

# Converting a D19 MicAD Stage to a D19 MicAD

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This Application Note gives you information on how to convert a Studer D19 MicAD Stage (66.651.000.00) to a D19 MicAD (66.650.000.00).

## 1 Contents of the Kit

(Order no. 20.651.040.00)

1.650.010.01-V	Front panel complete, including keyboard parts and potentiometer knobs.
1.650.040.00-V	1 × Keyboard 8-channel
1.650.031.25	1 × MicAD Software
1.010.128.58	8 × potentiometer 2 × 10kΩ lin
1.010.357.50	8 × transistor ZTX651 (Studer 50.03.0523)
1.010.363.50	16 × transistor ZTX751S (Studer 50.03.0352)
50.16.0703	1 × IC TMP 82 C 79 P-2 (C-MOS)
50.17.1154	1 × IC 74 HC 154 (4-to-16 line driver)
54.14.2003	1 × 26 pin connector socket

## 2 Required Materials

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- An operative Studer D19 MicAD Stage (66.651.000.00);
- Service Instructions for D19 MicAD (10.27.3791);
- Conversion kit, part number 20.651.040.00, including all the components listed above;
- Tools for opening the case and removing the boards inside;
- Equipment for soldering and resoldering.

## 3 Modification

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The modification may be performed by qualified personnel only. Please consider the safety and EMC section in the Service and Operating Instruction Manuals. Use appropriate tools to remove or solder the components listed below.

## 4 Procedure

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**Preparation:** *The MicAD Stage must be switched off and disconnected from the AC power outlet before any housing parts are removed.*



Please retain all screws for later use!

### Disassembly:

- Remove the top cover.
- Remove the front panel (four screws at the front, three at the bottom); as soon as the front panel comes loose, the power switch can be removed (two screws).
- Remove the Keyboard from the front panel.
- Remove the Line Input Board and all optional Interface Boards, if installed.
- Unplug the two-pin connector on the internal power supply unit.
- Remove the Main Board from the chassis.

## Work on Main Board:

Before the described components can be installed, the solder pads used must be free from solder. The positions of the components to be installed are indicated in the list below:

**8 × ZTX651**  
**16 × ZTX 751S**

at the following positions: Q36, Q37, Q48, Q49, Q60, Q61, Q72, and Q73.  
at the following positions: Q38, Q39, Q40, Q41, Q50, Q51, Q52, Q53, Q62, Q63, Q64, Q65, Q74, Q75, Q76, and Q77.

*Please take care to insert the transistors correctly. More information on this subject can be found in the “Technical Information Transistor Package Layout”, order no. 10.27.4750, and in the illustration below.*



**1 × TMP 82 C 79 P-2**

(C-MOS) at position IC131.

*Pay attention to the orientation of the IC: The notch on the IC must correspond to the marker on the component layout diagram.*

**1 × 74 HC 154**

(4-to-16 line driver) at position IC 123.

*Pay attention to the orientation of the IC: The notch on the IC must correspond to the marker on the component layout diagram.*

**1 × 26 pin socket**

(54.14.2003) at position P7.

*Pay attention to the orientation of the socket: The notch on the socket must correspond to the marker on the component layout diagram.*

**8 × potentiometer 2 × 10kΩ lin**

(1.010.128.58) at the following positions: RA1, RA2, RA3, RA4, RA5, RA6, RA7, and RA8.

## Software:

**Studer 1.650.031.25**

The current software on the Main Board must be replaced by:

Software for MicAD, at position IC 121.

*Pay attention to the orientation of the IC: The notch on the IC must correspond to the marker on the component layout diagram.*

## Front panel:

- Mount the new Keyboard (1.650.040.00-V) onto the new front panel with the retained screws.
- Install all the key caps.

