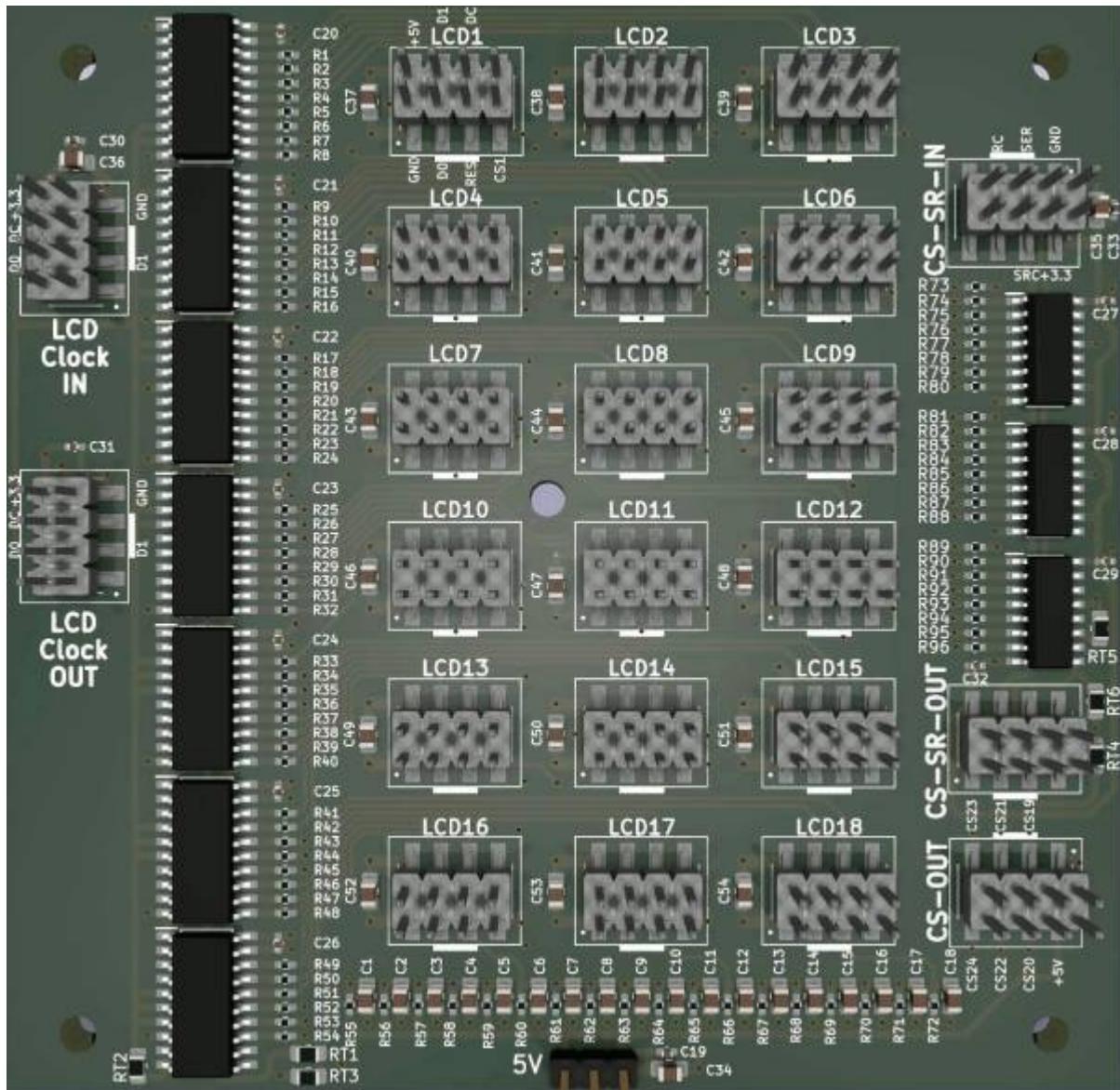
