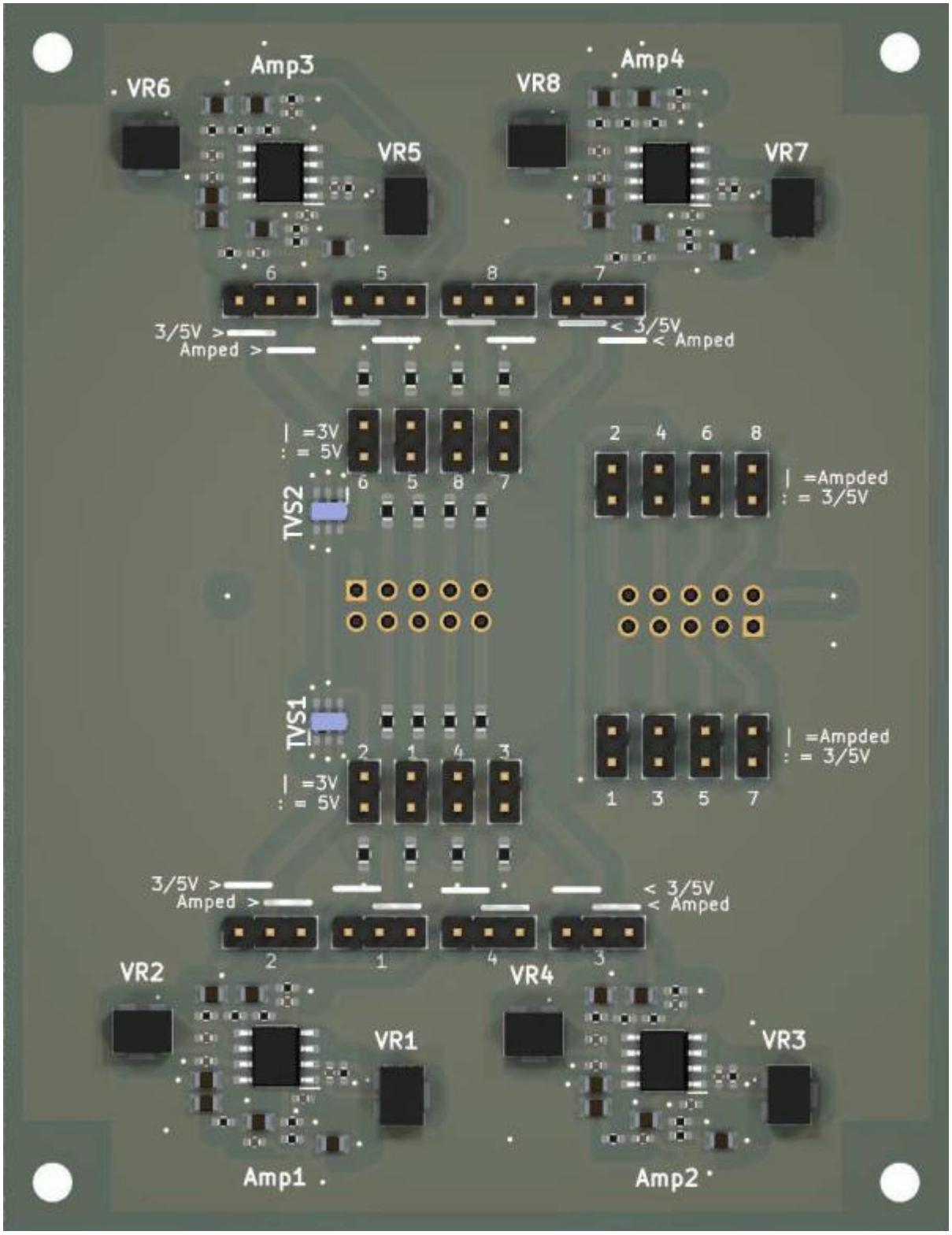
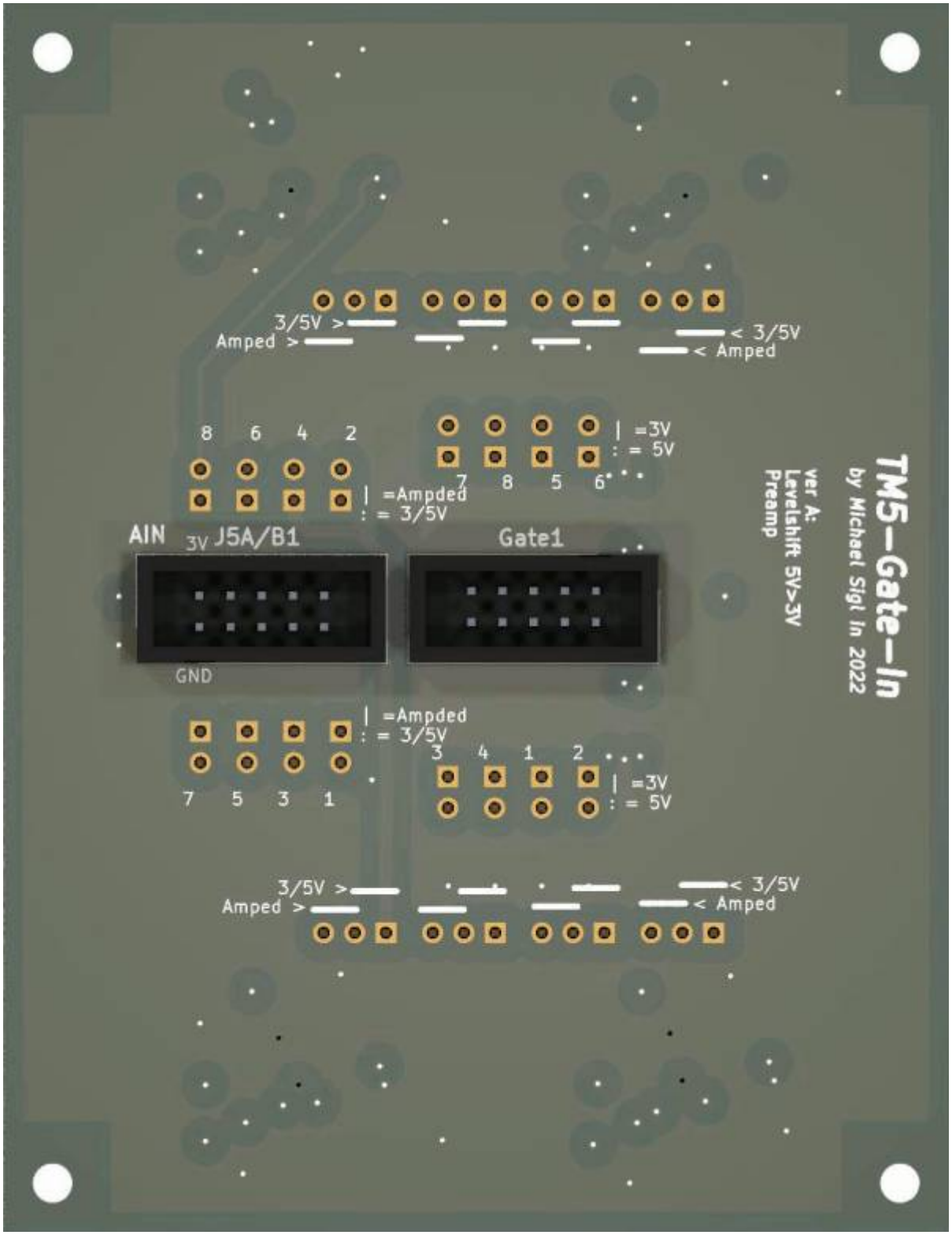
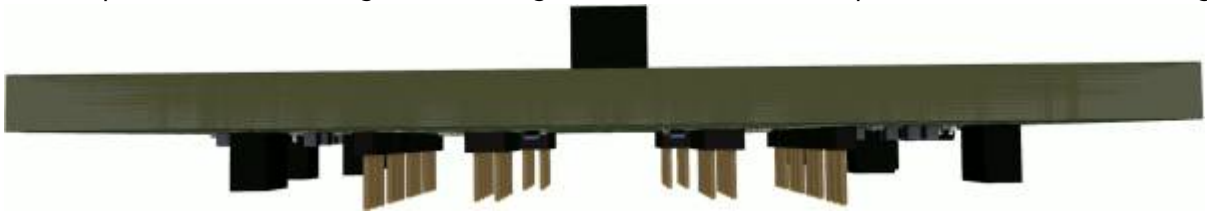
TM5 Gate/Trigger Input