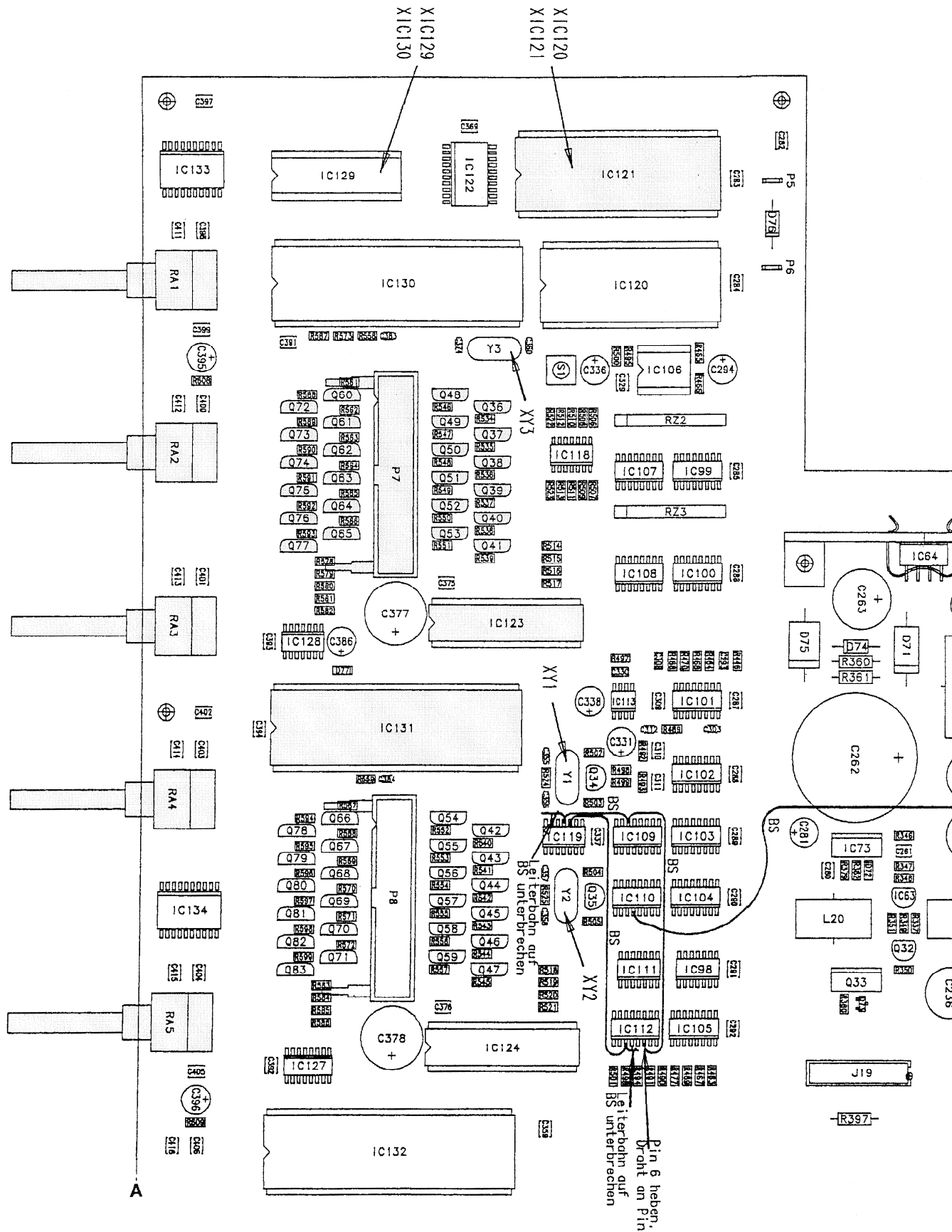
## MicAD Main Board:

- Install the modified Main Board and fix it with all the screws.
- Reconnect the power supply .
- Install the power switch to the new front panel and mount the front panel to the chassis.
- Slide the rotary knobs to the potentiometer shafts.
- Install the Line Input Board and all optional Interface Boards that were installed before. Insert the connectors to the Main Board and fix the Boards again with the appropriate screws.