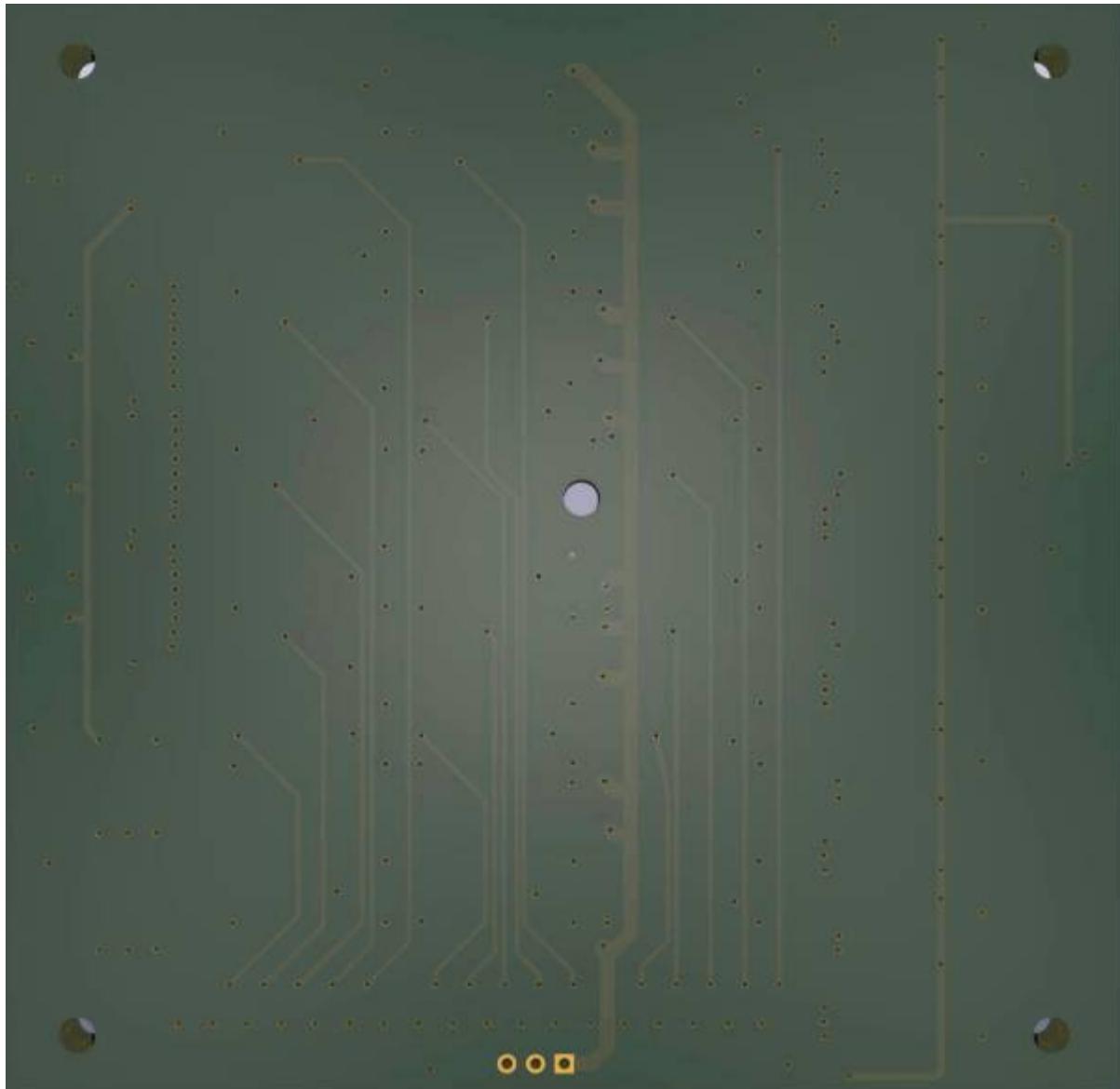


