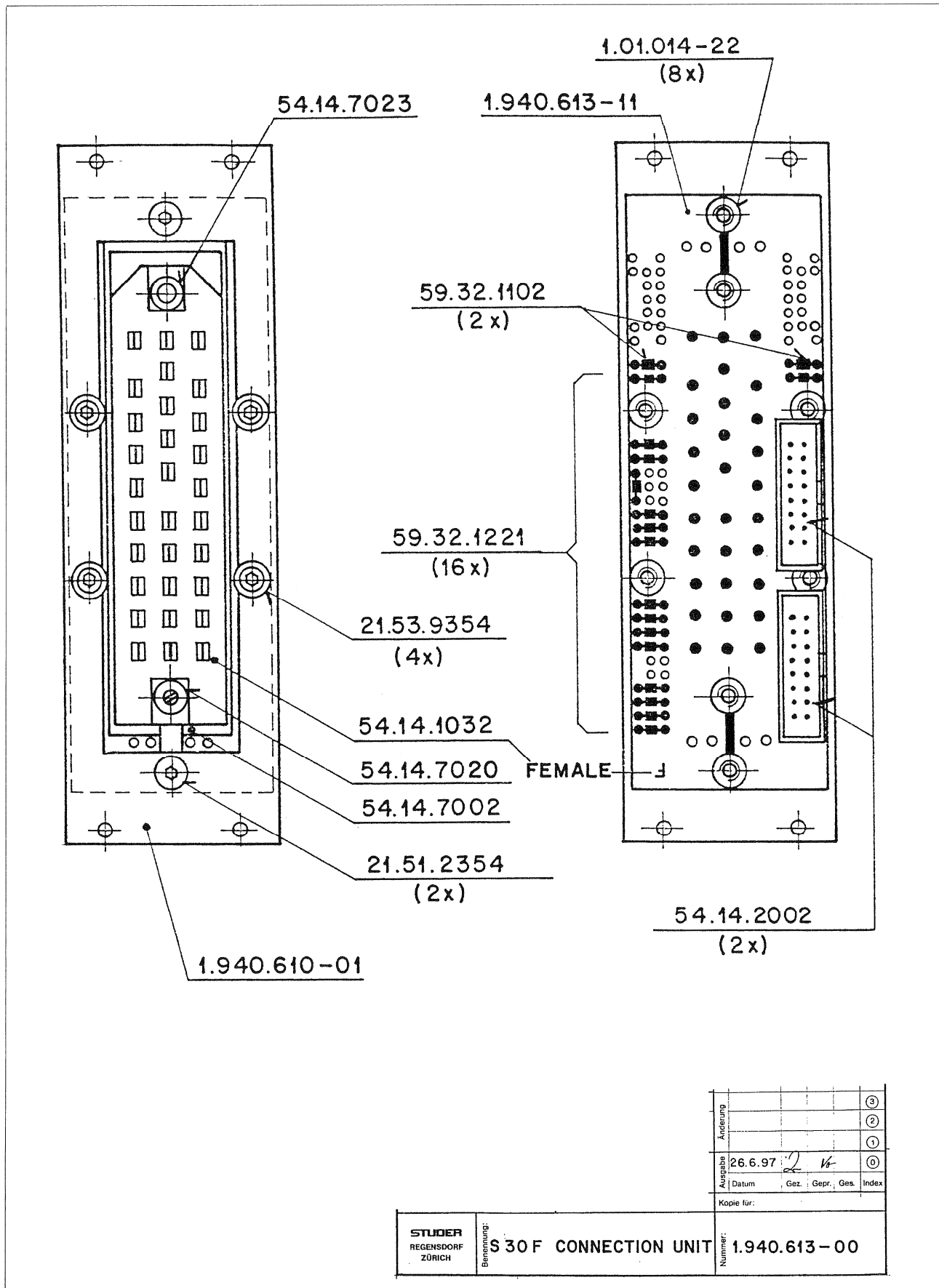
**Connection Board BNC AESO-Card 1.940.612.00**



**Connection Board S-30F - C4AD 1.940.613.00**  
**Connection Board S-30M - C4DA 1.940.614.00**



Connection Board S-30F - C4AD 1.940.613.00



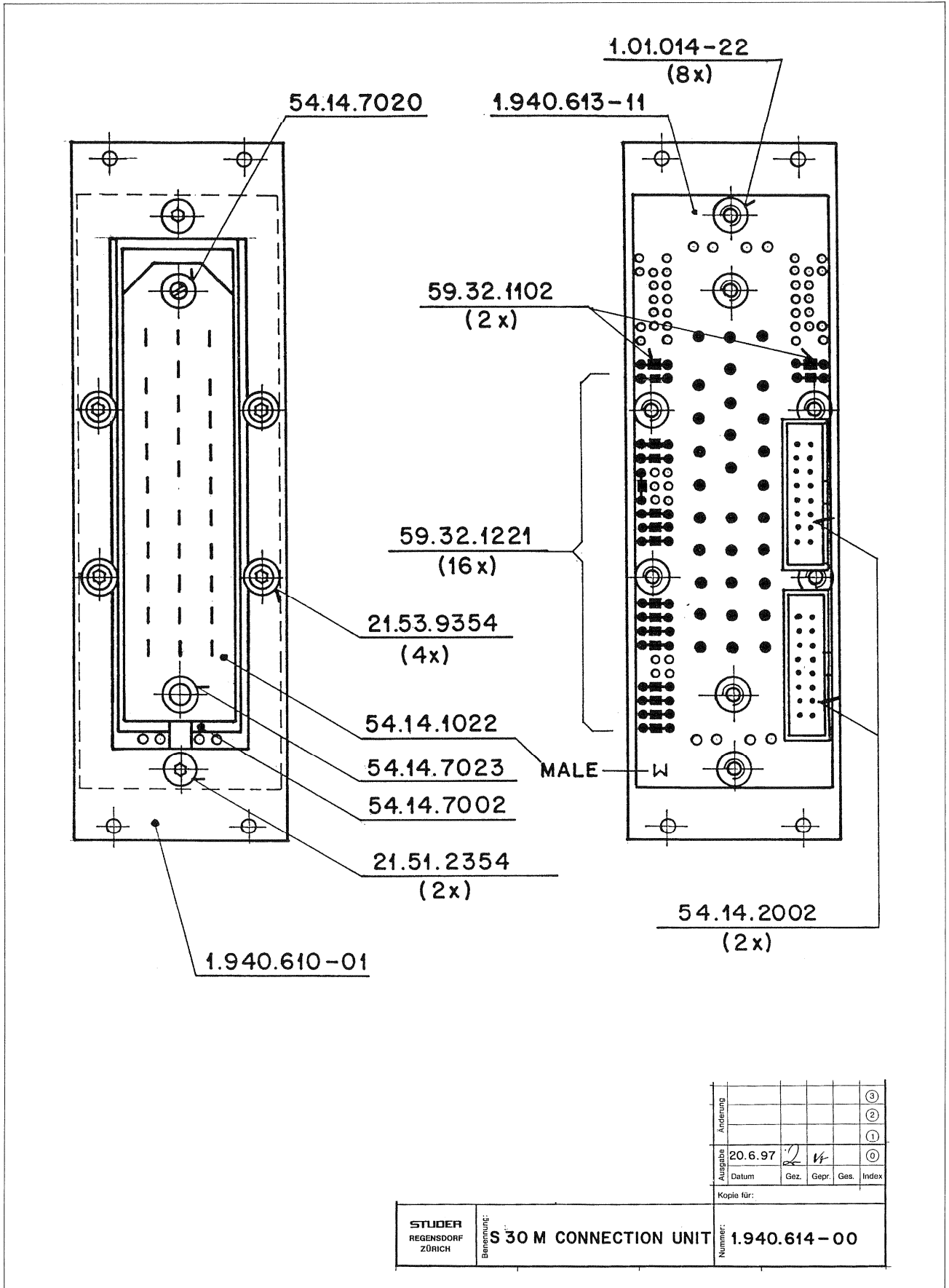
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Änderung				②
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Gez.		Gepr.	Ges.	Index

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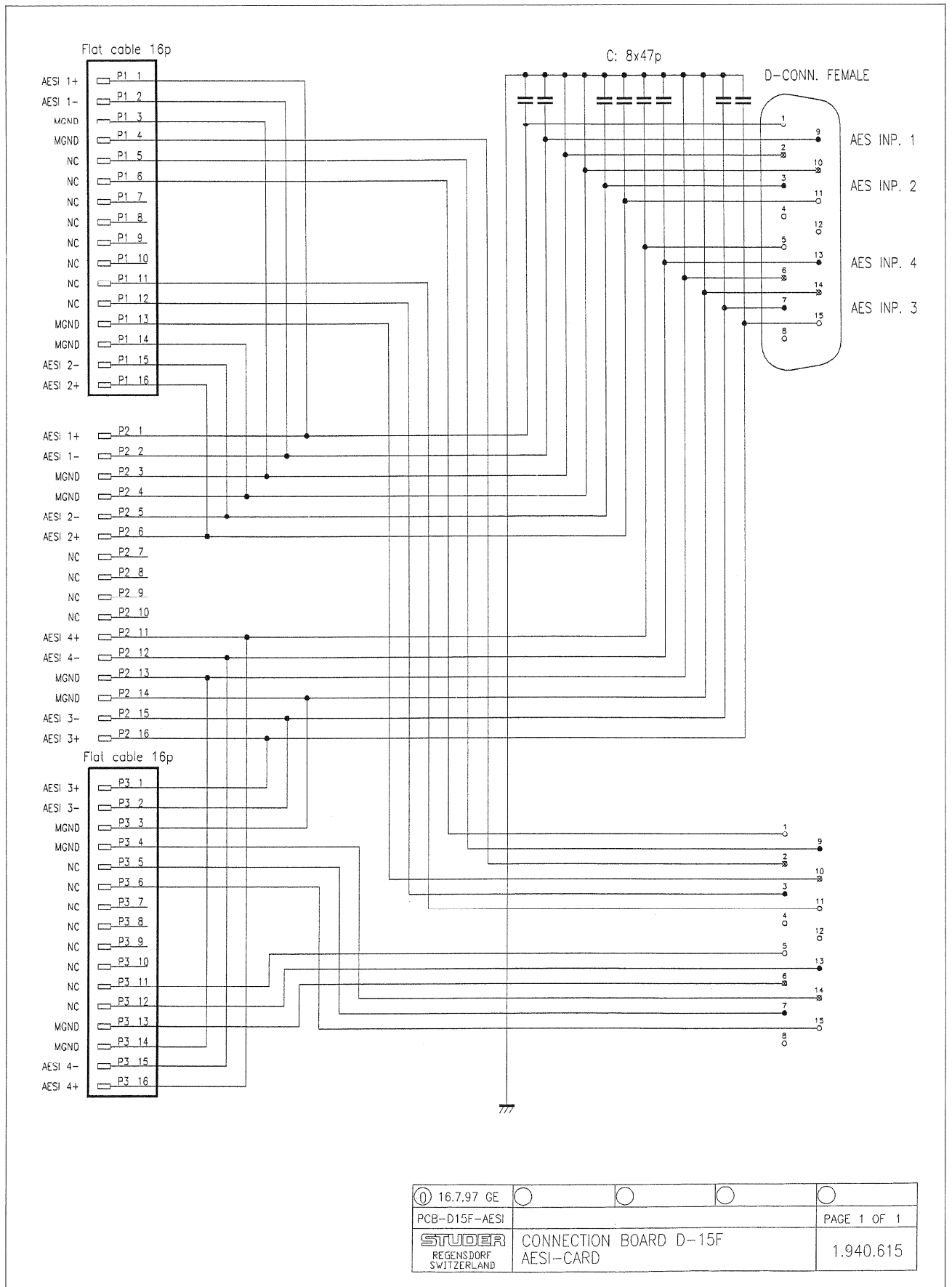
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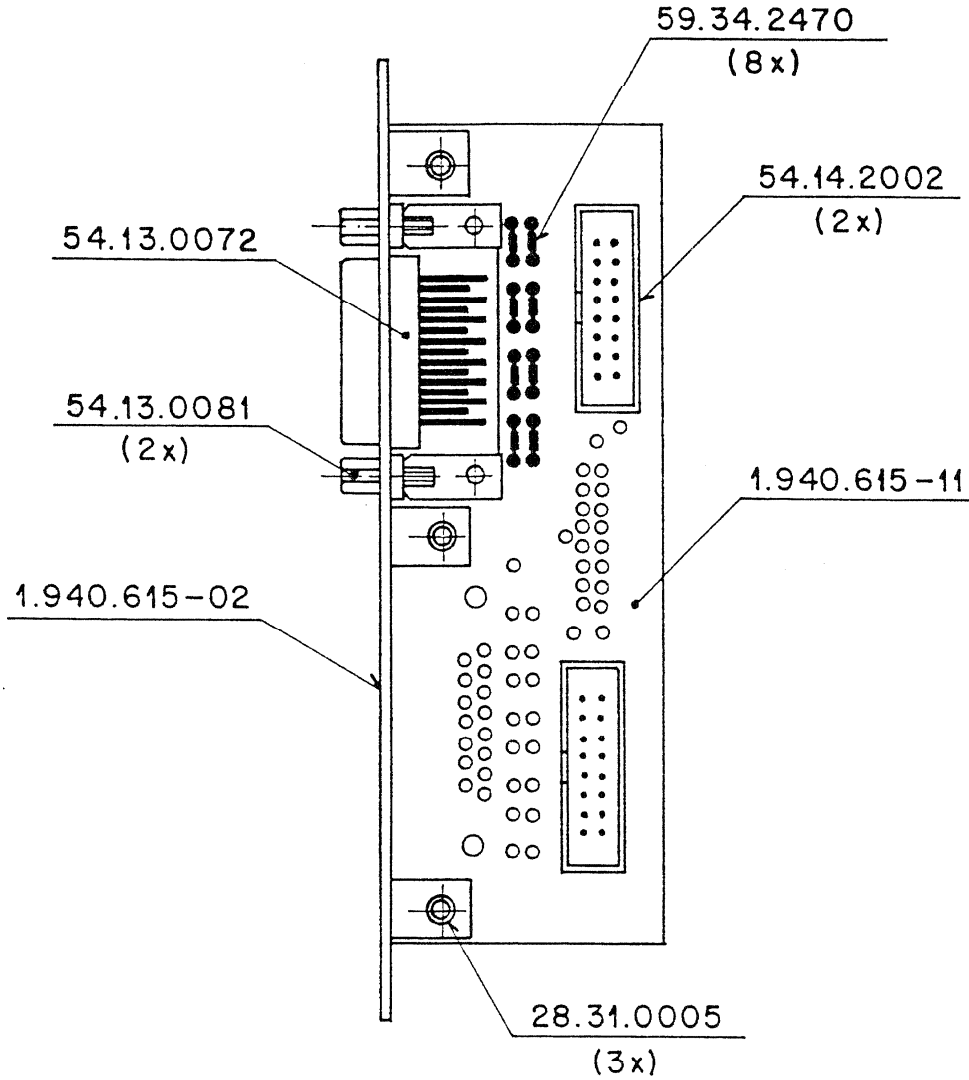
**Connection Board S-30M - C4DA 1.940.614.00**



