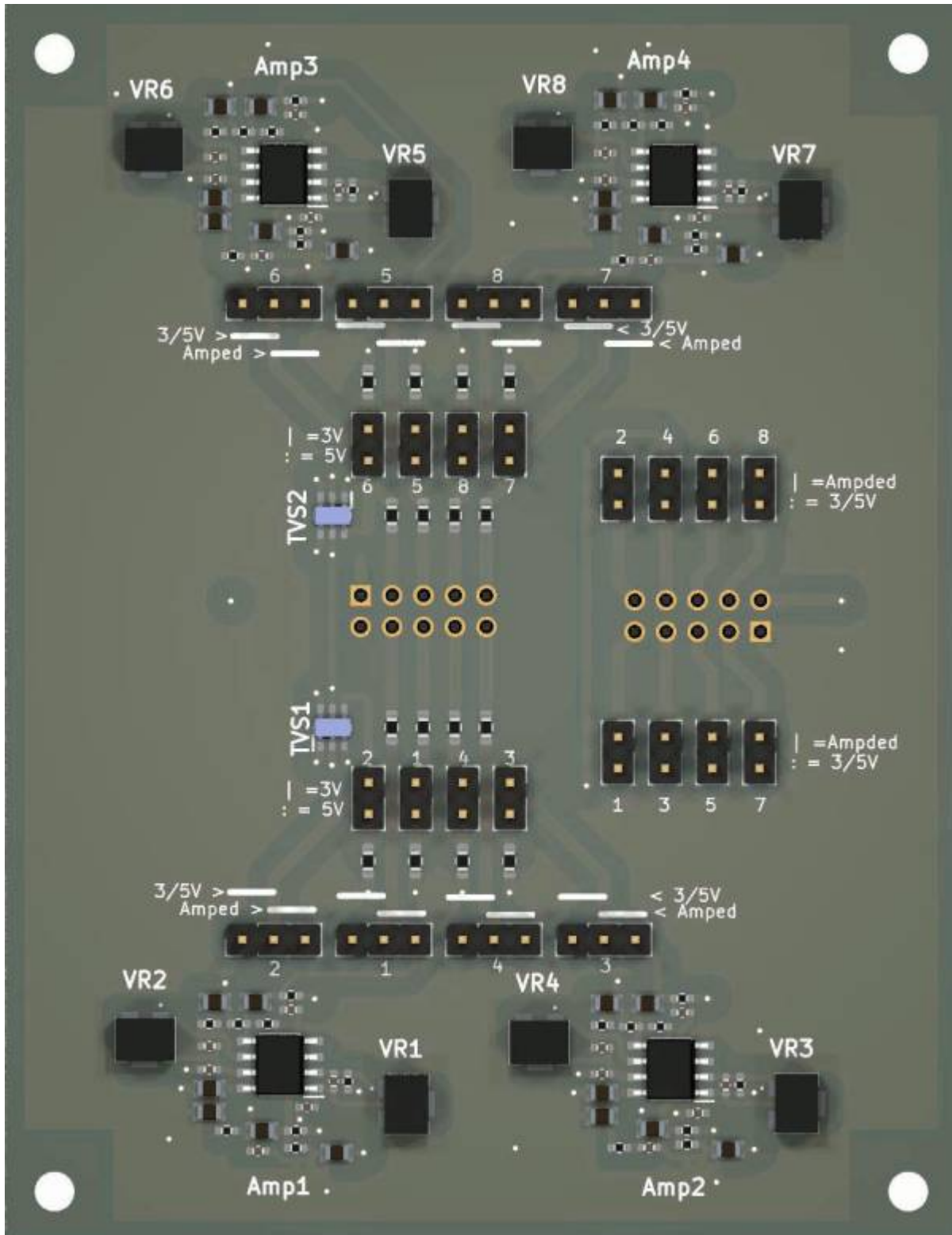


TM5 Gate/Trigger Input

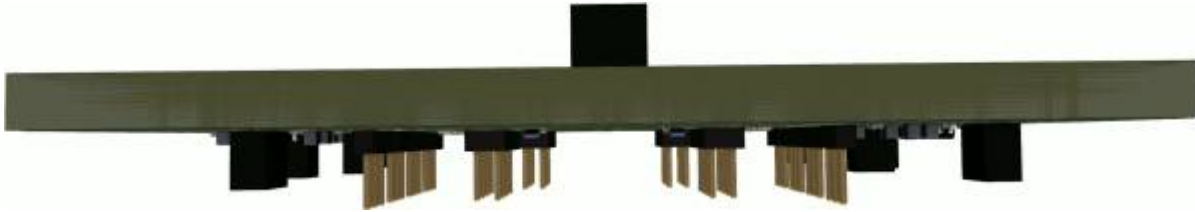




this is one essential part for my [triggermatrix5](#)

- * Levelshift from 5V to the for the MCU required 3V, with a Resistor Divider
- * Overvoltage Protectect with TVS-Diodes
- * Preamp-Section

5V, 3V or Pre-Amped input - can be set vie 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!

Schematic

[tm5-gatein-schema.pdf](#)



Building and BOM

BOM

Follwing 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 |

| Comment | Designator | Footprint | LCSC |
|---------|------------|-----------|--------|
| 74HC595 | IC8-10 | SOIC-16 | C5947 |
| 220 OHM | R1-54 | 0402_R | C25091 |
| 1K OHM | R55-96 | 0402_R | C11702 |

Order-List

This Quantitys are for ONE Board, you may need 2 Boards...

copy following list into this [mouser.com-Link](#)

517-30310-6002|5

Order from Reichelt:

3x [1x20Pin Male 2,54mm Headers](#)

4x [PinHeader 2x5Pin FeMale](#)

32x [Jumper](#)



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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