

# TM5 Gate/Trigger Input

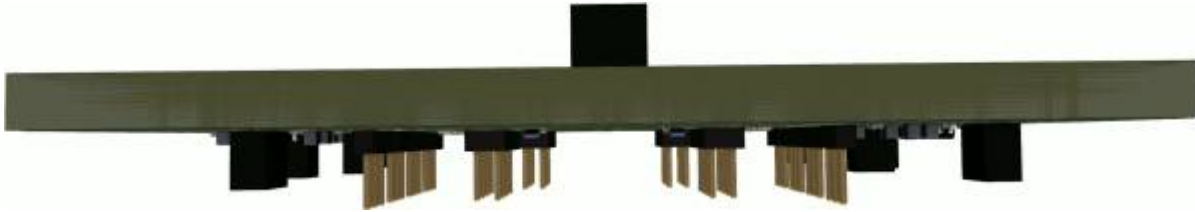




this is one essential part for my [triggermatrix5](#)

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

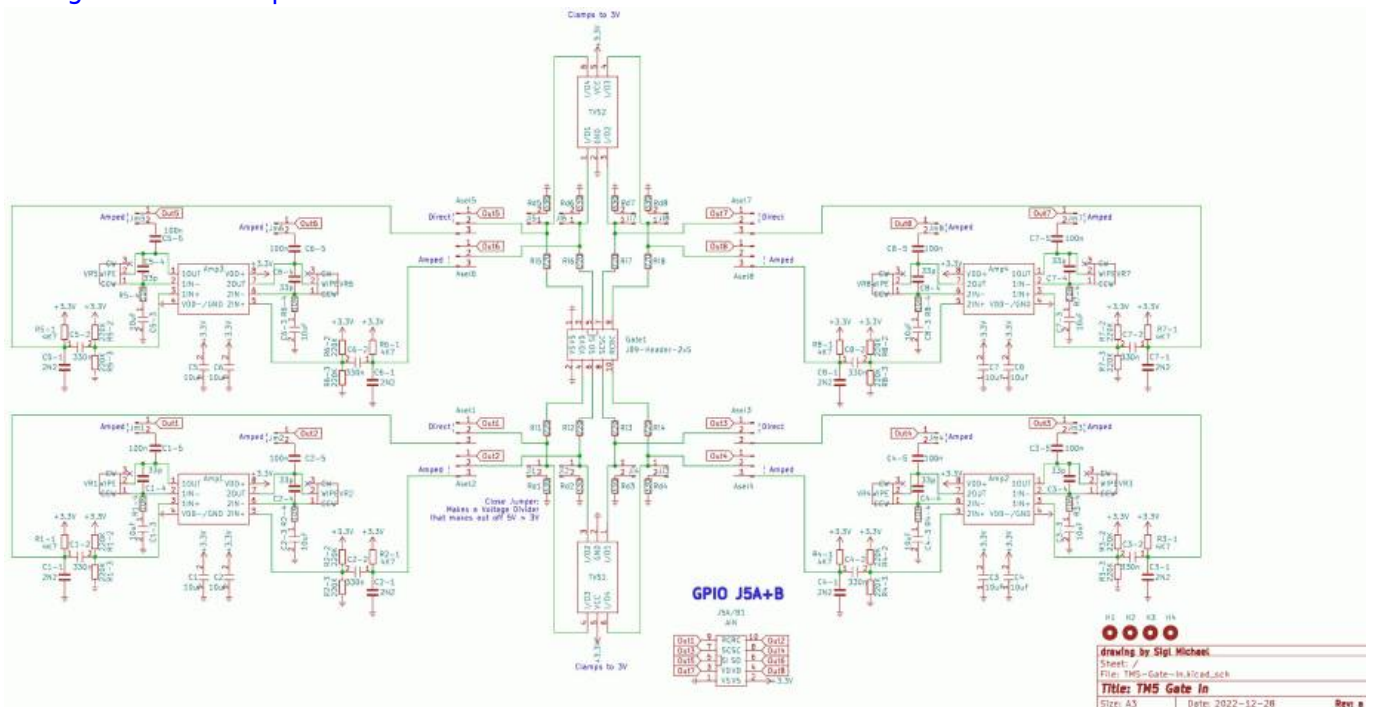
5V, 3V or Pre-Amped input - can be set vie Jumpers and Potentiometers, the PCB itself should be mounted on the Groundplate off the housing, the housing should have a service-plate to access this Settings!:



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](#)

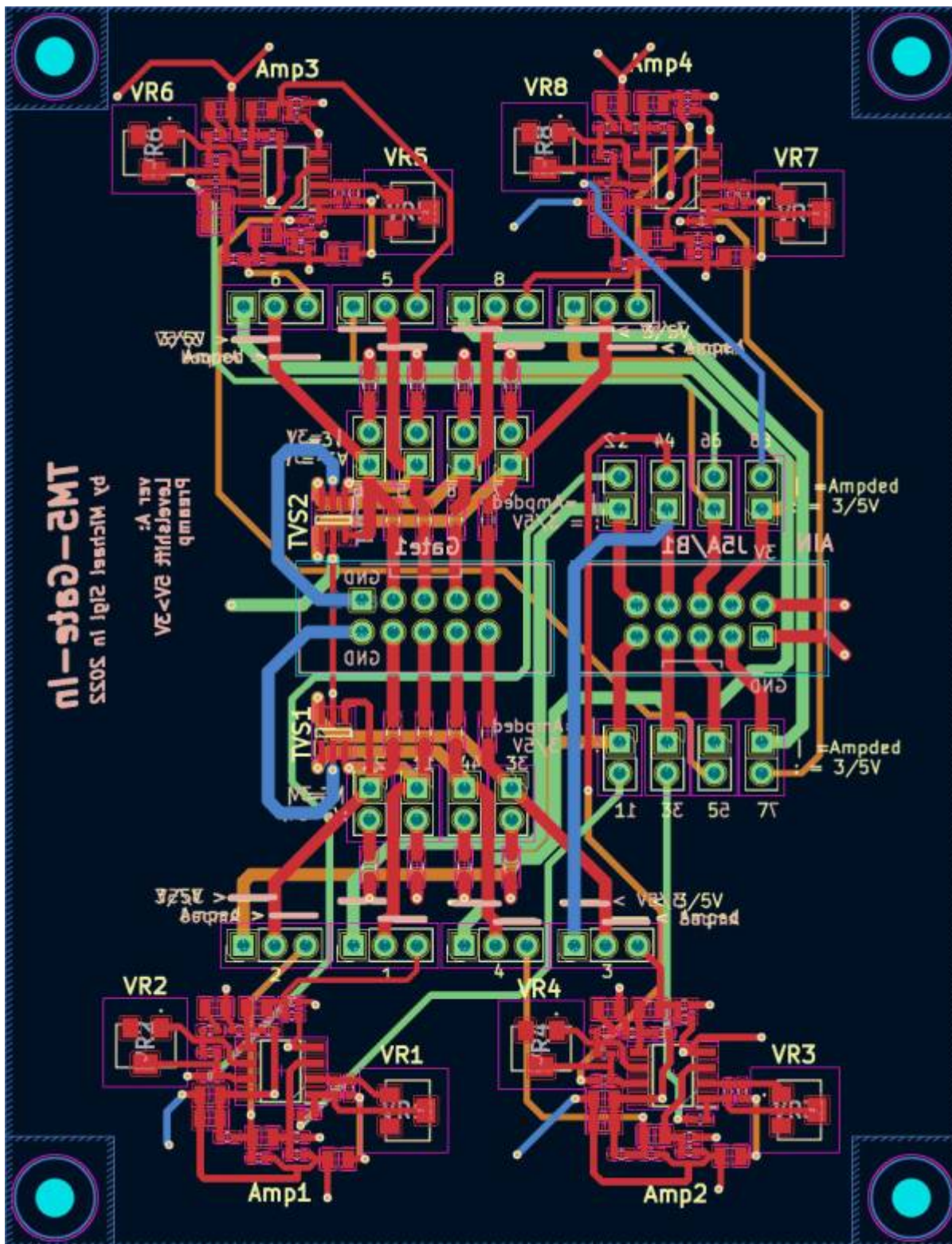
517-30310-6002|5

### Order from Reichelt:

3x [2x20Pin 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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Last update: **2022/12/29 12:13**