Connection Board D-15F AESI-Card 1.940.615.00



**Connection Board D-15F AESI-Card 1.940.615.00**

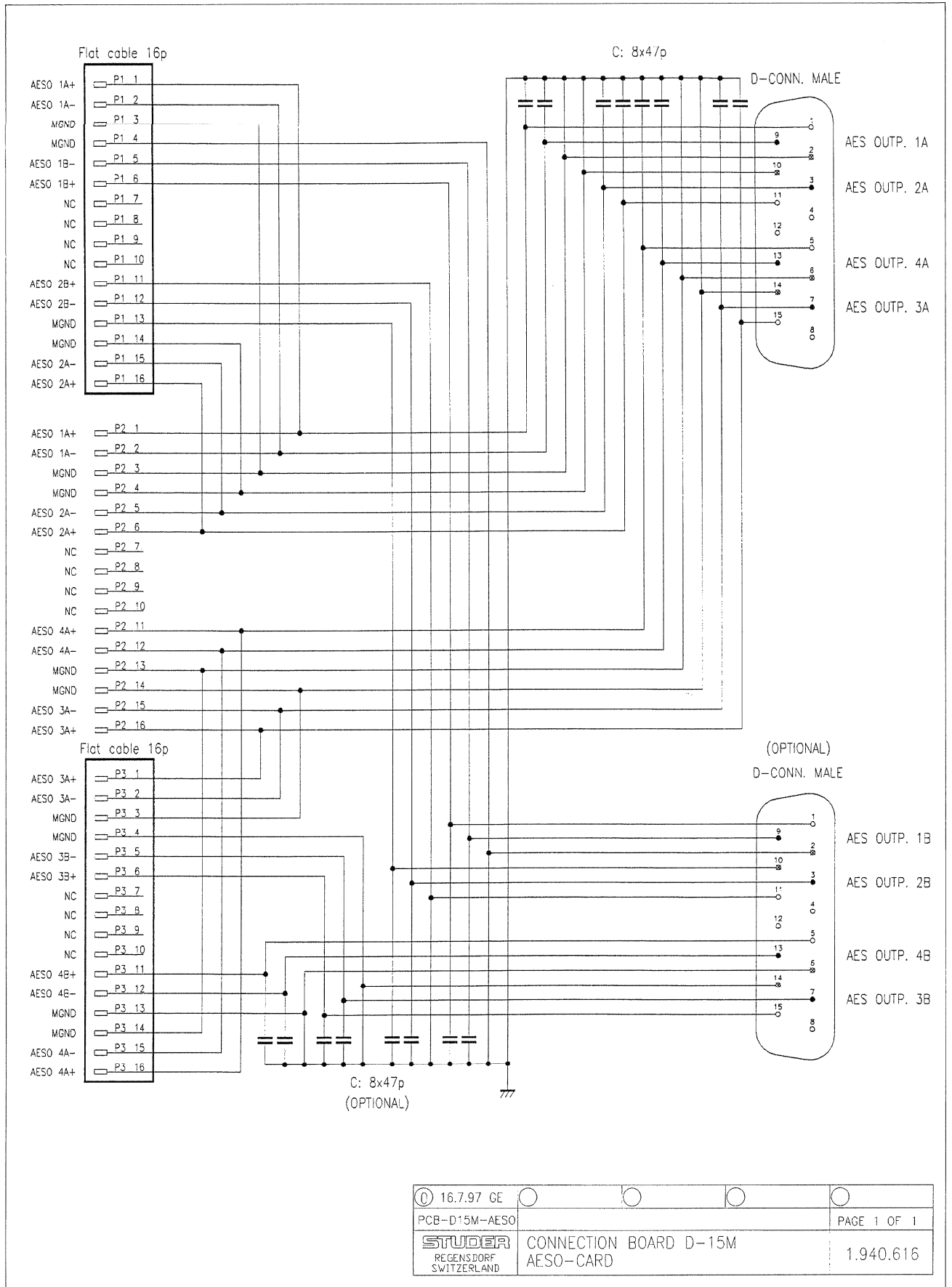


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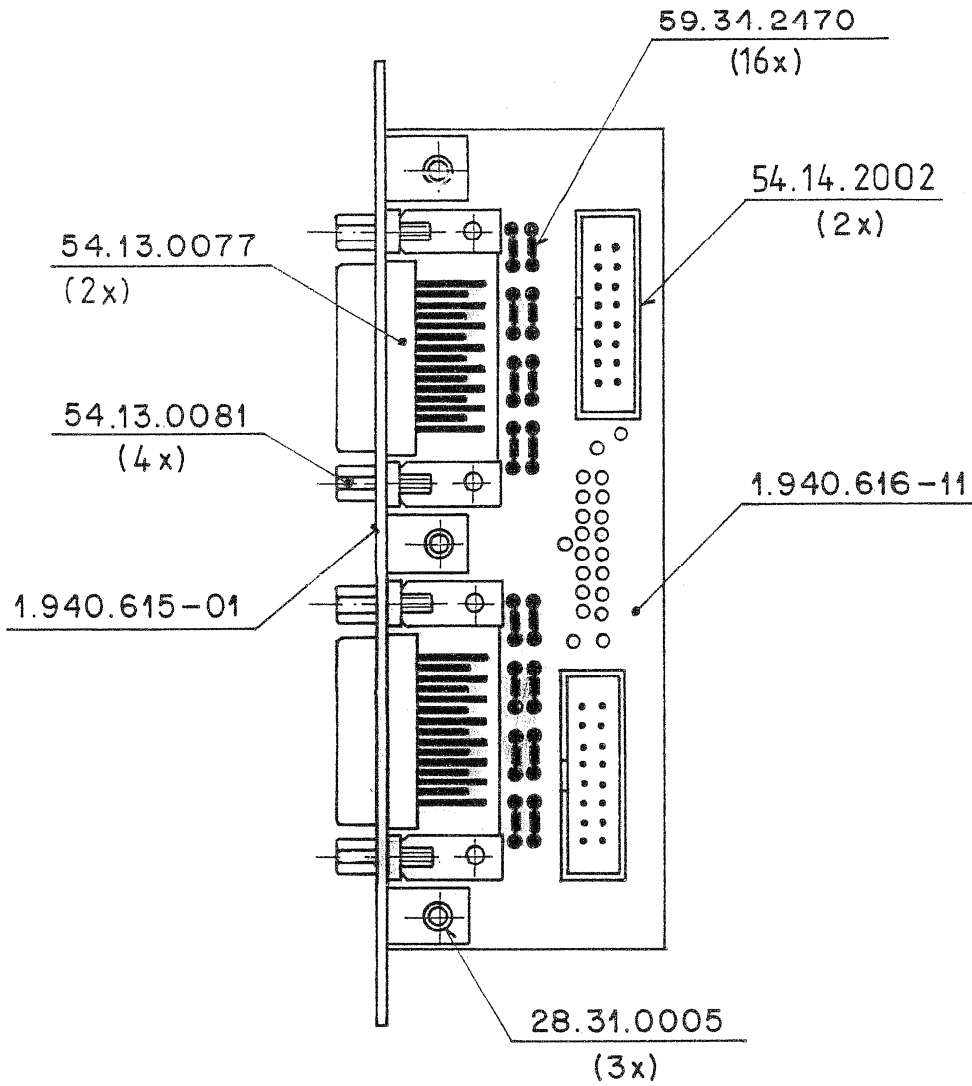
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**Connection Board D-15M AESO-Card 1.940.616**





**Connection Board D-15m AESO-Card 1.940.616.81**

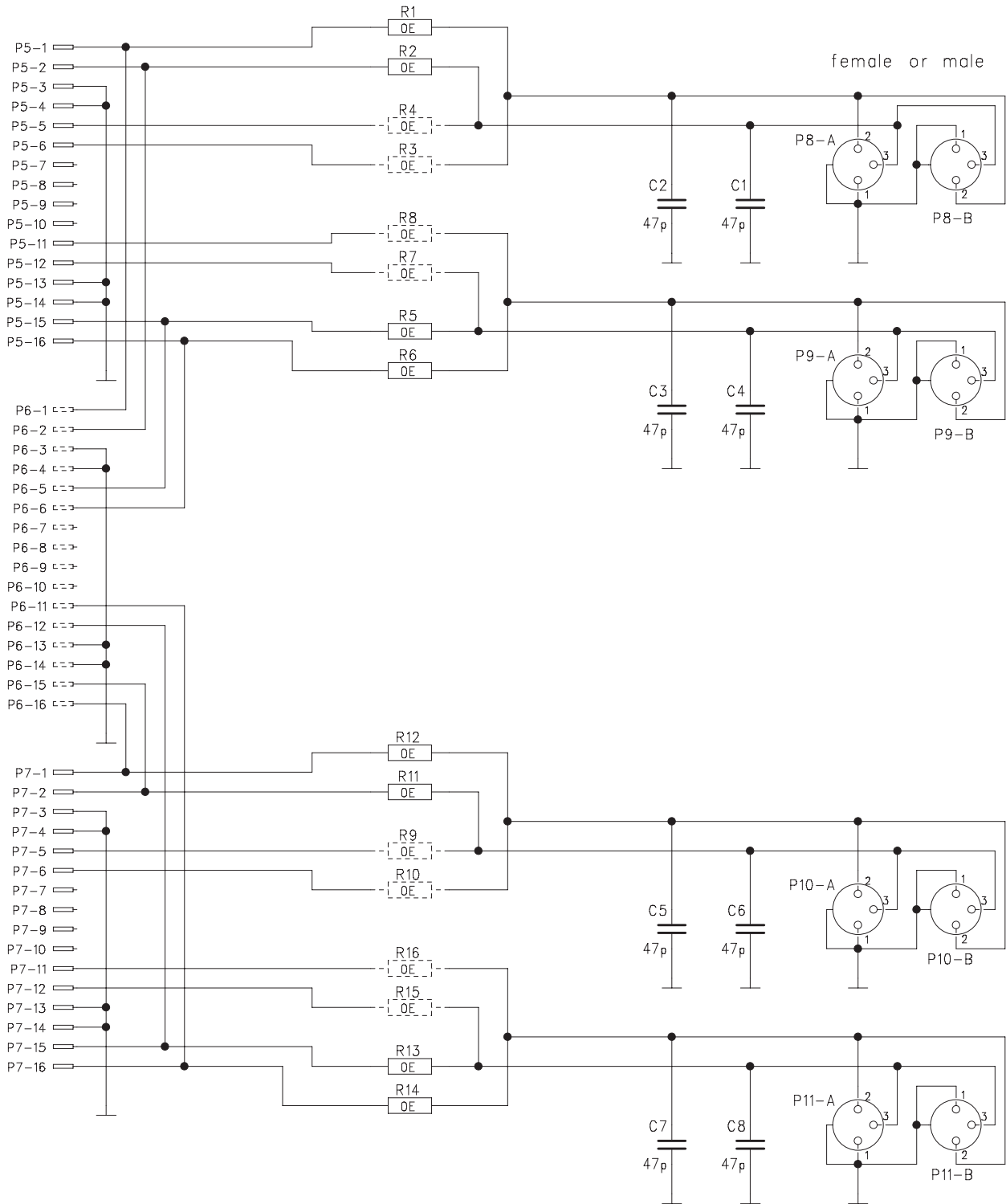


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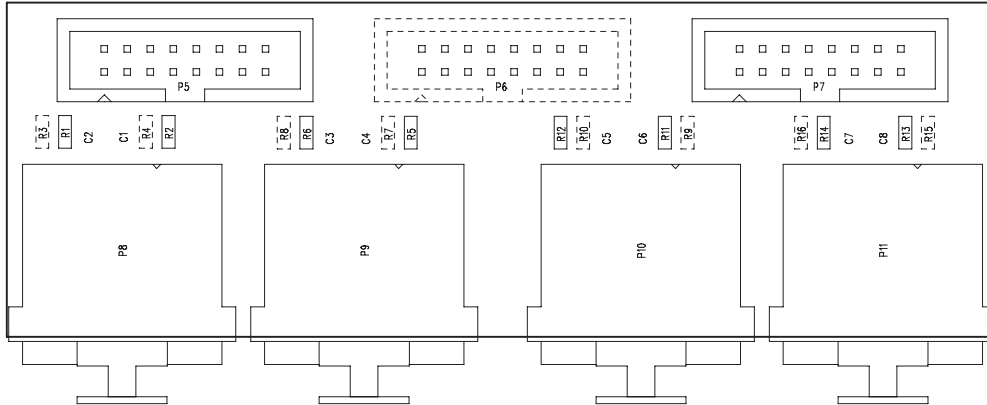
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**Connection Unit 4 × XLR3f (AES/EBU In) 1.940.617.82 ( 0 )**



**Connection Unit 4 × XLR3f (AES/EBU In) 1.940.617.82 ( 0)**

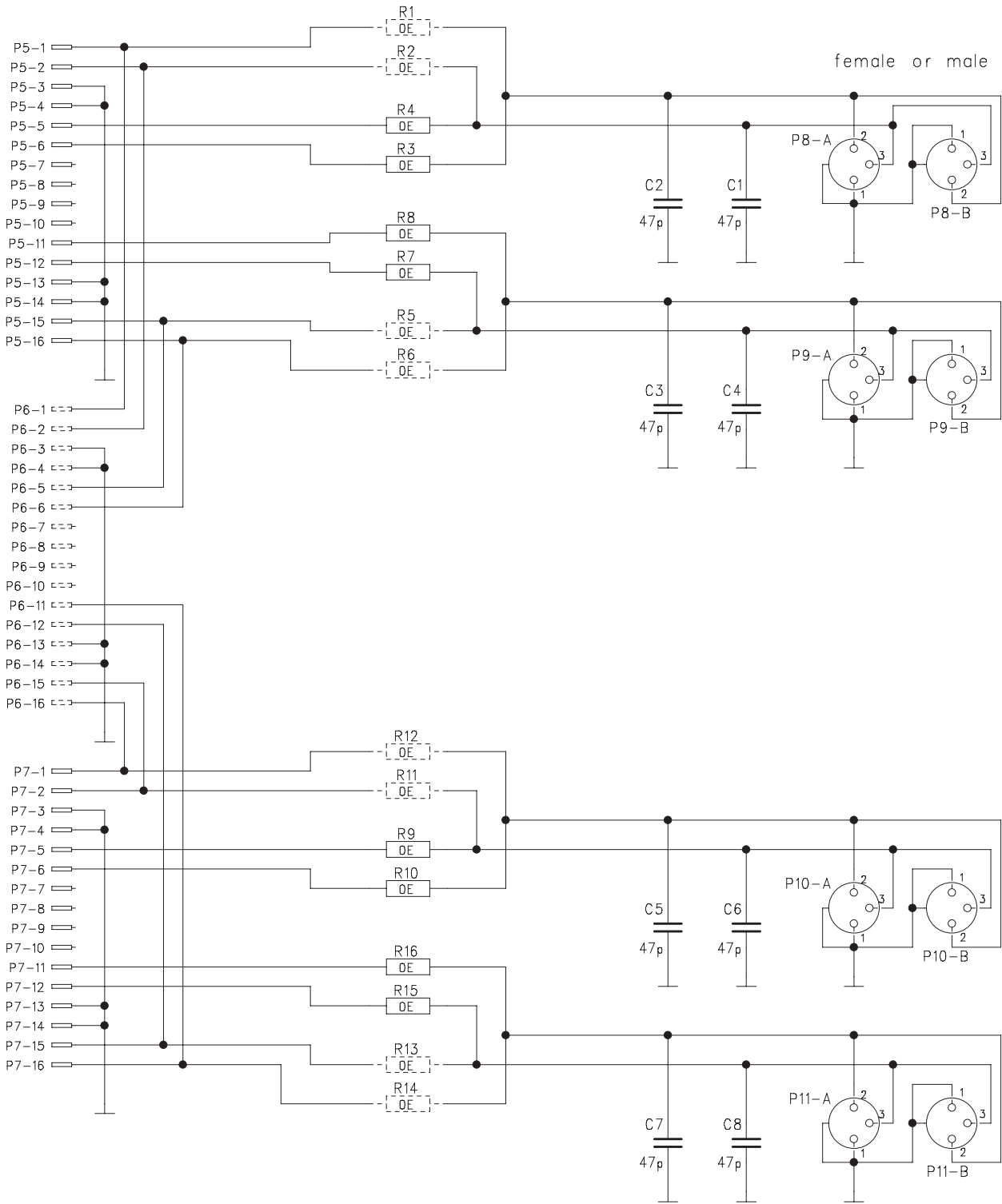


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STUDER		XLR Connection Unit		1.940.617.82
Part No.		Part No.		

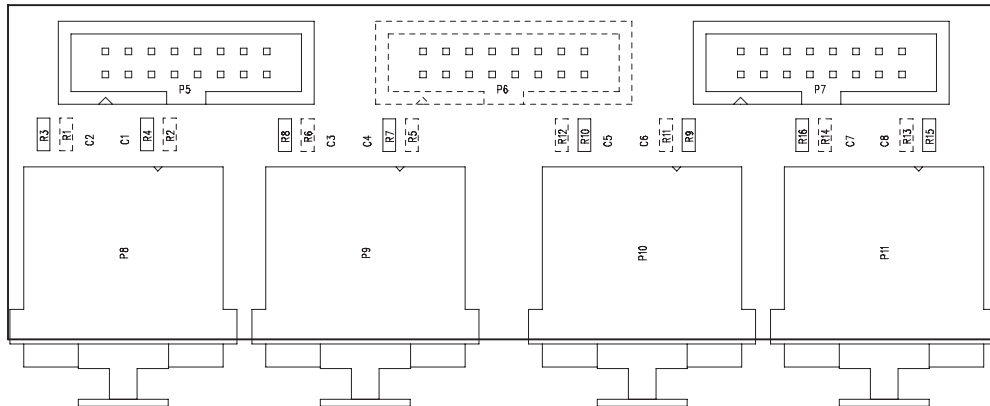
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0	C 2	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 3	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 4	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 5	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 6	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 7	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 8	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	MP 1	1.940.617.13	1 pce		XLR Connection Unit PCB
0	MP 2	1.940.617.04	1 pce		Nr.-Etikette 5 * 20
0	MP 3	1.940.617.01	1 pce		RUECKWAND XLR
0	MP 4	20.24.8754	8 pcs	2.9*6	L - Formschr. K-Torx, Zn bl
0	P 5	54.14.2002	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 6	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 7	54.14.2002	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 8	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	P 9	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	P 10	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	P 11	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	R 1	57.60.1000	1 pce	0R0	MF, 0204
0	R 2	57.60.1000	1 pce	0R0	MF, 0204
0	R 3	not used	1 pce	0R0	MF, 0204
0	R 4	not used	1 pce	0R0	MF, 0204
0	R 5	57.60.1000	1 pce	0R0	MF, 0204
0	R 6	57.60.1000	1 pce	0R0	MF, 0204
0	R 7	not used	1 pce	0R0	MF, 0204
0	R 8	not used	1 pce	0R0	MF, 0204
0	R 9	not used	1 pce	0R0	MF, 0204
0	R 10	not used	1 pce	0R0	MF, 0204
0	R 11	57.60.1000	1 pce	0R0	MF, 0204
0	R 12	57.60.1000	1 pce	0R0	MF, 0204
0	R 13	57.60.1000	1 pce	0R0	MF, 0204
0	R 14	57.60.1000	1 pce	0R0	MF, 0204
0	R 15	not used	1 pce	0R0	MF, 0204
0	R 16	not used	1 pce	0R0	MF, 0204

End of List

**Connection Unit 4 × XLR3m (AES/EBU Out) 1.940.618.82 ( 0 )**



**Connection Unit 4 × XLR3m (AES/EBU Out) 1.940.618.82 ( 0 )**



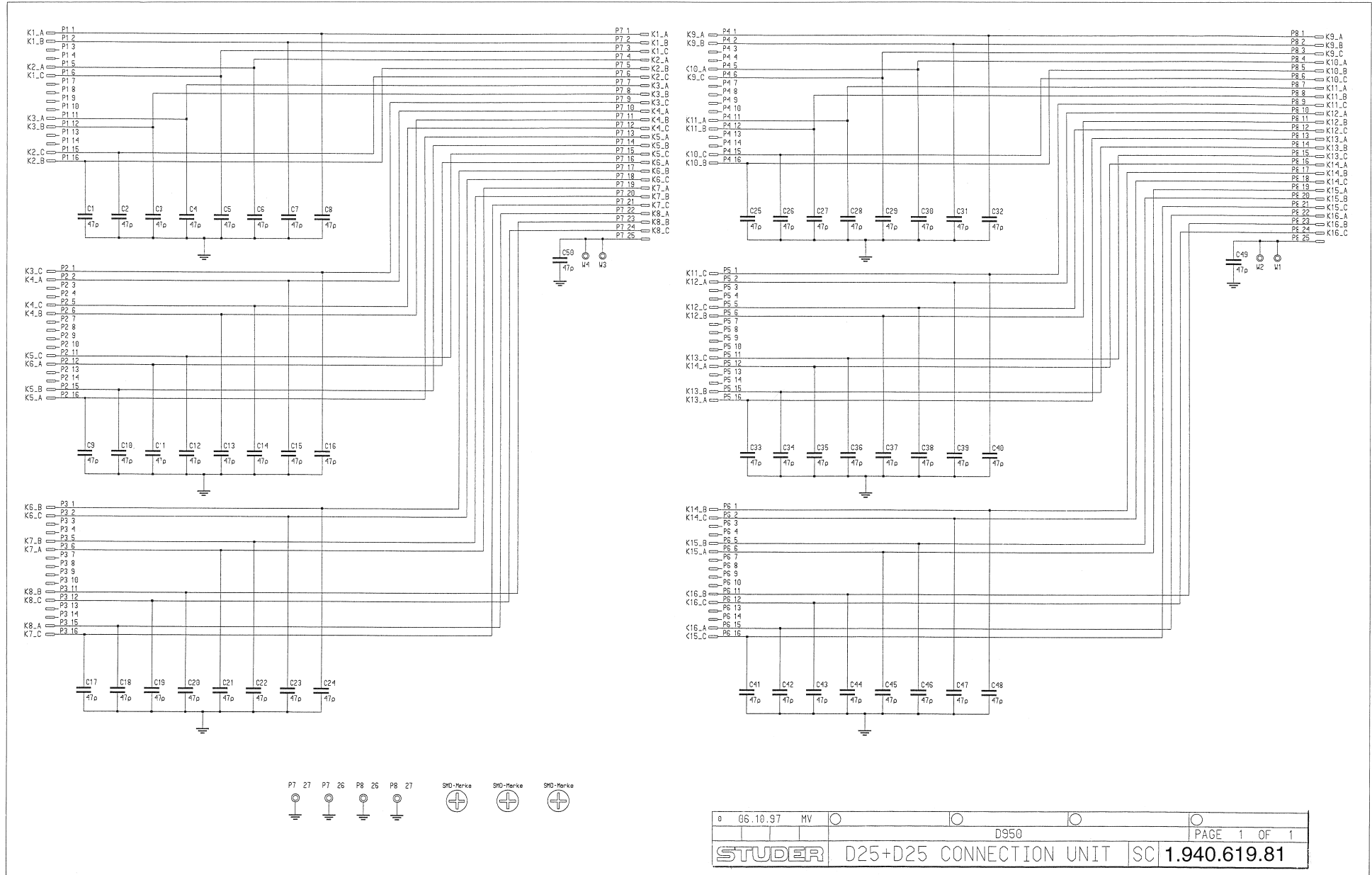
Date 20.01.2004	WO	ML	EB
Issue 0	Page 1	Order 1	Time / 1
Part No. 1.940.618.82	1.940.618.82		