## TM5 Gate/Trigger Input





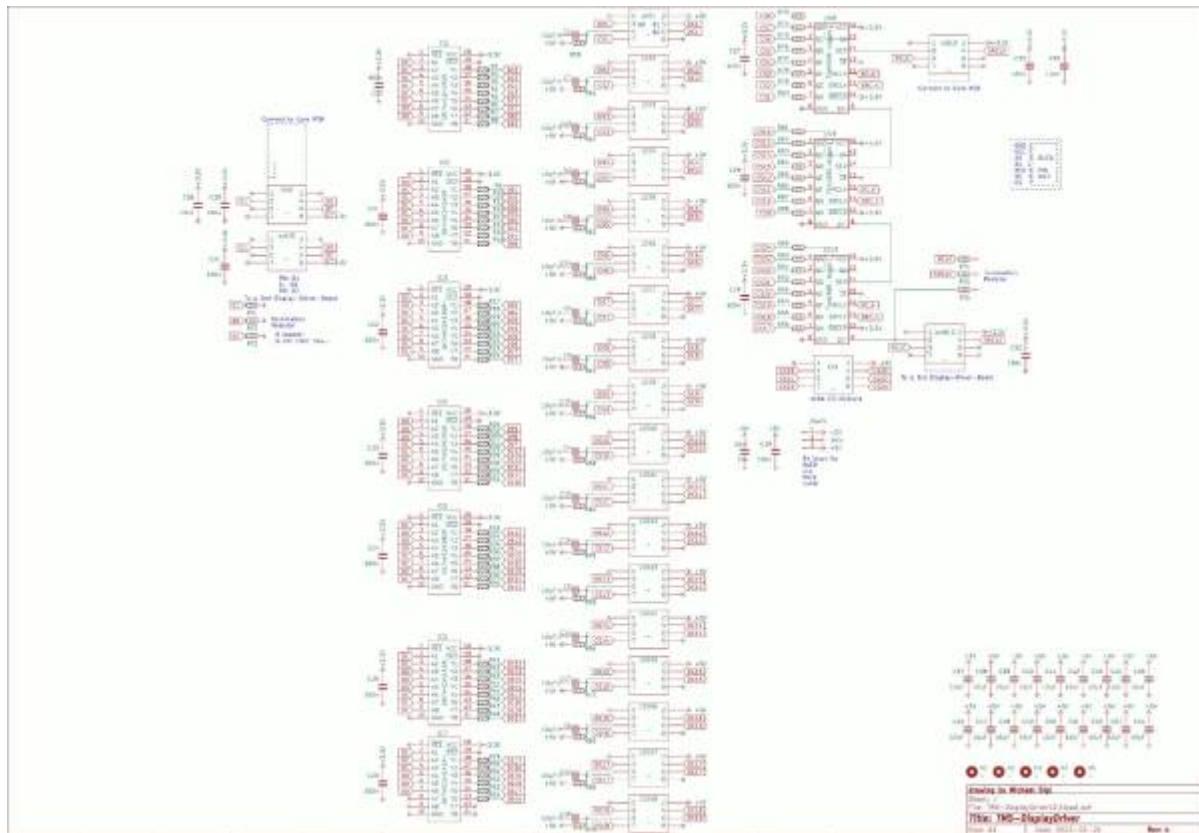
this is one essential part for my [triggermatrix5](#)

This can make a Levelshift from 5V to the for the MCU required 3V, with a Resistor Divider, and is overvoltage Protectect with TVS-Diodes, also there is a Preamp-Section, if you want 5V, 3V oder PreAmped input can be set via Jumpers and Potentiometers, the PCB itself should be mounted on the Groundplate off the housing, the housing should have a service-plate to access this Settings!

8 Channels, are managed here, so in order to have 16channels, you need 2 off this PCBs if you dont want a Preamp, then dont stuff the Preamp-section > this will make this PCB a lot off cheaper!

## Shematic

[display-driver-smd-shematic.pdf](#)



# Building and BOM

## BOM

Following list is for reference, and debugging only, **no need to order them!** all the parts are already soldered on the PCB!

| Comment   | Designator                    | Footprint                | LCSC            |
|-----------|-------------------------------|--------------------------|-----------------|
| 10uF      | C1-18,C34-54                  | 0805_C                   | CL21A106KAYNNNE |
| 100n      | C19-33                        | 0402_C                   | C307331         |
| -         | CS1,LCD1-18,inB10,outB10,in15 | PinHead-SMD-2,54mm Pitch | C192300         |
| SN74HC541 | IC1-7                         | SOIC127P780X200-20N      | C116811         |
| 74HC595   | IC8-10                        | SOIC-16                  | C5947           |
| 220 OHM   | R1-54                         | 0402_R                   | C25091          |
| 1K OHM    | R55-96                        | 0402_R                   | C11702          |