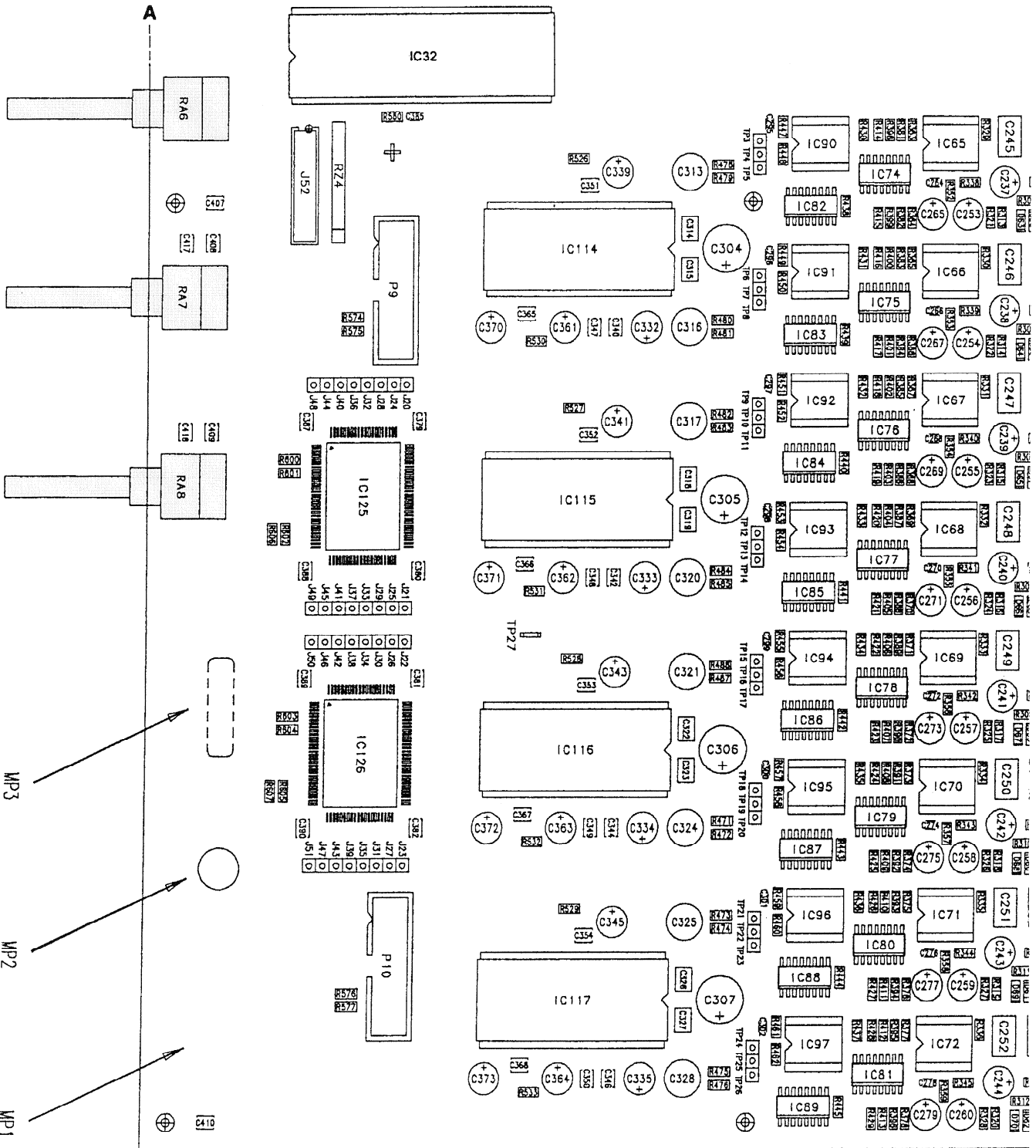
## Finish:

- Reinstall the top cover and enjoy using your MicAD. 👍

MAIN BOARD A / D CONVERTER 8CH 1.650.030.24



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