**STUDER** XLR Connection Unit

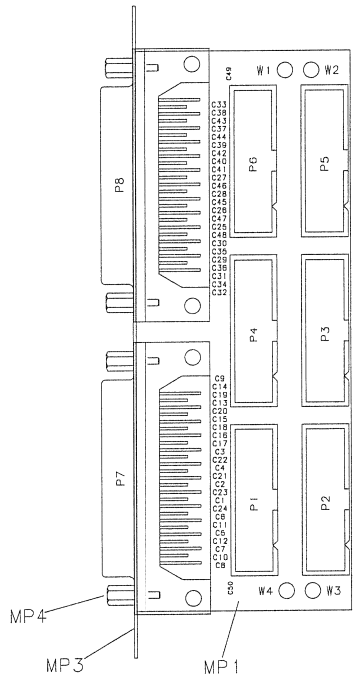
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 2	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 3	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 4	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 5	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 6	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 7	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 8	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	MP 1	1.940.617.13	1 pce		XLR Connection Unit PCB
0	MP 2	1.940.618.04	1 pce		Nr.-Etikette 5 * 20
0	MP 3	1.940.617.01	1 pce		RUECKWAND XLR
0	MP 4	20.24.8754	8 pcs	2.9*6	L - Formschr. K-Torx, Zn bl
0	P 5	54.14.2002	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 6	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 7	54.14.2002	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 8	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 9	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 10	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 11	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	R 1	not used	1 pce	0R0	MF, 0204
0	R 2	not used	1 pce	0R0	MF, 0204
0	R 3	57.60.1000	1 pce	0R0	MF, 0204
0	R 4	57.60.1000	1 pce	0R0	MF, 0204
0	R 5	not used	1 pce	0R0	MF, 0204
0	R 6	not used	1 pce	0R0	MF, 0204
0	R 7	57.60.1000	1 pce	0R0	MF, 0204
0	R 8	57.60.1000	1 pce	0R0	MF, 0204
0	R 9	57.60.1000	1 pce	0R0	MF, 0204
0	R 10	57.60.1000	1 pce	0R0	MF, 0204
0	R 11	not used	1 pce	0R0	MF, 0204
0	R 12	not used	1 pce	0R0	MF, 0204
0	R 13	not used	1 pce	0R0	MF, 0204
0	R 14	not used	1 pce	0R0	MF, 0204
0	R 15	57.60.1000	1 pce	0R0	MF, 0204
0	R 16	57.60.1000	1 pce	0R0	MF, 0204

End of List

D25 + D25 Connection Unit 1.940.619.81



D25 + D25 Connection Unit 1.940.619.81



Idx	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 2	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 3	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 4	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 5	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 6	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 7	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 8	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 9	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 10	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 11	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 12	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 13	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 14	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 15	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 16	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 17	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 18	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 19	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 20	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 21	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 22	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 23	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 24	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 25	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 26	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 27	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 28	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 29	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 30	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 31	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 32	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 33	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 34	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 35	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 36	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 37	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 38	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 39	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 40	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 41	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 42	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 43	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 44	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 45	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 46	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 47	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 48	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 49	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	C 50	59.60.2241	47p	CER 50V, 5%, COG, 0603	
0	MP 1	1.940.619.12	1 pcs		D25+D25 Connection PCB
0	MP 2	1.940.619.04	1 pcs		Nr.-Etikette 5 * 20
0	MP 3	1.940.619.02	1 pcs		Rückwand D25+D25
0	MP 4	54.13.0081	4 pcs	4.85mm	Bolzen UNC 4-40
0	P 1	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 2	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 3	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 4	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 5	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 6	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 7	54.13.0073	25p		D-Sub, PCB, Winkel
0	P 8	54.13.0073	25p		D-Sub, PCB, Winkel

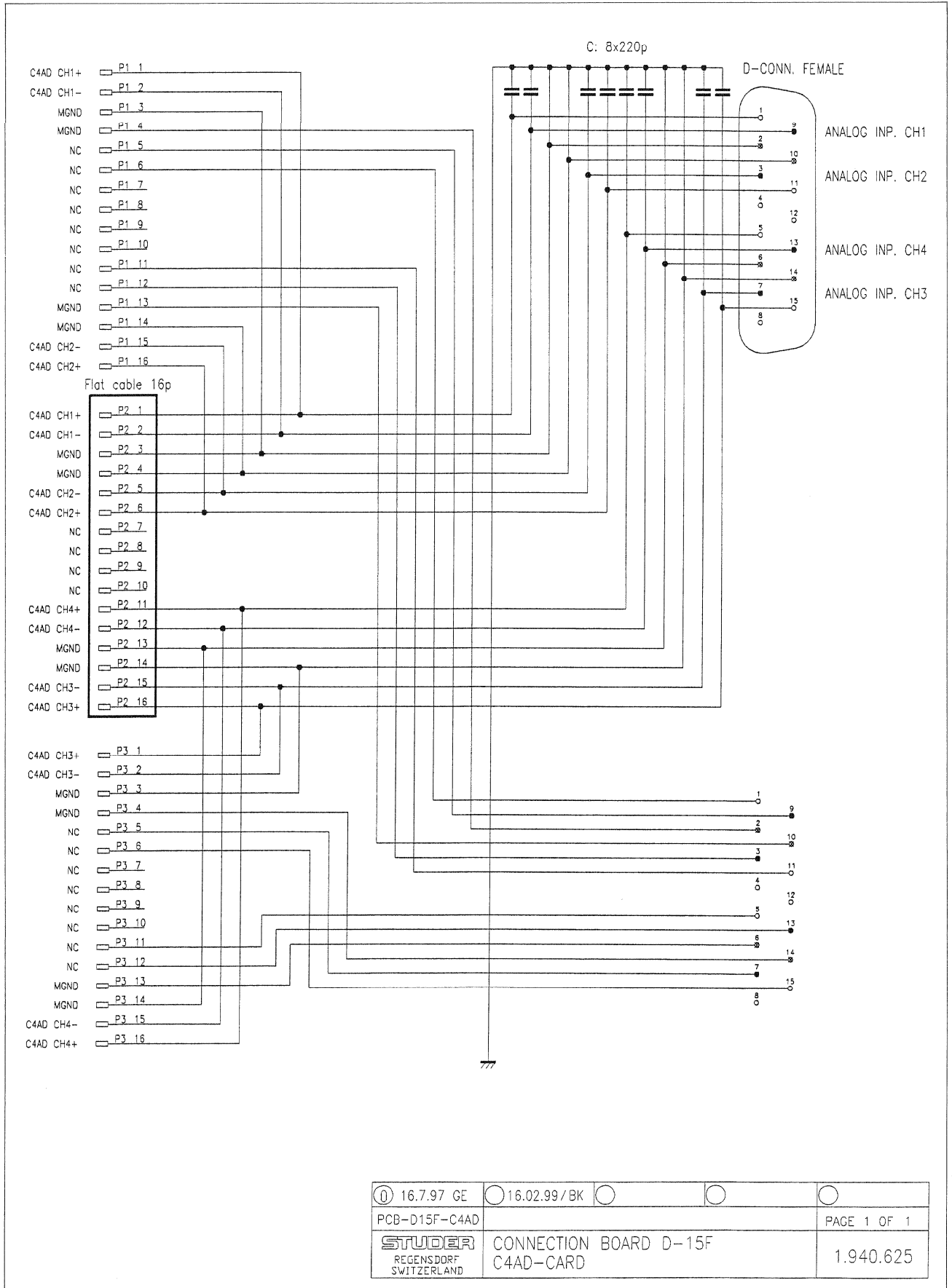
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Comments

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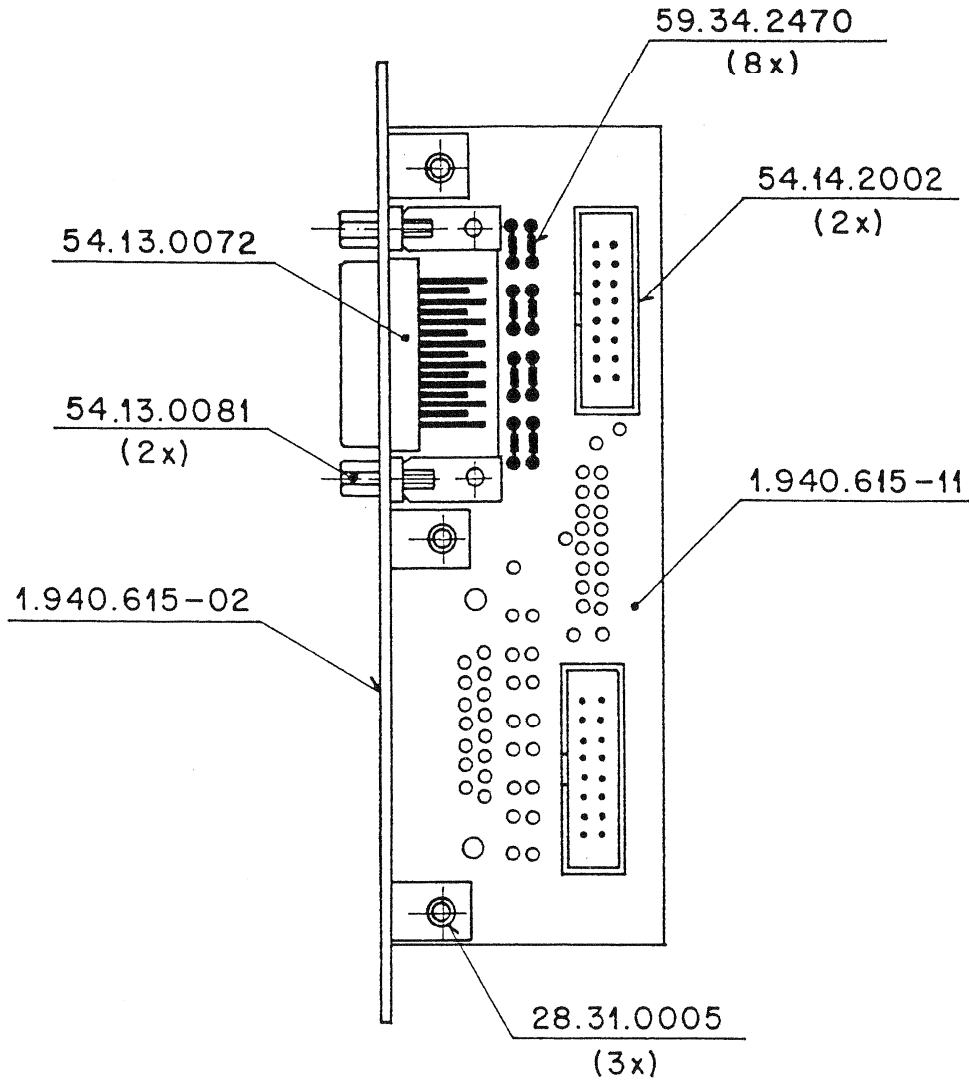
STUDER REGENSDORF D25+D25 CONNECTION UNIT 1.940.619.81

Connection Board D-15F C4AD-Card 1.940.625.00





**Connection Board D-15F C4AD-Card 1.940.625.00**



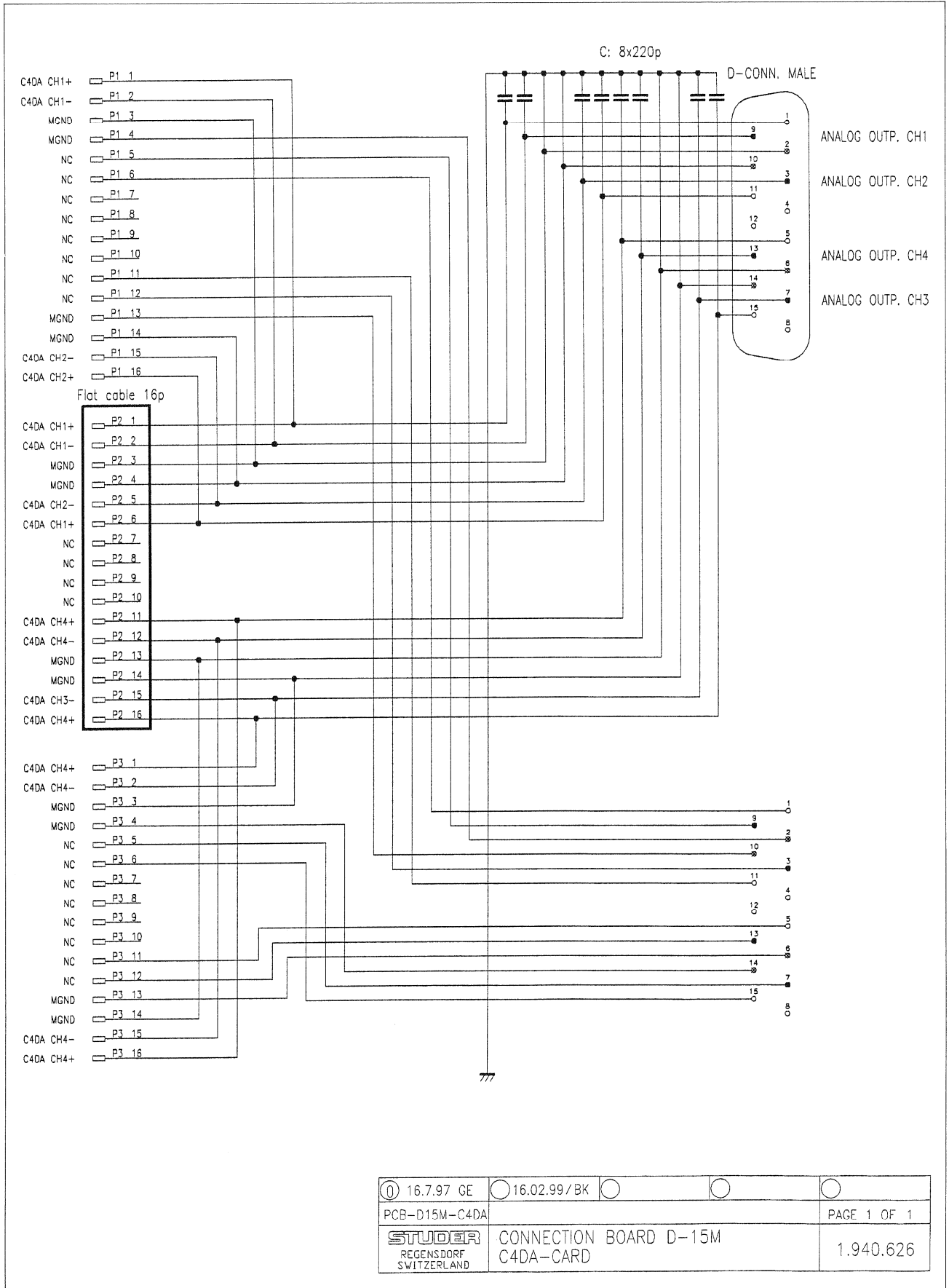
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Datum	20.2.97	Gez.	Gepr.	Ges.	Index

Kopie für:

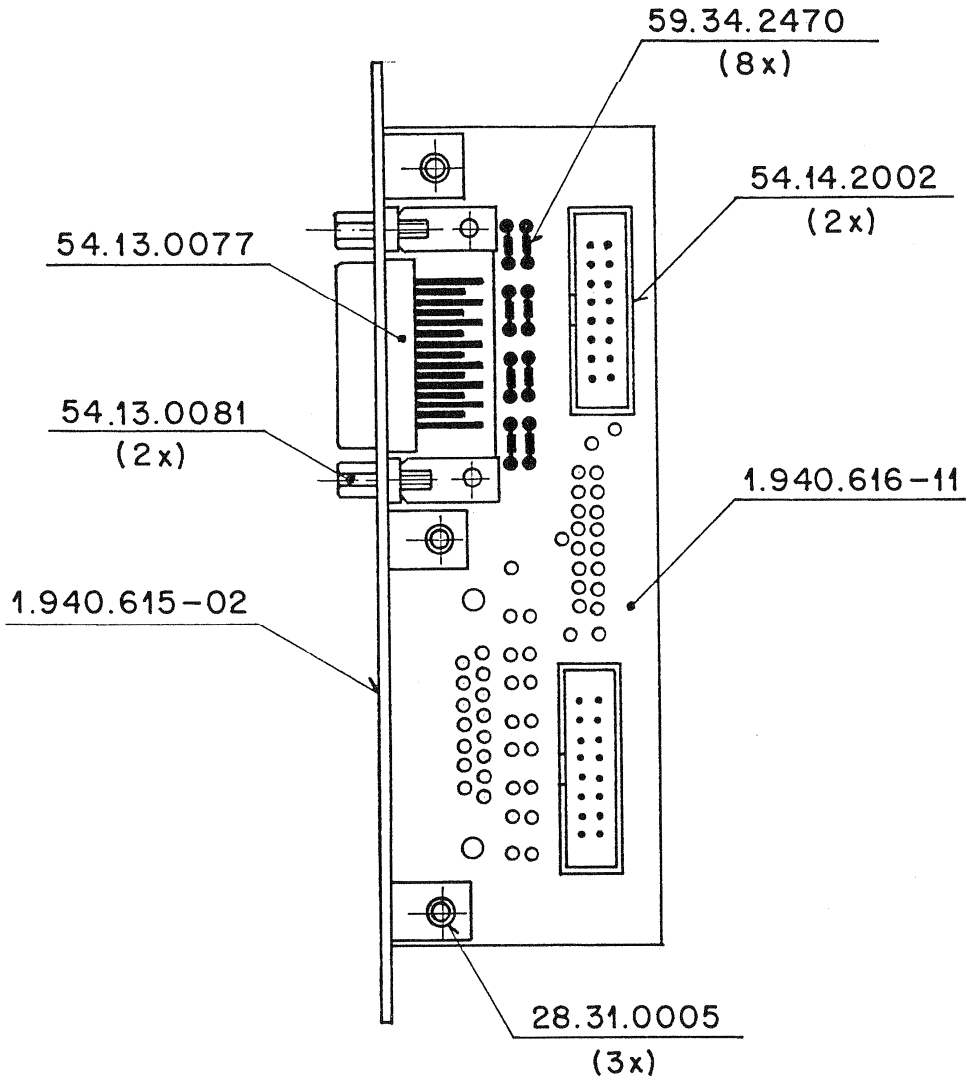
Numer: 1.940.625

<p><b>STUDER</b> REGENSDORF ZÜRICH</p>	<p>Benennung: <b>D 15 F CONNECTION UNIT</b></p>
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**Connection Board D-15m C4DA-Card 1.940.626.00**



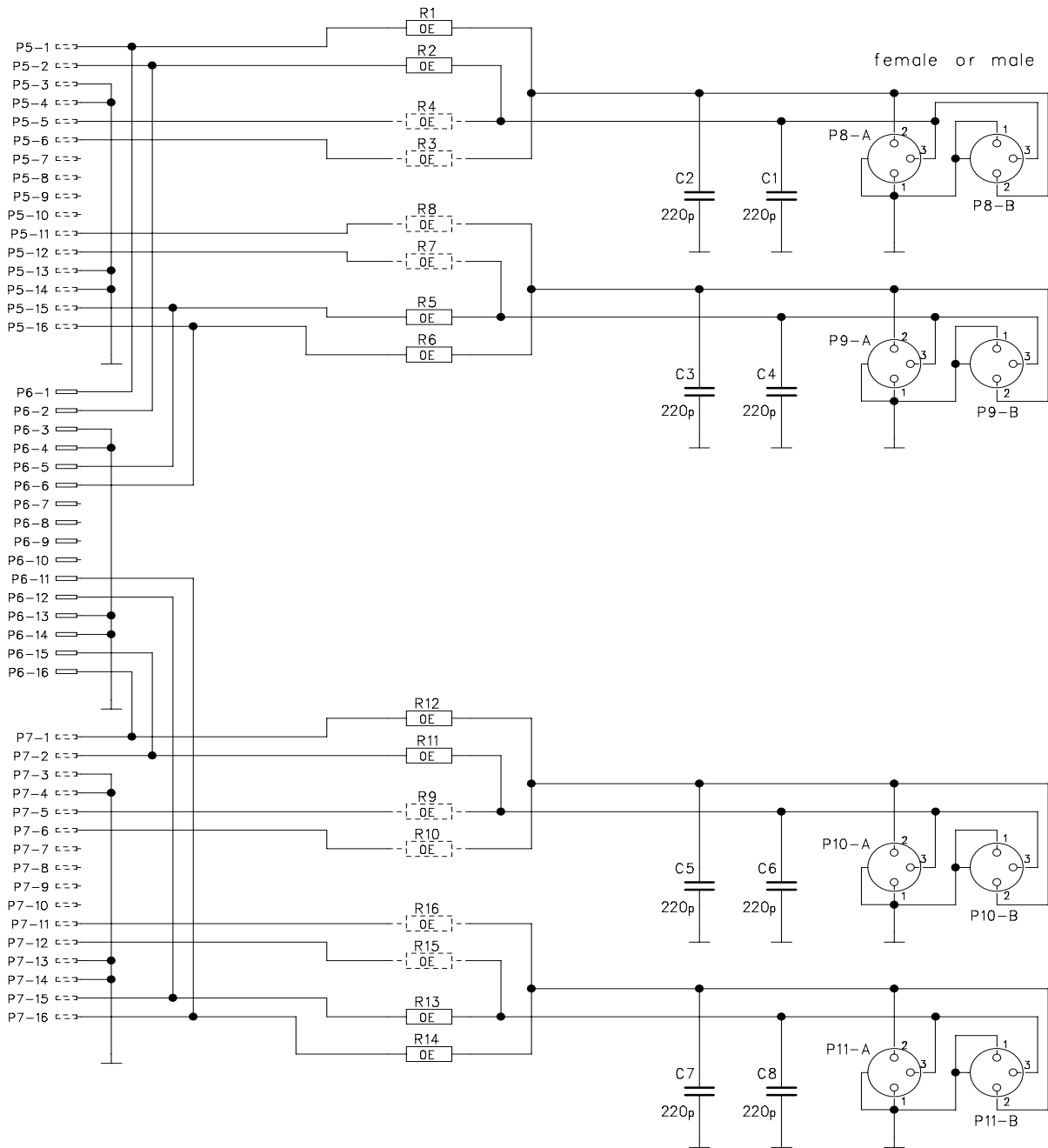
**Connection Board D-15m C4DA-Card 1.940.626.00**



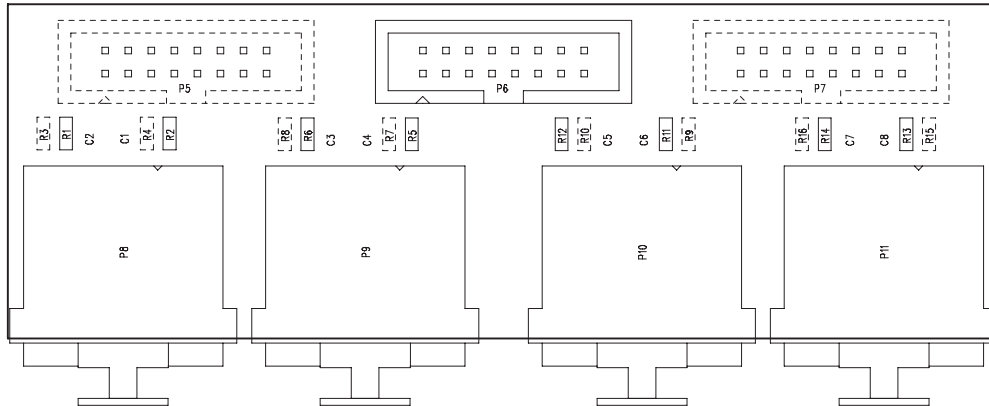
Änderung					③
					②
					①
Ausgabe	20.2.97	2	H		①
Datum	Gez.	Gepr.	Ges.	Index	

<b>STUDER</b> REGENSDORF ZÜRICH	Bezeichnung: <b>D 15 M CONNECTION UNIT</b>	Kopie für:
		Nummer: 1.940.626

Connection Unit 4 × XLR3f (Analog In) 1.940.627.82 ( 0 )



**Connection Unit 4 × XLR3f (Analog In) 1.940.627.82 ( 0 )**

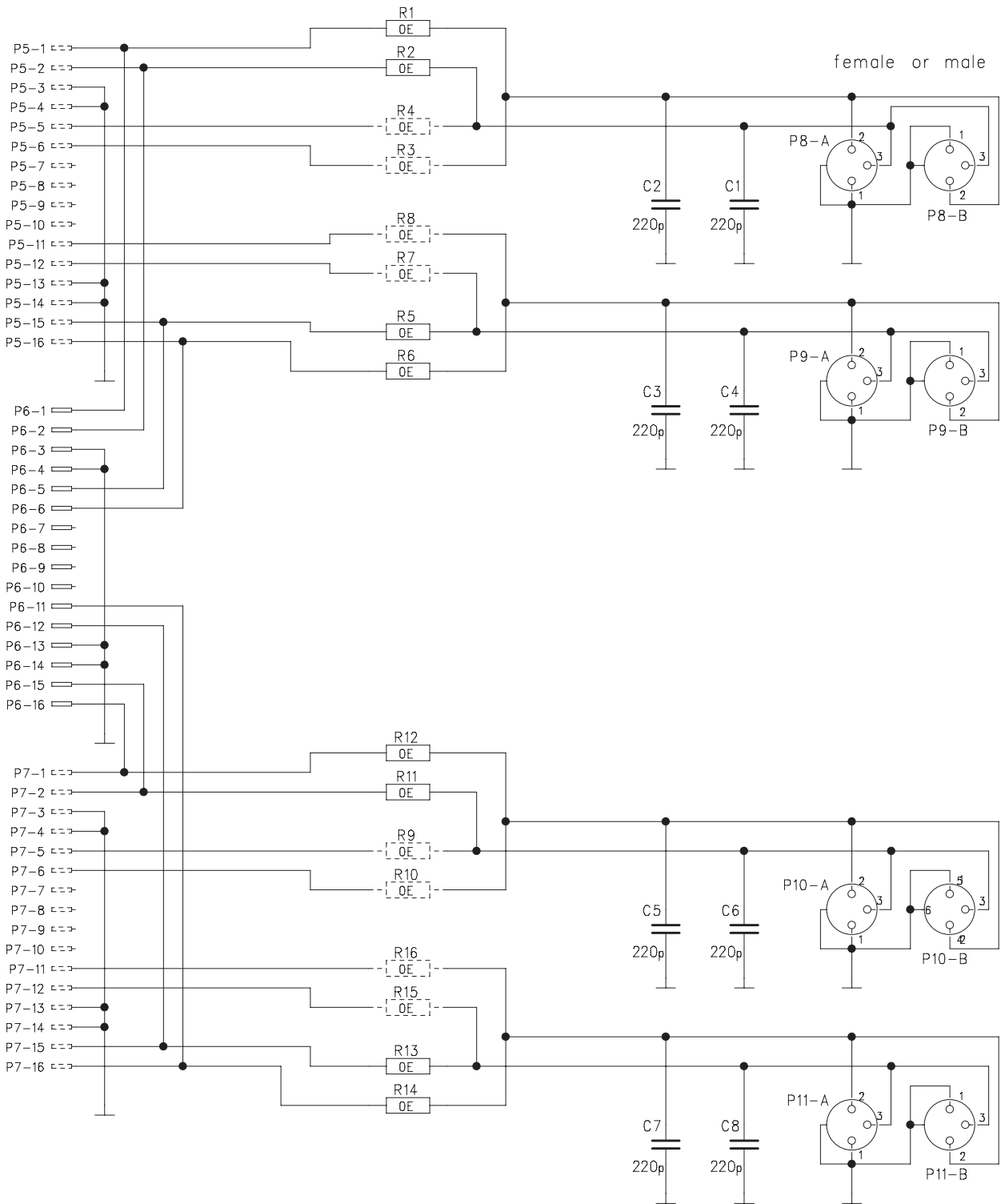


20.01.2004	WO	ML	EB
Doc. No.	File No.	Version	Doc. No.
0	1	/	1
STUDER		XLR Connection Unit	
		1.940.627.82	

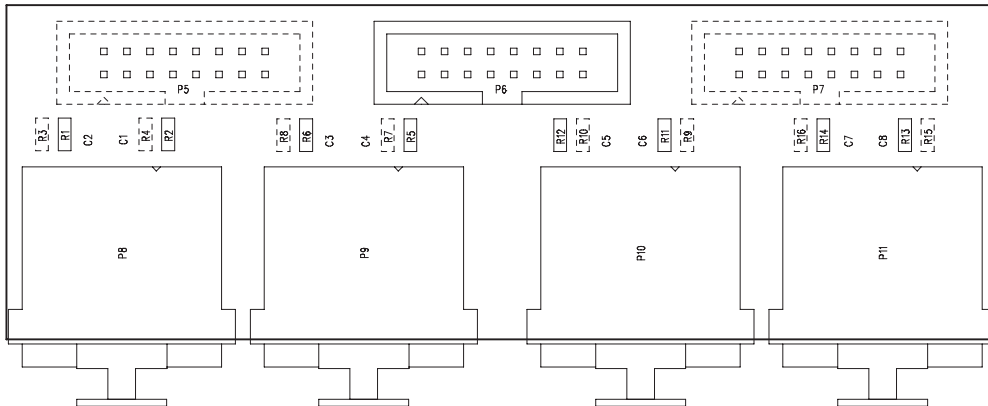
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 2	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 3	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 4	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 5	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 6	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 7	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 8	59.63.1105		220p	PPS 50V, 2%, 0805
0	MP 1	1.940.617.13	1 pce		XLR Connection Unit PCB
0	MP 2	1.940.627.04	1 pce		Nr.-Etikette 5 * 20
0	MP 3	1.940.617.01	1 pce		RUECKWAND XLR
0	MP 4	20.24.8754	8 pcs	2.9*6	L - Formschr. K-Torx, Zn bl
0	P 5	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 6	54.14.2002	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 7	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 8	54.21.2205		3p	XLR PCB Winkel lock
0	P 9	54.21.2205		3p	XLR PCB Winkel lock
0	P 10	54.21.2205		3p	XLR PCB Winkel lock
0	P 11	54.21.2205		3p	XLR PCB Winkel lock
0	R 1	57.60.1000	1 pce	0R0	MF, 0204
0	R 2	57.60.1000	1 pce	0R0	MF, 0204
0	R 3	not used	1 pce	0R0	MF, 0204
0	R 4	not used	1 pce	0R0	MF, 0204
0	R 5	57.60.1000	1 pce	0R0	MF, 0204
0	R 6	57.60.1000	1 pce	0R0	MF, 0204
0	R 7	not used	1 pce	0R0	MF, 0204
0	R 8	not used	1 pce	0R0	MF, 0204
0	R 9	not used	1 pce	0R0	MF, 0204
0	R 10	not used	1 pce	0R0	MF, 0204
0	R 11	57.60.1000	1 pce	0R0	MF, 0204
0	R 12	57.60.1000	1 pce	0R0	MF, 0204
0	R 13	57.60.1000	1 pce	0R0	MF, 0204
0	R 14	57.60.1000	1 pce	0R0	MF, 0204
0	R 15	not used	1 pce	0R0	MF, 0204
0	R 16	not used	1 pce	0R0	MF, 0204

End of List

**Connection Unit 4 × XLR3m (Analog Out) 1.940.628.82 ( 0 )**



**Connection Unit 4 × XLR3m (Analog Out) 1.940.628.82 ( 0)**



Date 20.01.2004	WO	ML	EB
Issue 0	Page 1	Order 1	Time / 1
Part No. 1.940.628.82		Description XLR Connection Unit	

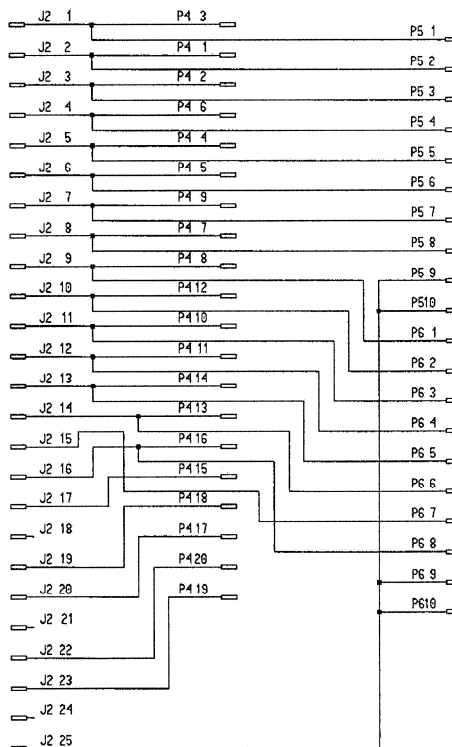
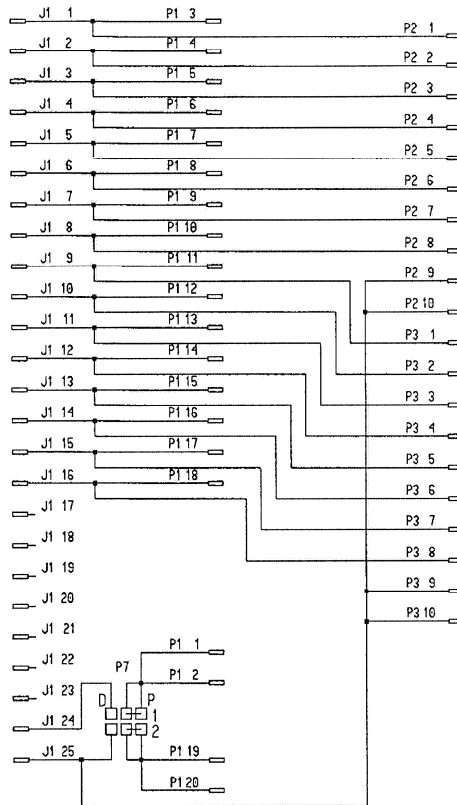