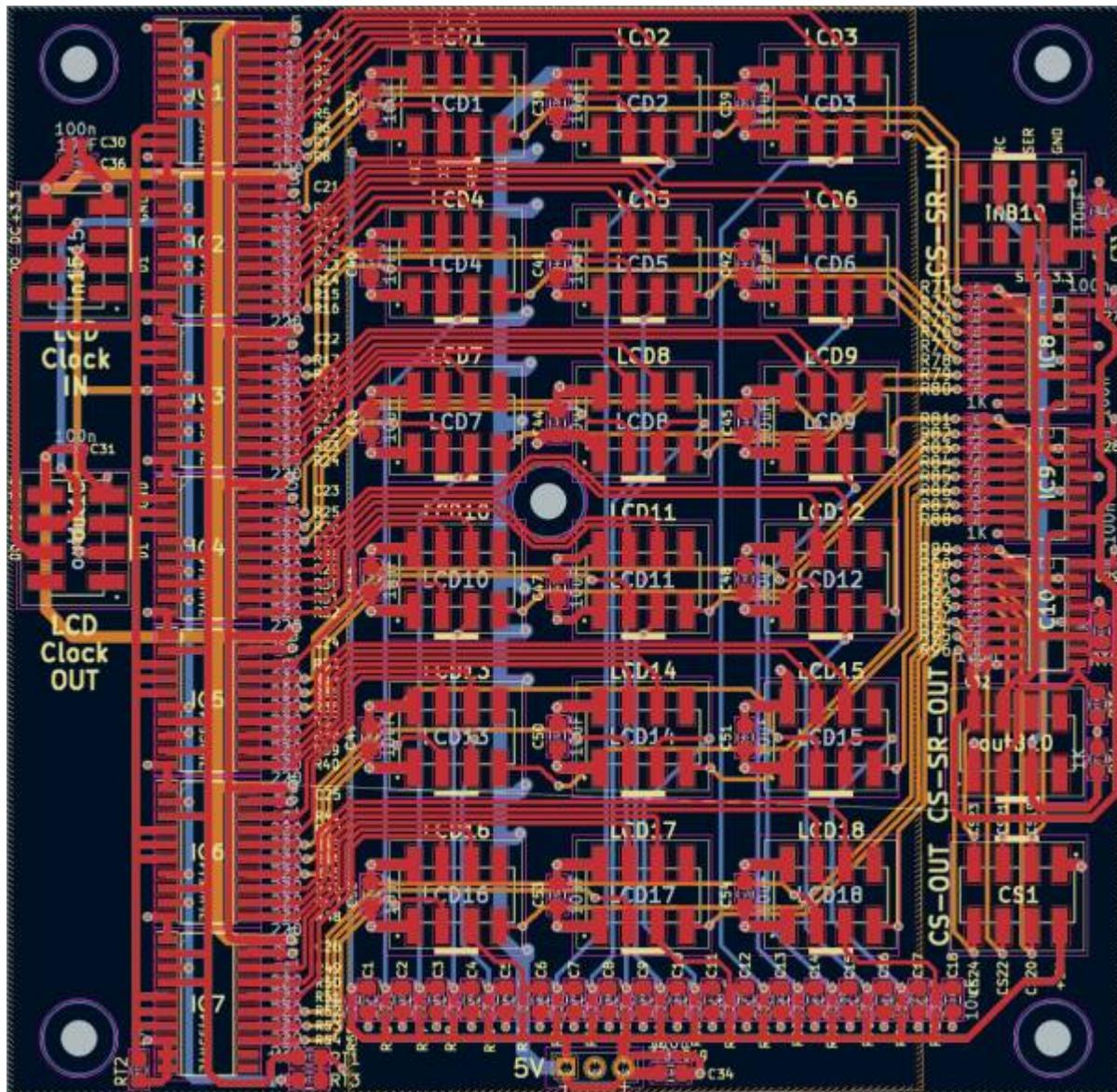
## Order-List

copy following list into this [mouser.com](http://mouser.com)-Link

710-61200823021|22

**Order from Reichelt:**

## 17xFemale Pinheader 1x7pin



## To Do

waiting for the assembled Prototype

# Community users working on it

- **Phatline** = PCB & Schematic, UI-Programming, Documentation...

Just let a Private message on the forum to user already involved.  
or join the forum: [Triggermatrix 5](#)

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Permanent link:

<http://wiki.midibox.org/doku.php?id=tm5-gateinput&rev=1672311667>

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