XLR Connection Unit

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 2	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 3	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 4	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 5	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 6	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 7	59.63.1105		220p	PPS 50V, 2%, 0805
0	C 8	59.63.1105		220p	PPS 50V, 2%, 0805
0	MP 1	1.940.617.13	1 pce		XLR Connection Unit PCB
0	MP 2	1.940.628.04	1 pce		Nr.-Etikette 5 * 20
0	MP 3	1.940.617.01	1 pce		RUECKWAND XLR
0	MP 4	20.24.8754	8 pcs	2.9*6	L - Formschr. K-Torx, Zn bl
0	P 5	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 6	54.14.2002	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 7	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 8	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 9	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 10	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 11	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	R 1	57.60.1000	1 pce	0R0	MF, 0204
0	R 2	57.60.1000	1 pce	0R0	MF, 0204
0	R 3	not used	1 pce	0R0	MF, 0204
0	R 4	not used	1 pce	0R0	MF, 0204
0	R 5	57.60.1000	1 pce	0R0	MF, 0204
0	R 6	57.60.1000	1 pce	0R0	MF, 0204
0	R 7	not used	1 pce	0R0	MF, 0204
0	R 8	not used	1 pce	0R0	MF, 0204
0	R 9	not used	1 pce	0R0	MF, 0204
0	R 10	not used	1 pce	0R0	MF, 0204
0	R 11	57.60.1000	1 pce	0R0	MF, 0204
0	R 12	57.60.1000	1 pce	0R0	MF, 0204
0	R 13	57.60.1000	1 pce	0R0	MF, 0204
0	R 14	57.60.1000	1 pce	0R0	MF, 0204
0	R 15	not used	1 pce	0R0	MF, 0204
0	R 16	not used	1 pce	0R0	MF, 0204

End of List

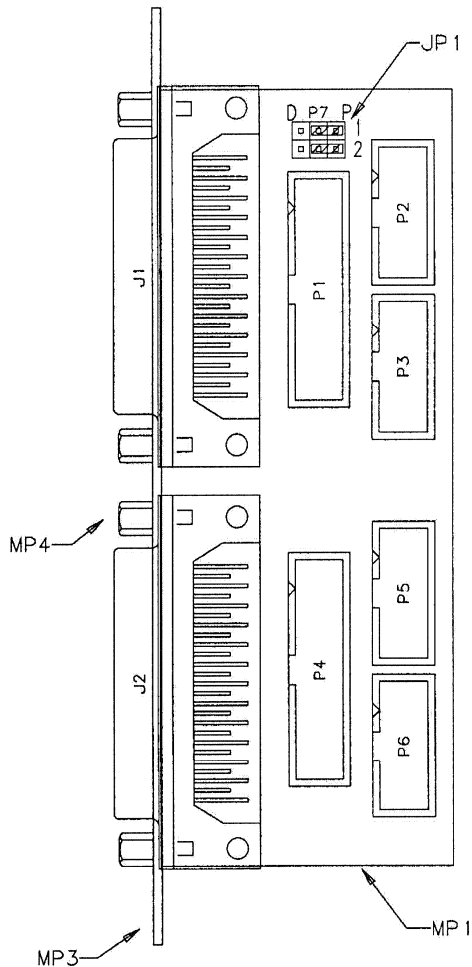
**Connection Unit Control Port 1.940.630.81 ( 0 )**



11.03.1999	ML					
DS-D Rack						PAGE 1 OF 1
STUDER		Control Connection			1.940.630.00	



**Connection Unit Control Port 1.940.630.81 ( 0 )**



Accompanying documents: Zugehoerige Unterlagen: PL	General tolerance: Freimasstoleranz:	Scale: Masstab:	Edition Ausgabe	26.04.1999	PZ	<i>M</i>	<i>R</i>	⓪
			Date Datum	Visa Gez.	Checked Gepr.	Seen Ges.	Index	
Substitute for: Ersatz fuer:	Replaced by: Ersetzt durch:	Copy to: Kopie fuer:						
<b>STUDER</b> REGENSDORF	Control Connection		Number: Nummer:	1.940.630.81				

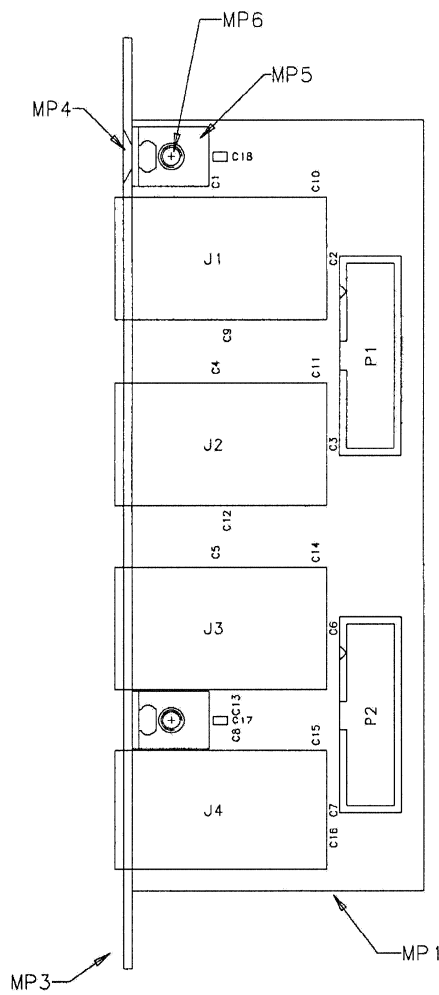
**Connection Unit Control Port 1.940.630.81 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	J 1		54.13.0073	25p	D-Sub, PCB, Winkel				
0	J 2		54.13.0073	25p	D-Sub, PCB, Winkel				
0	JP 1		54.01.0021	2 pcs	Jumper				0.63*0.63mm, Au
0	MP 1		1.940.630.12	1 pce	Control Connection PCB				
0	MP 2		1.940.630.10	1 pce	NR. Etiketle 5 x 20				
0	MP 3		1.940.619.02	1 pce	Rückwand D25+D25				
0	MP 4		54.13.0081	4 pcs	4.85mm				Bolzen UNC 4-40
0	MP 5		24.16.1030	4 pcs	3.2/5.5				Rippenscheibe
0	P 1		54.14.2008		20p				1/20" Au, gerade, ohne Verrieg
0	P 2		54.14.2001		10p				1/20" Au, gerade, ohne Verrieg
0	P 3		54.14.2001		10p				1/20" Au, gerade, ohne Verrieg
0	P 4		54.14.2008		20p				1/20" Au, gerade, ohne Verrieg
0	P 5		54.14.2001		10p				1/20" Au, gerade, ohne Verrieg
0	P 6		54.14.2001		10p				1/20" Au, gerade, ohne Verrieg
0	P 7		54.11.0136		2*3p				Pin 0.63*0.63, RM2.54

End of List



**Connection Unit Bantam Jack (f. Analog Inserts) 1.940.631.00 ( 0 )**



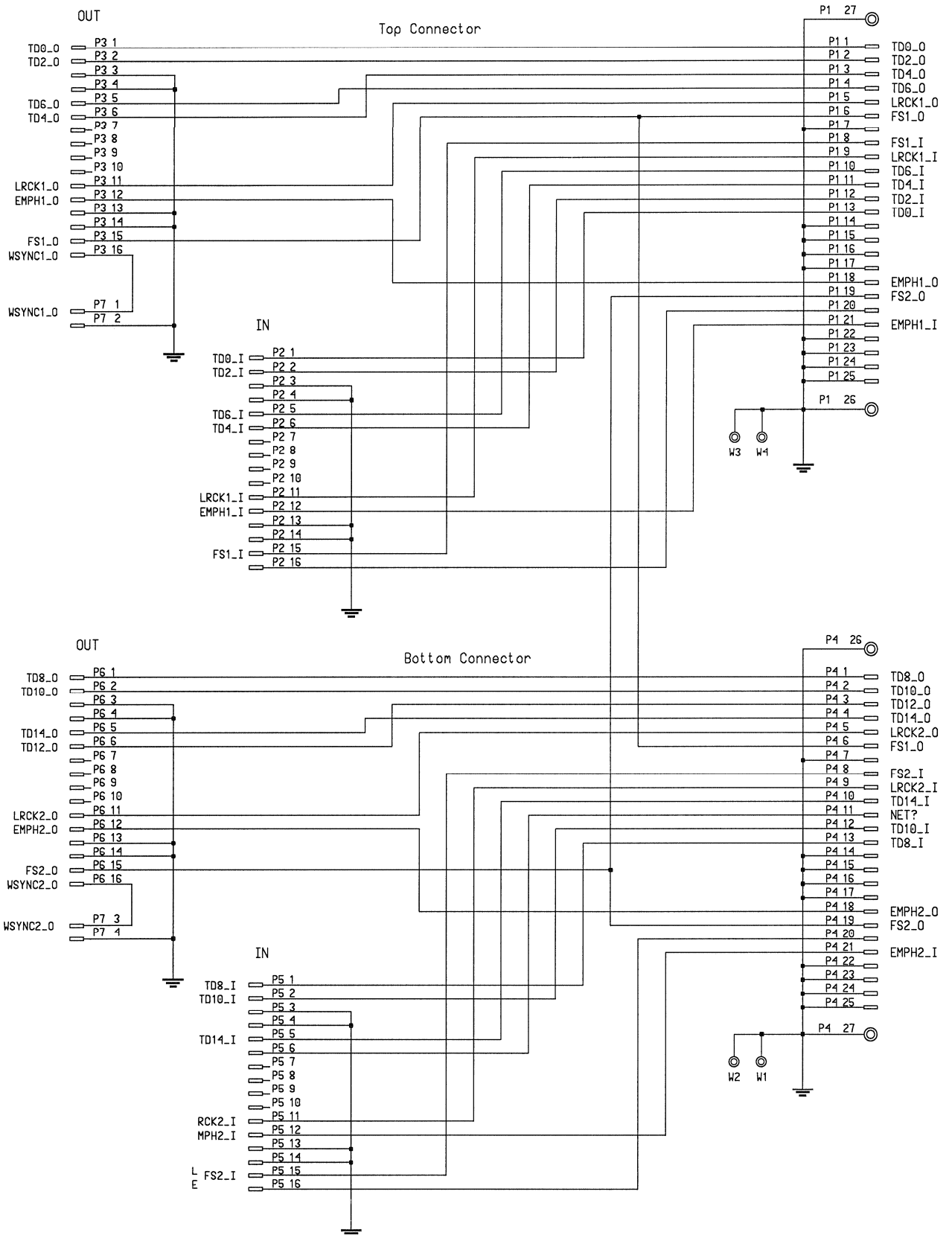
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Substitute for: Ersatz fuer:	Replaced by: Ersetzt durch:	Copy to: Kopie fuer:	Date Datum	Visa Gez.	Checked Gepr.	Seen Ges.	Index
<b>STUDER</b> REGENSDORF	Description: Benennung: Connection Board Insert		Number: Nummer:	1.940.631.00			

**Connection Unit Bantam Jack (Analog Ins.) 1.940.631.00 ( 0)** Page: 1 of 1

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1		59.60.2257	220p					CER 50V, 5%, COG, 0603
0	C 2		59.60.2257	220p					CER 50V, 5%, COG, 0603
0	C 3		59.60.2257	220p					CER 50V, 5%, COG, 0603
0	C 4		59.60.2257	220p					CER 50V, 5%, COG, 0603
0	C 5		59.60.2257	220p					CER 50V, 5%, COG, 0603
0	C 6		59.60.2257	220p					CER 50V, 5%, COG, 0603
0	C 7		59.60.2257	220p					CER 50V, 5%, COG, 0603
0	C 8		59.60.2257	220p					CER 50V, 5%, COG, 0603
0	C 9		59.60.2249	100p					CER 50V, 5%, COG, 0603
0	C 10		59.60.2249	100p					CER 50V, 5%, COG, 0603
0	C 11		59.60.2249	100p					CER 50V, 5%, COG, 0603
0	C 12		59.60.2249	100p					CER 50V, 5%, COG, 0603
0	C 13		59.60.2249	100p					CER 50V, 5%, COG, 0603
0	C 14		59.60.2249	100p					CER 50V, 5%, COG, 0603
0	C 15		59.60.2249	100p					CER 50V, 5%, COG, 0603
0	C 16		59.60.2249	100p					CER 50V, 5%, COG, 0603
0	C 17		59.60.3337	100n					CER 50V, 10%, X7R, 0805
0	C 18		59.60.3337	100n					CER 50V, 10%, X7R, 0805
0	J 1		54.24.0211	2*3p					Bantam-Buchse, 4.4mm
0	J 2		54.24.0211	2*3p					Bantam-Buchse, 4.4mm
0	J 3		54.24.0211	2*3p					Bantam-Buchse, 4.4mm
0	J 4		54.24.0211	2*3p					Bantam-Buchse, 4.4mm
0	MP 1	1.940.631.11	1	pce					CONNECTION INSERT PCB
0	MP 2	1.940.631.10	1	pce					Nr. Etikette 5 x 20
0	MP 3	1.940.631.01	1	pce					RÜCKWAND
0	MP 4	28.31.0110	2	pcs					SENKKOPFNIETE D 3.2 * 4.3
0	MP 5	35.99.0104	2	pcs					MONTAGEWINKEL
0	MP 6	21.53.9354	2	pcs				M3*6	Z-Schraube Inbus-Ripp Zn gb ch
0	P 1	54.14.2002		16p					1/20" Au, gerade, ohne Verrieg
0	P 2	54.14.2002		16p					1/20" Au, gerade, ohne Verrieg

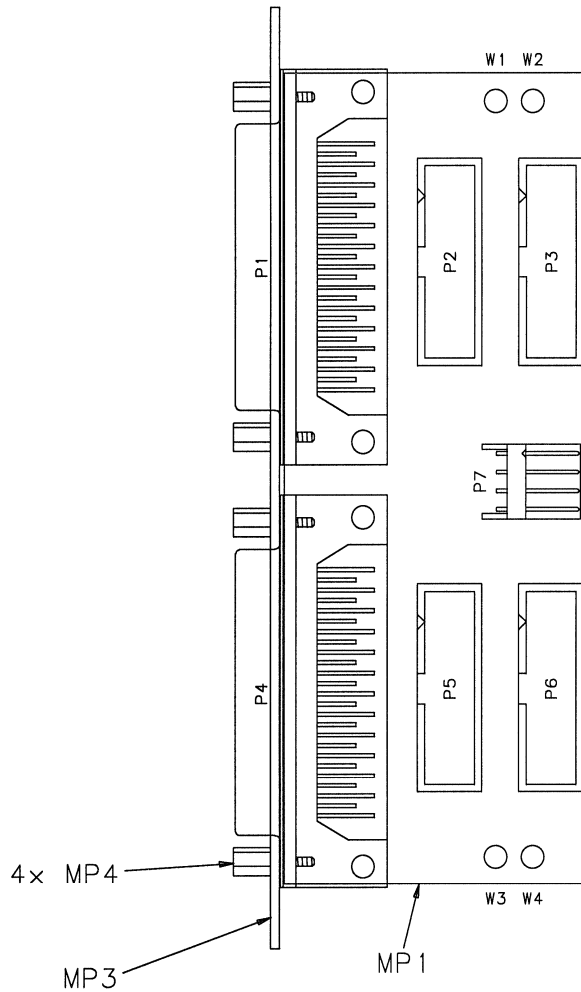
End of List

**Connection Unit 4 × D25m (Dual TDIF I/O) 1.940.632.00 (0)**



Erstellt	03.01.2001	ZT					
D19M						PAGE 1 OF 1	
<b>STUDER</b>			CONNECTION-TDIF IN/OUT			1.940.632.00	

**Connection Unit 4 × D25m (Dual TDIF I/O) 1.940.632.00 (0)**



Accompanying documents: Zugehörige Unterlagen: PL		General tolerance: Freimasstoleranz:	Scale: Massstab:	Edition Ausgabe Date Datum	03.01.2001	ZT Visa Gez.	ML Checked Gepr.	RL Seen Ges.	① Index
Substitute for: Ersatz fuer:				Page: Seite: 1 / 1					
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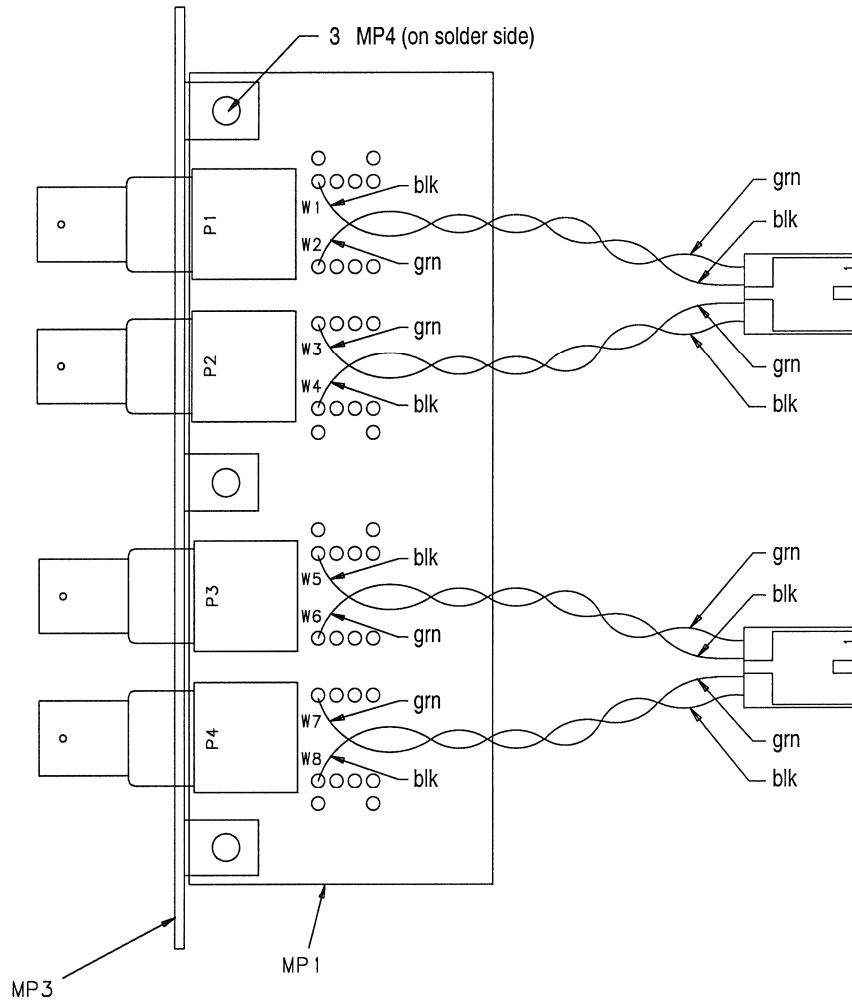
**Connection Unit 4 × D25m (Dual TDIF I/O) 1.940.632.00 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 MP 1	1.940.632.11	1	pce	CONNECTION TDIF IN/OUT PCB					
0 MP 2	1.940.632.04	1	pce	Nr.-Etikette 5 * 20					
0 MP 3	1.940.619.02	1	pce	Rückwand D25+D25					
0 MP 4	54.13.0081	4	pcs	4.85mm Bolzen UNC 4-40					
0 P 1	54.13.0073	1	pce	25p D-Sub, PCB, Winkel					
0 P 2	54.14.2002	1	pce	16p 1/20" Au, gerade, ohne Verrieg					
0 P 3	54.14.2002	1	pce	16p 1/20" Au, gerade, ohne Verrieg					
0 P 4	54.13.0073	1	pce	25p D-Sub, PCB, Winkel					
0 P 5	54.14.2002	1	pce	16p 1/20" Au, gerade, ohne Verrieg					
0 P 6	54.14.2002	1	pce	16p 1/20" Au, gerade, ohne Verrieg					
0 P 7	54.12.0724	1	pce	4p Stecker winkel PCB					

End of List



**Connection Unit 4 × BNC (WCLK Out) 1.940.633.00 ( 0)**



Accompanying documents: Zugehörige Unterlagen: PL, LL		General tolerance: Freimasstoleranz:	Scale: Massstab:	Edition Ausgabe: 03.01.2001	ZT	ML	RL		
Substitute for: Ersatz fuer:				Date Datum:	Visa Gez.:	Checked Gepr.:	Seen Ges.:	Index	
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				Number: Nummer: 1.940.633.00					

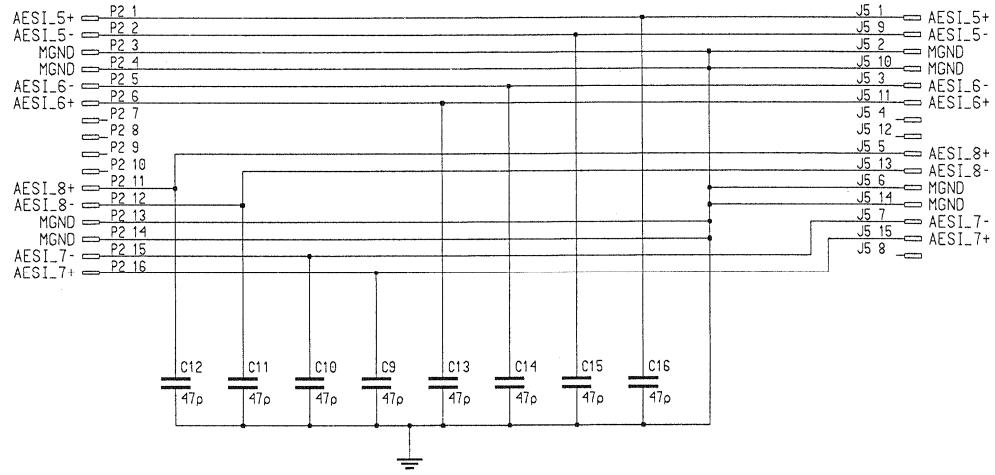
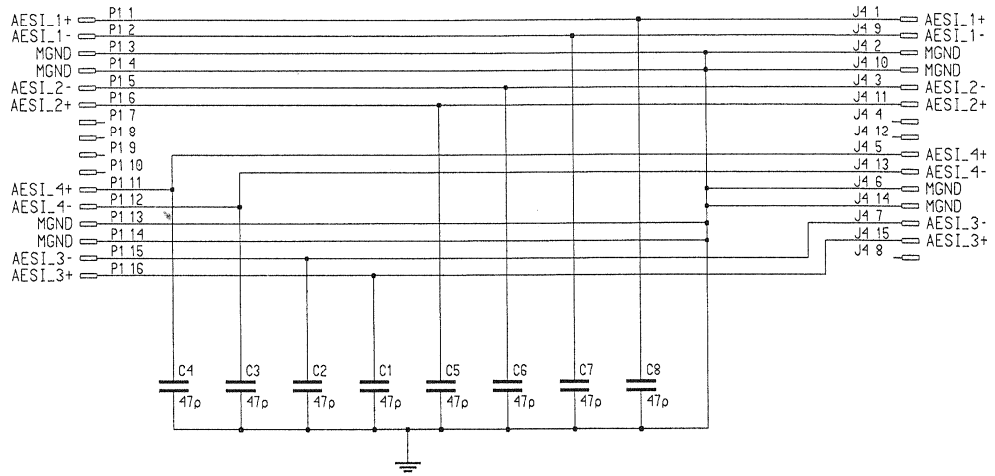
**Connection Unit 4 × BNC (WCLK Out) 1.940.633.00 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 LL 1	1.940.633.93	1 pce		LL CONNECTION WCLK OUT
0 MP 1	1.940.612.11	1 pce		BNC Output Unit PCB
0 MP 2	1.940.633.04	1 pce		Nr.-Etikette 5 * 20
0 MP 3	1.940.611.01	1 pce		Rückwand BNC
0 MP 4	28.31.0005	3 pcs		BLINDNIETE, D 3.2* 6.1
0 P 1	54.21.2031	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0 P 2	54.21.2031	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0 P 3	54.21.2031	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0 P 4	54.21.2031	1 pce	BNC	J 1 POL PRINT/WINKEL BNC

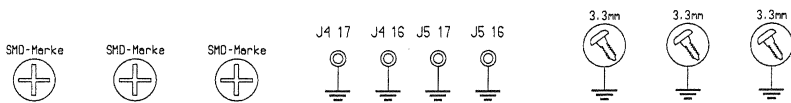
Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 LL 1	1.940.633.93	1 pce		LL CONNECTION WCLK OUT
0 MP 1	1.940.612.11	1 pce		BNC Output Unit PCB
0 MP 2	1.940.633.04	1 pce		Nr.-Etikette 5 * 20
0 MP 3	1.940.611.01	1 pce		Rückwand BNC
0 MP 4	28.31.0005	3 pcs		BLINDNIETE, D 3.2* 6.1
0 P 1	54.21.2031	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0 P 2	54.21.2031	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0 P 3	54.21.2031	1 pce	BNC	J 1 POL PRINT/WINKEL BNC
0 P 4	54.21.2031	1 pce	BNC	J 1 POL PRINT/WINKEL BNC

End of List

Connection Board 2xD-15F 8x AESI-Card 1.940.635.00

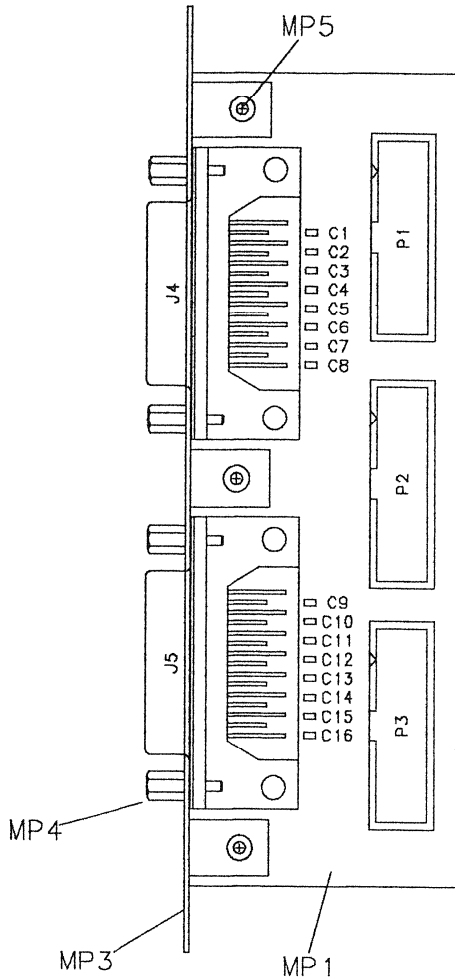


- P3 1
- P3 2
- P3 3
- P3 4
- P3 5
- P3 6
- P3 7
- P3 8
- P3 9
- P3 10
- P3 11
- P3 12
- P3 13
- P3 14
- P3 15
- P3 16



0	18.11.97	JM	○	○	○	○
D950						PAGE 1 OF 1
<b>STUDER</b>				CONNECTION BOARD 2X D-15F 8X AESI-CARD		SC 1.940.635.00

**Connection Board 2xD-15F 8x AESI-Card I.940.635.00**



Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 2	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 3	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 4	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 5	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 6	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 7	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 8	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 9	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 10	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 11	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 12	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 13	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 14	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 15	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 16	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	J 4	54.13.0072	15p		D-Sub, PCB, Winkel
0	J 5	54.13.0072	15p		D-Sub, PCB, Winkel
0	MP 1	1.940.635.11	1 pce		Connection 2xD-15F 8xAESI PCB
0	MP 2	1.940.635.04	1 pce		Nr.-Etikette 5 * 20
0	MP 3	1.940.615.01	1 pce		Rückwand D15+D15
0	MP 4	54.13.0081	4 pcs	4.85mm	Bolzen UNC 4-40
0	MP 5	28.31.0005	3 pcs		BLINDNIETE, D 3.2* 6.1
0	P 1	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 2	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 3	not used	16p		1/20" Au, gerade, ohne Verrieg

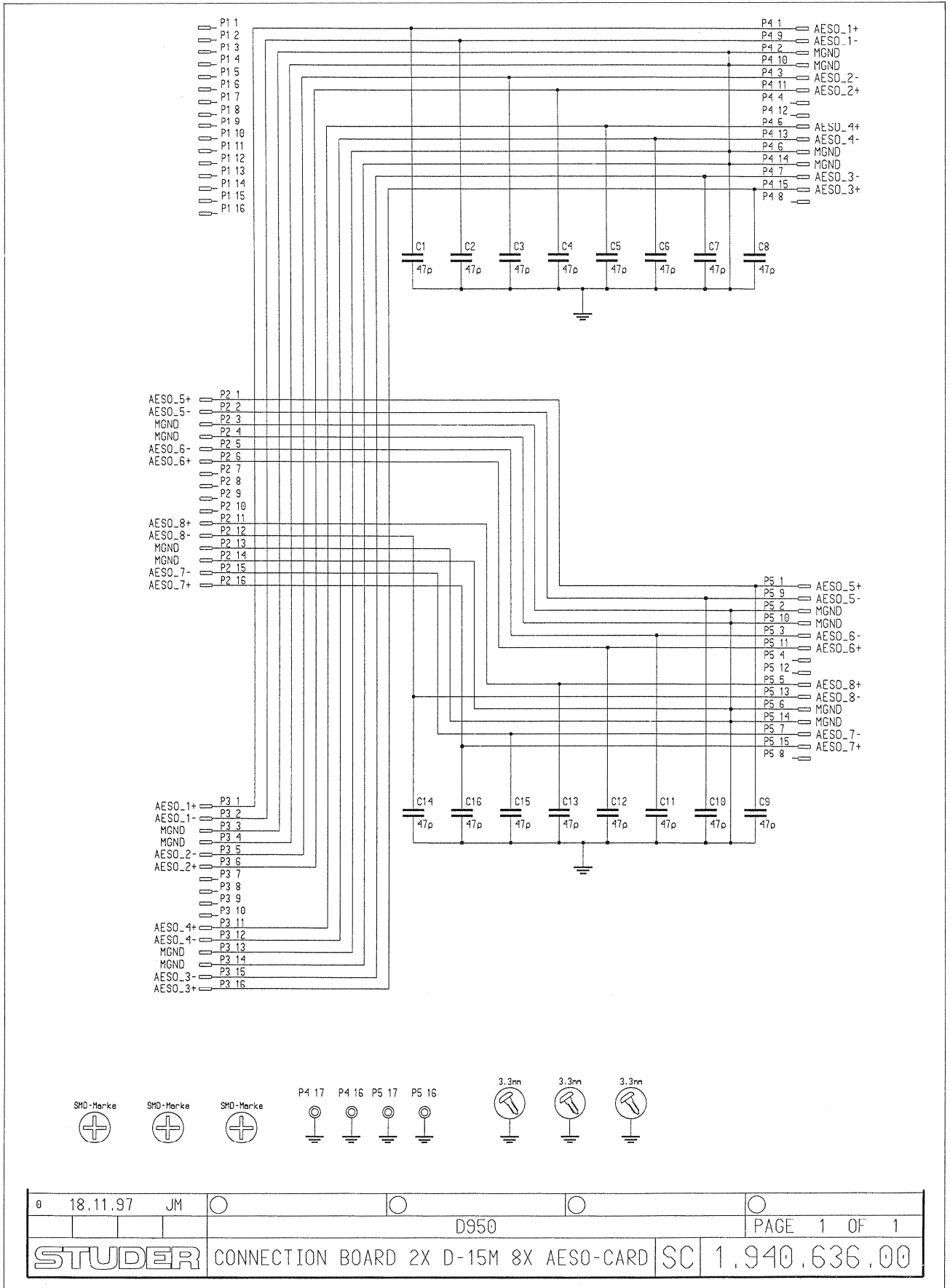
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Comments

Edition Ausg.	Date Datum	Viso Gez.	Check Gedr.	Seen Ges.	Index	3
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18.11.97	AF					0

<b>STUDER</b> REGENSDORF	Description: Bezeichnung:	CONNECTION BOARD 2X D-15F 8X AESI-CARD	Number: Nummer:	1.940.635.00
			Copy to: Kopie fuer:	

Connection Board 2xD-15M 8x AESO-Card 1.940.636.00



**Connection Board 2xD-15M 8x AESO-Card I.940.636.00**

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 2	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 3	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 4	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 5	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 6	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 7	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 8	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 9	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 10	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 11	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 12	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 13	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 14	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 15	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	C 16	59.60.2241	47p		CER 50V, 5%, COG, 0603
0	MP 1	1.940.636.11	1 pce		Connection 2xD-15M 8xAESO PCB
0	MP 2	1.940.636.04	1 pce		Nr.-Etikette 5 * 20
0	MP 3	1.940.615.01	1 pce		Rückwand D15+D15
0	MP 4	54.13.0081	4 pcs	4.85mm	Bolzen UNC 4-40
0	MP 5	28.31.0005	3 pcs		BLINDNIETE, D 3.2* 6.1
0	P 1	not used	16p		1/20" Au, gerade, ohne Verrieg
0	P 2	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 3	54.14.2002	16p		1/20" Au, gerade, ohne Verrieg
0	P 4	54.13.0077	15p		D-Sub, PCB, Winkel
0	P 5	54.13.0077	15p		D-Sub, PCB, Winkel

End of List

Comments

Edition	Date	Visa	Gez.	Seen	Index
Ausgabe	Datum	Gez.	Bspr.	Gez.	
Anforderung	18.11.97	AF	<i>[Signature]</i>	<i>[Signature]</i>	⑤
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REGENSDORF

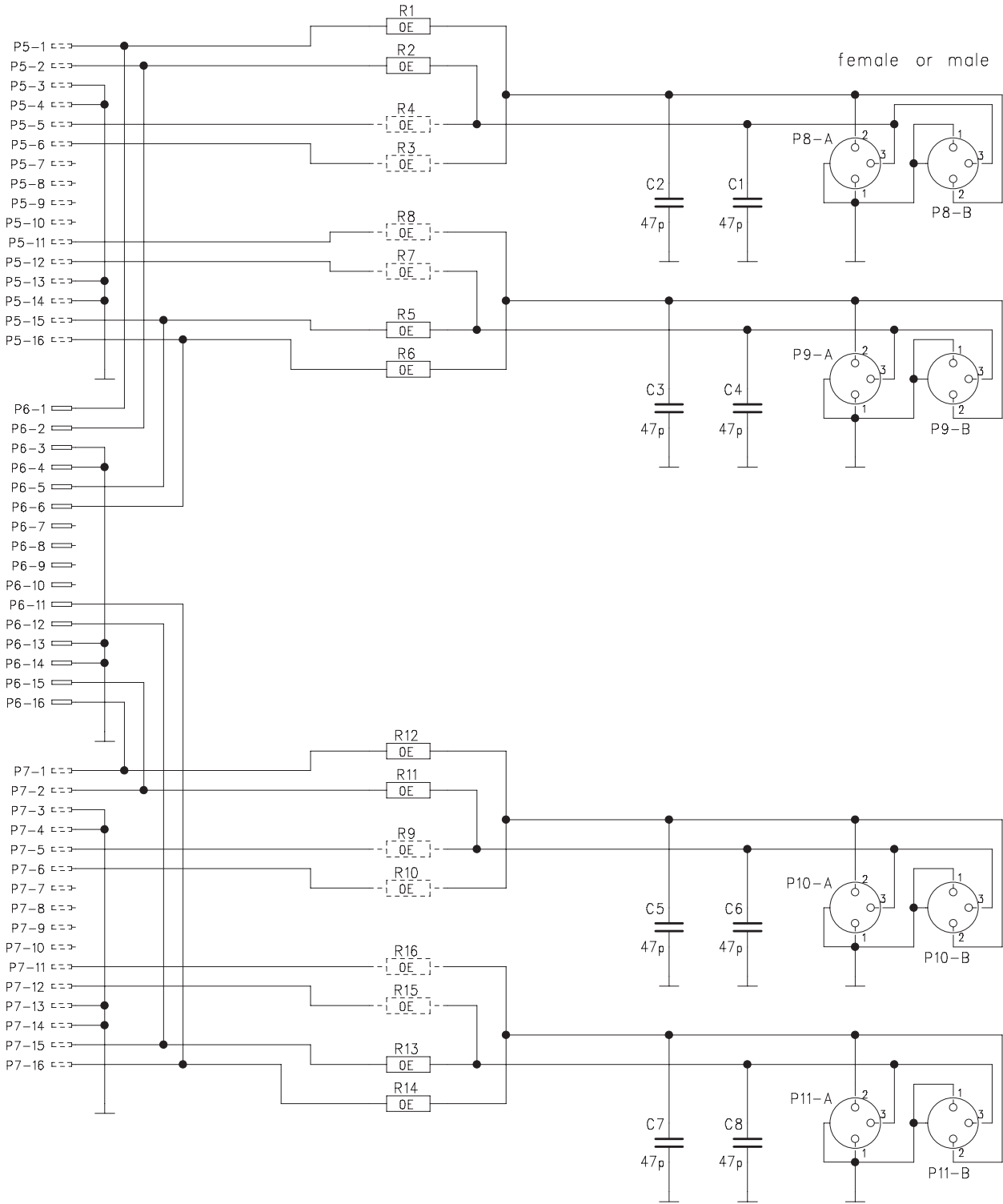
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Bezeichnung: CONNECTION BOARD 2X D-15M 8X AESO-CARD

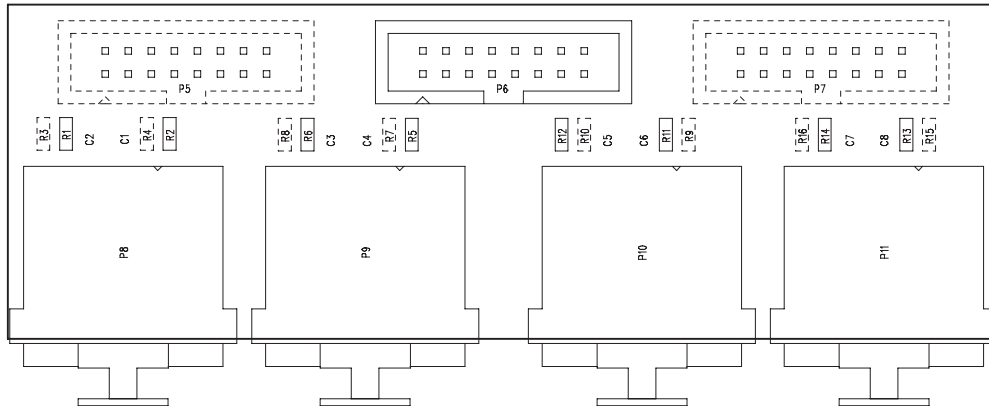
Number:

1.940.636.00

**Connection Unit 4 × XLR3f (AES/EBU In) 1.940.637.82 ( 0 )**



**Connection Unit 4 × XLR3f (AES/EBU In) 1.940.637.82 ( 0)**



20.01.2004	WO	ML	EB
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1.940.637.82			

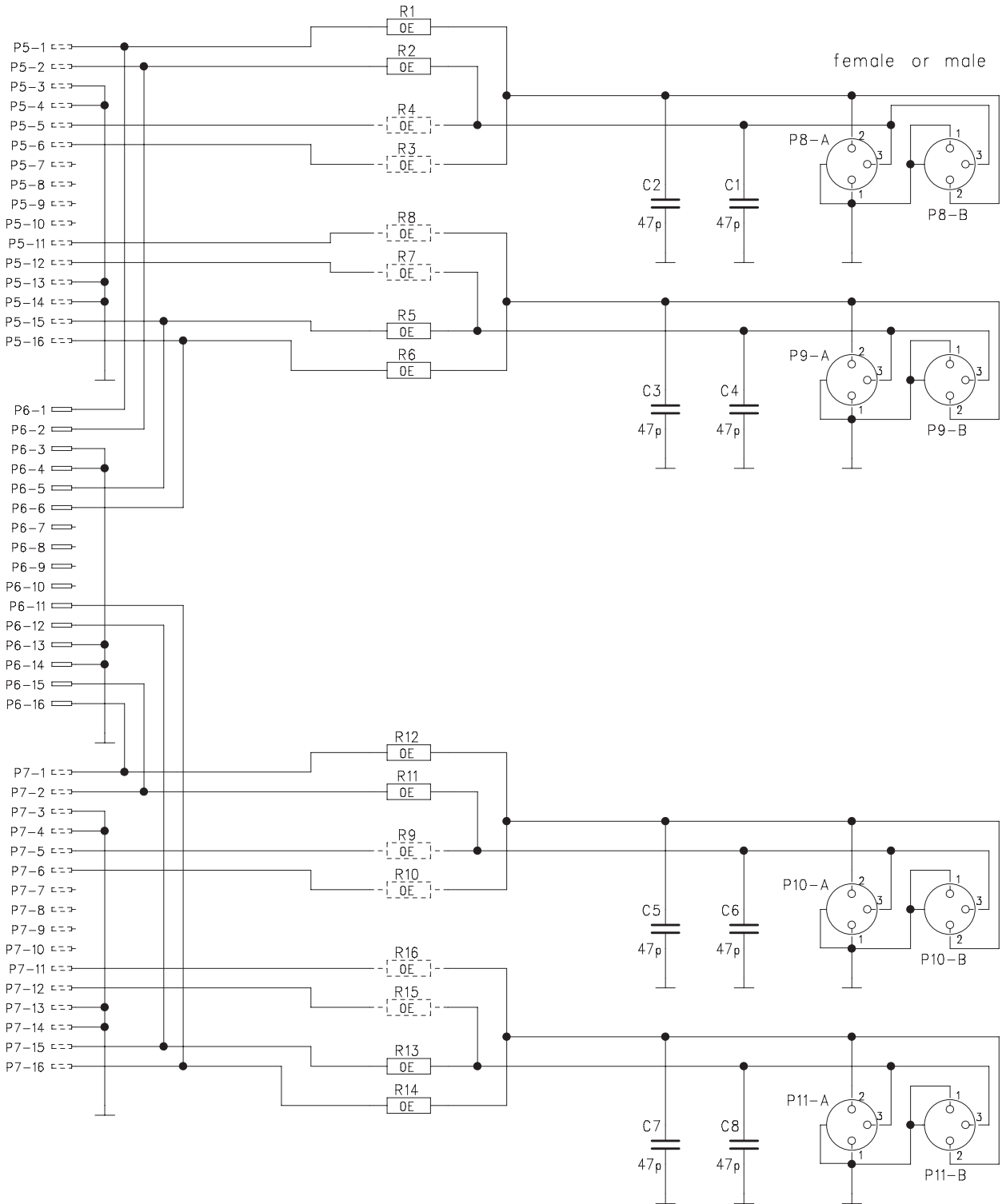
**STUDER** XLR Connection Unit

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 2	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 3	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 4	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 5	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 6	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 7	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	C 8	59.60.2341		47p	CER 50V, 5%, COG, 0805
0	MP 1	1.940.617.13	1 pce		XLR Connection Unit PCB
0	MP 2	1.940.637.04	1 pce		Nr.-Etikette 5 * 20
0	MP 3	1.940.617.01	1 pce		RUECKWAND XLR
0	MP 4	20.24.8754	8 pcs	2.9*6	L - Formschr. K-Torx, Zn bl
0	P 5	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 6	54.14.2002	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 7	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 8	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	P 9	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	P 10	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	P 11	54.21.2205	1 pce	3p	XLR PCB Winkel lock
0	R 1	57.60.1000	1 pce	0R0	MF, 0204
0	R 2	57.60.1000	1 pce	0R0	MF, 0204
0	R 3	not used	1 pce	0R0	MF, 0204
0	R 4	not used	1 pce	0R0	MF, 0204
0	R 5	57.60.1000	1 pce	0R0	MF, 0204
0	R 6	57.60.1000	1 pce	0R0	MF, 0204
0	R 7	not used	1 pce	0R0	MF, 0204
0	R 8	not used	1 pce	0R0	MF, 0204
0	R 9	not used	1 pce	0R0	MF, 0204
0	R 10	not used	1 pce	0R0	MF, 0204
0	R 11	57.60.1000	1 pce	0R0	MF, 0204
0	R 12	57.60.1000	1 pce	0R0	MF, 0204
0	R 13	57.60.1000	1 pce	0R0	MF, 0204
0	R 14	57.60.1000	1 pce	0R0	MF, 0204
0	R 15	not used	1 pce	0R0	MF, 0204
0	R 16	not used	1 pce	0R0	MF, 0204

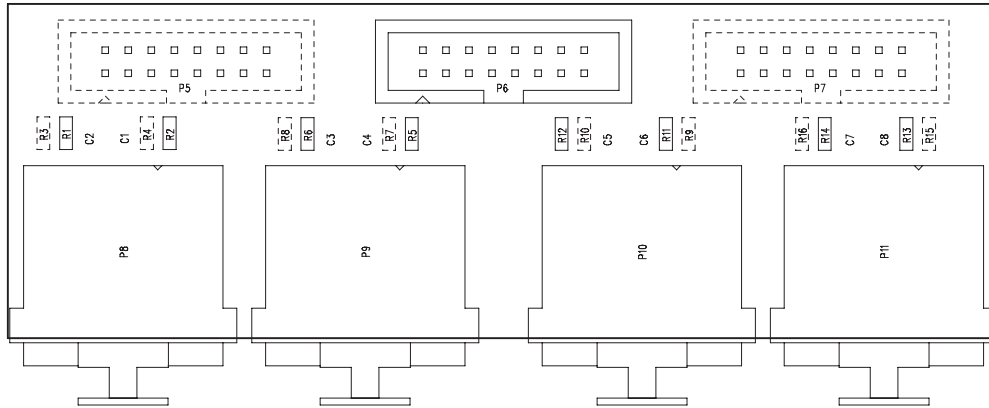
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**Connection Unit 4 × XLR3m (AES/EBU Out) 1.940.638.82 ( 0 )**



**Connection Unit 4 × XLR3m (AES/EBU Out) 1.940.638.82 ( 0 )**



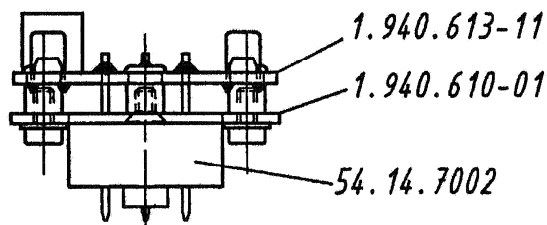
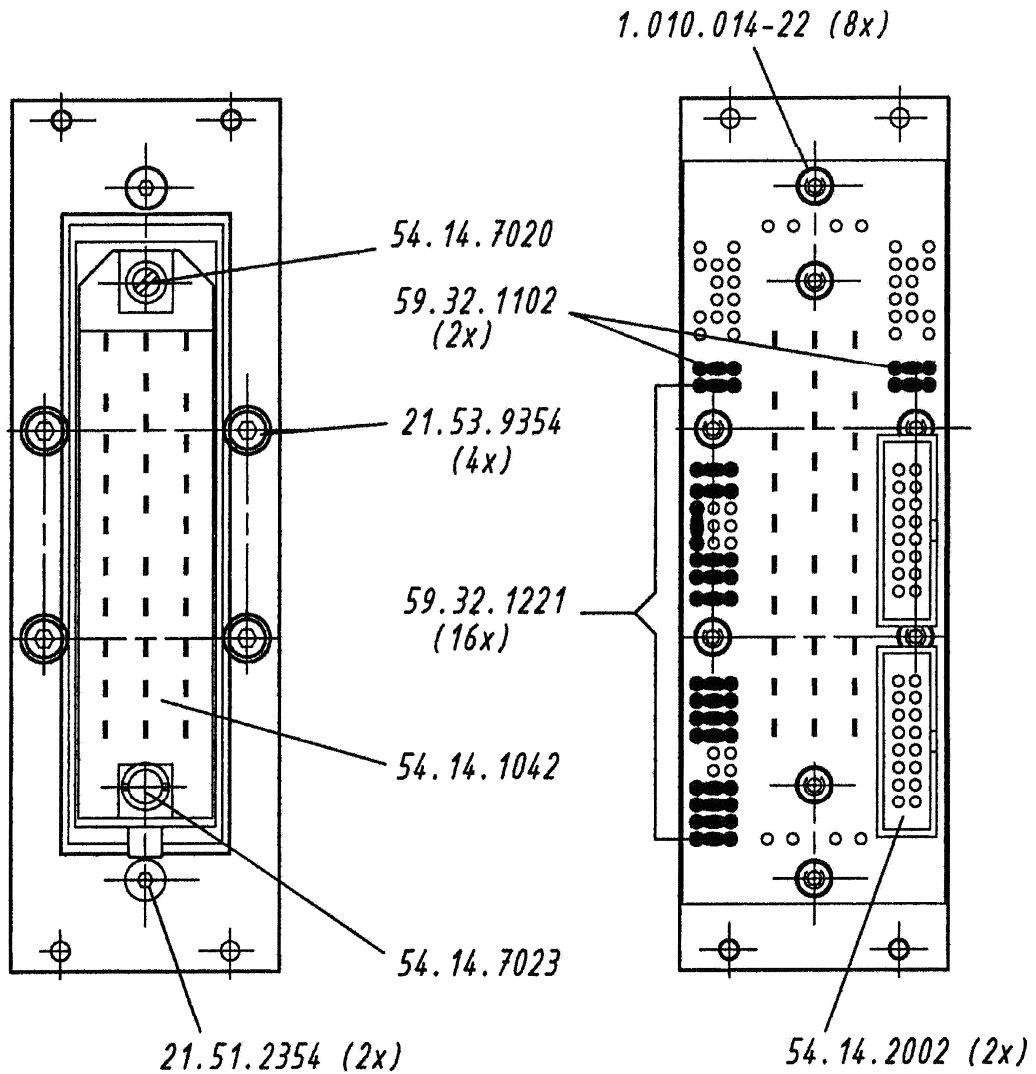
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Drawn	0	Page	1 / 1	Rev
1.940.638.82				

**STUDER** XLR Connection Unit

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 2	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 3	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 4	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 5	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 6	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 7	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	C 8	59.60.2341	1 pce	47p	CER 50V, 5%, COG, 0805
0	MP 1	1.940.617.13	1 pce		XLR Connection Unit PCB
0	MP 2	1.940.638.04	1 pce		Nr.-Etikette 5 * 20
0	MP 3	1.940.617.01	1 pce		RUECKWAND XLR
0	MP 4	20.24.8754	8 pcs	2.9*6	L - Formschr. K-Torx, Zn bl
0	P 5	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 6	54.14.2002	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 7	not used	1 pce	16p	1/20" Au, gerade, ohne Verrieg
0	P 8	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 9	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 10	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	P 11	54.21.2204	1 pce	3p	XLR PCB Winkel, Metall
0	R 1	57.60.1000	1 pce	0R0	MF, 0204
0	R 2	57.60.1000	1 pce	0R0	MF, 0204
0	R 3	not used	1 pce	0R0	MF, 0204
0	R 4	not used	1 pce	0R0	MF, 0204
0	R 5	57.60.1000	1 pce	0R0	MF, 0204
0	R 6	57.60.1000	1 pce	0R0	MF, 0204
0	R 7	not used	1 pce	0R0	MF, 0204
0	R 8	not used	1 pce	0R0	MF, 0204
0	R 9	not used	1 pce	0R0	MF, 0204
0	R 10	not used	1 pce	0R0	MF, 0204
0	R 11	57.60.1000	1 pce	0R0	MF, 0204
0	R 12	57.60.1000	1 pce	0R0	MF, 0204
0	R 13	57.60.1000	1 pce	0R0	MF, 0204
0	R 14	57.60.1000	1 pce	0R0	MF, 0204
0	R 15	not used	1 pce	0R0	MF, 0204
0	R 16	not used	1 pce	0R0	MF, 0204

End of List

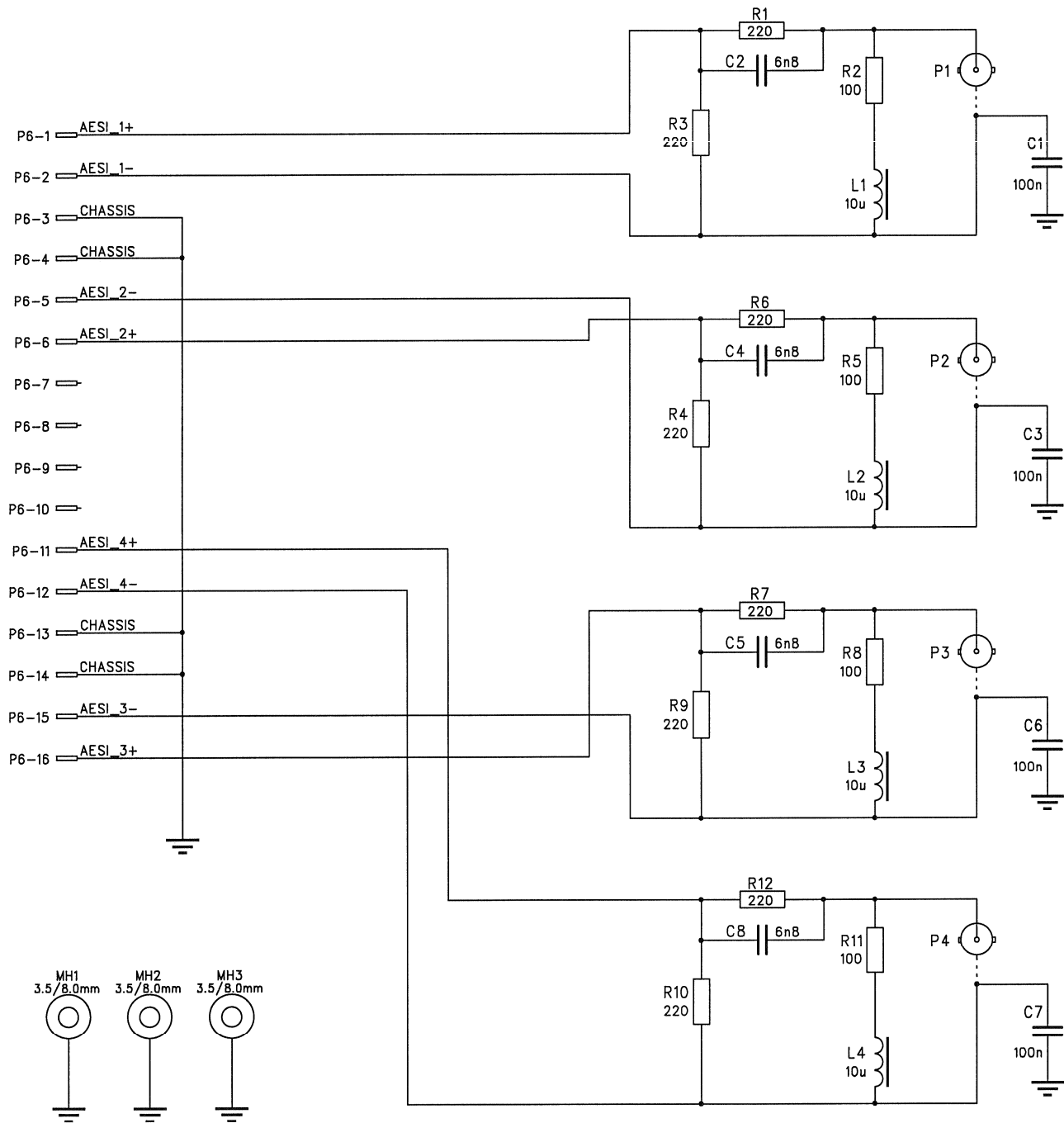
**Connection Unit S30f/Gold Cont. (Analog Out) 1.940.640.00 ( 0)**



Also contained:	
21.53.0279	4x
24.16.1025	4x
54.14.1052	1x
54.14.7012	1x
54.14.7020	1x
54.14.7023	1x
54.14.5021	4x
64.03.0214	1m

Accompanying documents: Zugehörige Unterlagen:		General tolerance: Freimasstoleranz:	Scale: Maßstab:	Edition Ausgabe	24.7.98	Ro	RO	HM	⓪
Substitute for: Ersatz für:		Replaced by: Ersetzt durch:	Copy to: Kopie für:	Date Datum	Visa Gez.	Checked Gepr.	Seen Ges.	Index	
<b>STUDER</b> REGENSDORF	Description: Benennung:	S30M Connection Unit 8TE Gold			Number: Nummer:	1.940.640-00			

**Connection Unit 4 × BNC (AES/EBU In) 1.940.641.00 ( 0)**

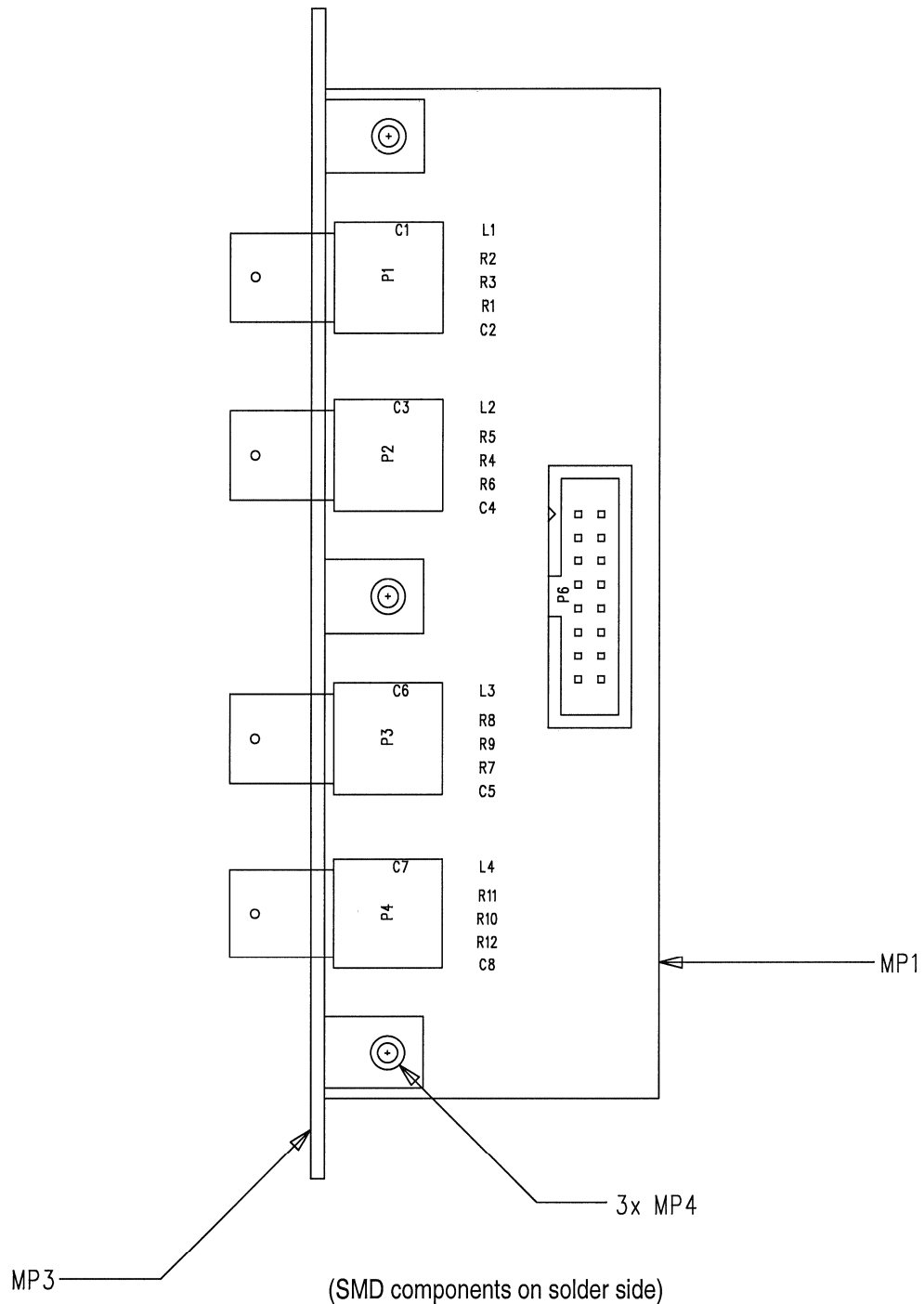


17.10.2001		ZT	.	.
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Number:				

**STUDER**

CONNECTION BNC AESI FOR CORE

**Connection Unit 4 × BNC (AES/EBU In) 1.940.641.00 ( 0)**



(SMD components on solder side)

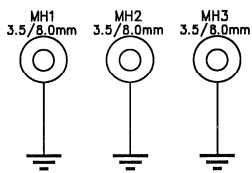
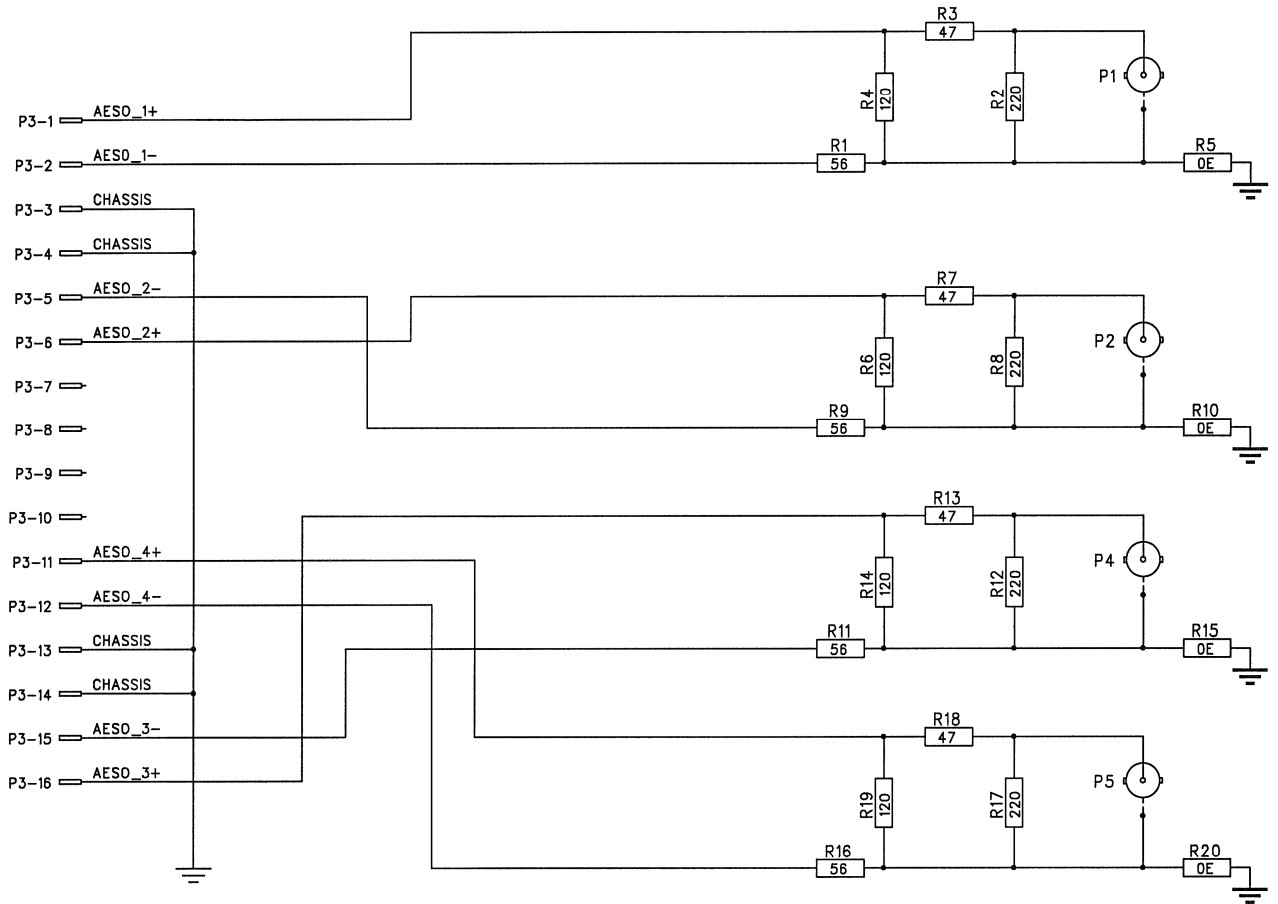
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			.		Index: Index: 0	Page: Seite: 1 / 1		
<b>STUDER</b>		CONNECTION BNC AESI FOR CORE			Number: Number: 1.940.641.00			

**Connection Unit 4 × BNC (AES/EBU In) 1.940.641.00 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	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	59.60.3323	1 pce	6n8					CER 50V, 10%, X7R, 0805
0	C 3	59.60.3337	1 pce	100n					CER 50V, 10%, X7R, 0805
0	C 4	59.60.3323	1 pce	6n8					CER 50V, 10%, X7R, 0805
0	C 5	59.60.3323	1 pce	6n8					CER 50V, 10%, X7R, 0805
0	C 6	59.60.3337	1 pce	100n					CER 50V, 10%, X7R, 0805
0	C 7	59.60.3337	1 pce	100n					CER 50V, 10%, X7R, 0805
0	C 8	59.60.3323	1 pce	6n8					CER 50V, 10%, X7R, 0805
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	62.60.0113	1 pce	10uH					SMD 10% 1210
0	L 4	62.60.0113	1 pce	10uH					SMD 10% 1210
0	MP 1	1.940.641.11	1 pce						CONNECTION BNC AESI PCB
0	MP 2	1.940.641.10	1 pce						NR.-ETIKETTE 5 * 20
0	MP 3	1.940.611.01	1 pce						Rückwand BNC
0	MP 4	28.31.0005	3 pcs						BLINDNIETE, D 3.2* 6.1
0	P 1	54.21.2031	1 pce	BNC					J 1 POL PRINT/WINKEL BNC
0	P 2	54.21.2031	1 pce	BNC					J 1 POL PRINT/WINKEL BNC
0	P 3	54.21.2031	1 pce	BNC					J 1 POL PRINT/WINKEL BNC
0	P 4	54.21.2031	1 pce	BNC					J 1 POL PRINT/WINKEL BNC
0	P 6	54.14.2002	1 pce	16p					1/20" Au, gerade, ohne Verrieg
0	R 1	57.60.1221	1 pce	220R					MF, 1%, 0204, E24
0	R 2	57.60.1101	1 pce	100R					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	57.60.1101	1 pce	100R					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	57.60.1101	1 pce	100R					MF, 1%, 0204, E24
0	R 9	57.60.1221	1 pce	220R					MF, 1%, 0204, E24
0	R 10	57.60.1221	1 pce	220R					MF, 1%, 0204, E24
0	R 11	57.60.1101	1 pce	100R					MF, 1%, 0204, E24
0	R 12	57.60.1221	1 pce	220R					MF, 1%, 0204, E24

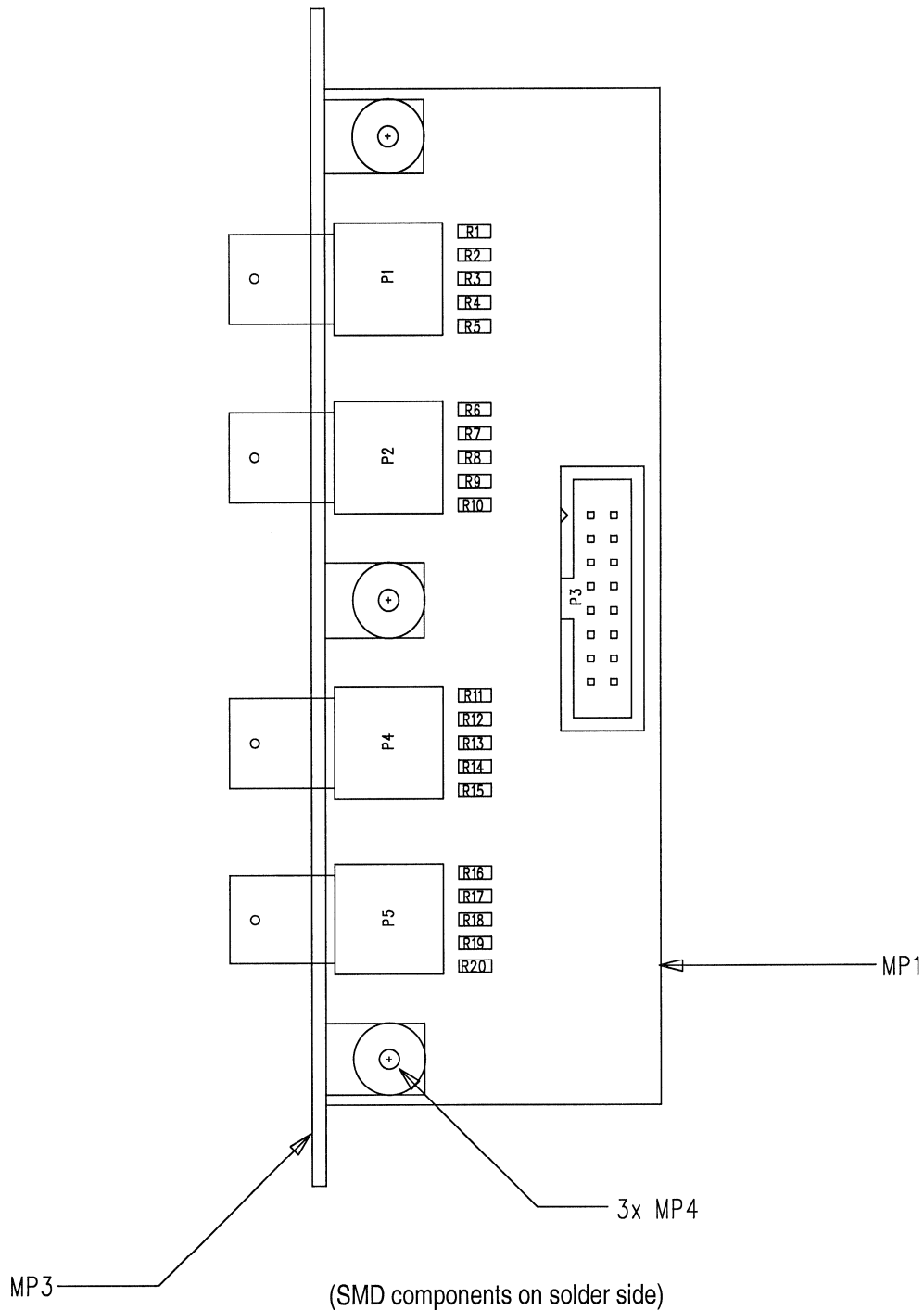
End of List

**Connection Unit 4 × BNC (AES/EBU Out) 1.940.642.00 ( 0)**



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Number:	SC 1.940.642.00		
Number:			

**Connection Unit 4 × BNC (AES/EBU Out) 1.940.642.00 ( 0)**



Accompanying documents: Zugehörige Unterlagen:		PL	General tolerance: Freimastoleranz:	.	Scale: Maßstab:	18.10.2001 Date: Datum:	ZT Visa: Gez.:	ML Checked: Gepr.:	HW Seen: Gese.:
						Index: Index:	0	Page: Seite:	1 / 1
<b>STUDER</b>		CONNECTION BNC AES0 FOR CORE				Number: Nummer:	1.940.642.00		



**Connection Unit 4 × BNC (AES/EBU Out) 1.940.642.00 ( 0)**

Idx. Pos.	Part No.	Qty.	Type/Val.	Description	Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0	MP 1	1.940.642.11	1 pce	CONNECTION BNC AESO PCB					
0	MP 2	1.940.642.10	1 pce	NR-ETIKETTE 5 * 20					
0	MP 3	1.940.611.01	1 pce	Rückwand BNC					
0	MP 4	28.31.0005	3 pcs	BLINDNIETE, D 3.2* 6.1					
0	P 1	54.21.2031	1 pce	BNC J 1 POL PRINT/WINKEL BNC					
0	P 2	54.21.2031	1 pce	BNC J 1 POL PRINT/WINKEL BNC					
0	P 3	54.14.2002	1 pce	16p 1/20" Au, gerade, ohne Verrieg					
0	P 4	54.21.2031	1 pce	BNC J 1 POL PRINT/WINKEL BNC					
0	P 5	54.21.2031	1 pce	BNC J 1 POL PRINT/WINKEL BNC					
0	R 1	57.60.1560	1 pce	56R MF, 1%, 0204, E24					
0	R 2	57.60.1221	1 pce	220R MF, 1%, 0204, E24					
0	R 3	57.60.1470	1 pce	47R MF, 1%, 0204, E24					
0	R 4	57.60.1121	1 pce	120R MF, 1%, 0204, E24					
0	R 5	57.60.1000	1 pce	0R0 MF, 0204					
0	R 6	57.60.1121	1 pce	120R MF, 1%, 0204, E24					
0	R 7	57.60.1470	1 pce	47R MF, 1%, 0204, E24					
0	R 8	57.60.1221	1 pce	220R MF, 1%, 0204, E24					
0	R 9	57.60.1560	1 pce	56R MF, 1%, 0204, E24					
0	R 10	57.60.1000	1 pce	0R0 MF, 0204					
0	R 11	57.60.1560	1 pce	56R MF, 1%, 0204, E24					
0	R 12	57.60.1221	1 pce	220R MF, 1%, 0204, E24					
0	R 13	57.60.1470	1 pce	47R MF, 1%, 0204, E24					
0	R 14	57.60.1121	1 pce	120R MF, 1%, 0204, E24					
0	R 15	57.60.1000	1 pce	0R0 MF, 0204					
0	R 16	57.60.1560	1 pce	56R MF, 1%, 0204, E24					
0	R 17	57.60.1221	1 pce	220R MF, 1%, 0204, E24					
0	R 18	57.60.1470	1 pce	47R MF, 1%, 0204, E24					
0	R 19	57.60.1121	1 pce	120R MF, 1%, 0204, E24					
0	R 20	57.60.1000	1 pce	0R0 MF, 0204					

End of List