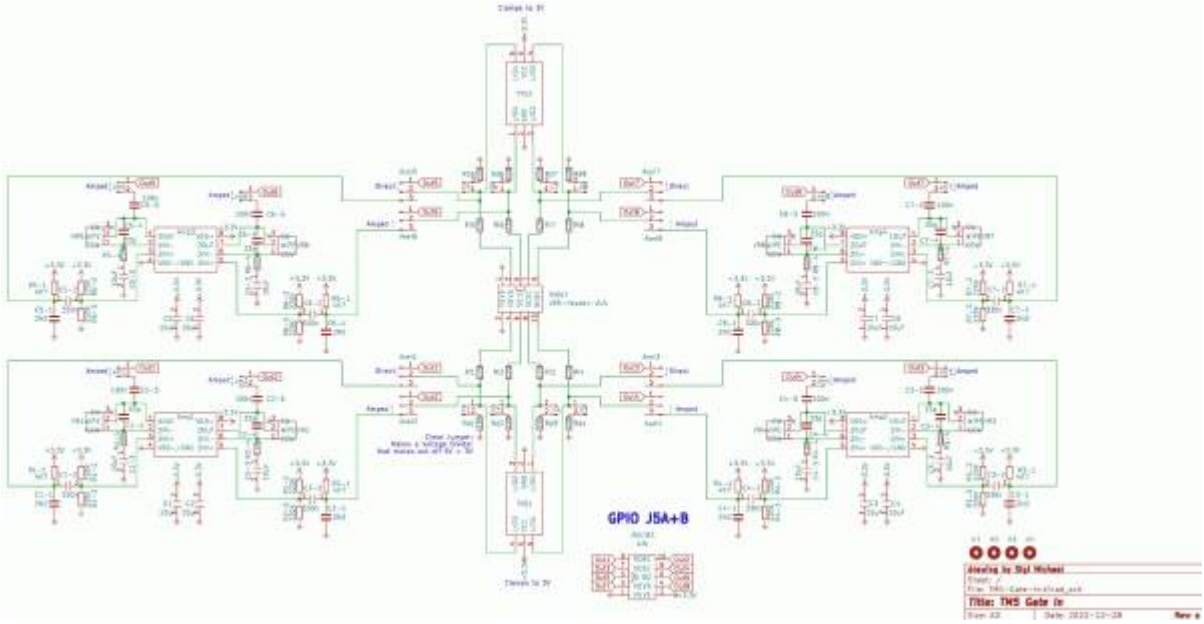
this is one essential part for my triggermatrix5
This can make a Levelshift from 5V to the for the MCU required 3V, with a Resistor Divider, and is overvoltage Protectect with TVS-Diodes, also there is a Preamp-Section, if you want 5V, 3V oder Pre-Amped input can be set vie Jumpers and Potentiometers, 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!

Shematic

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!

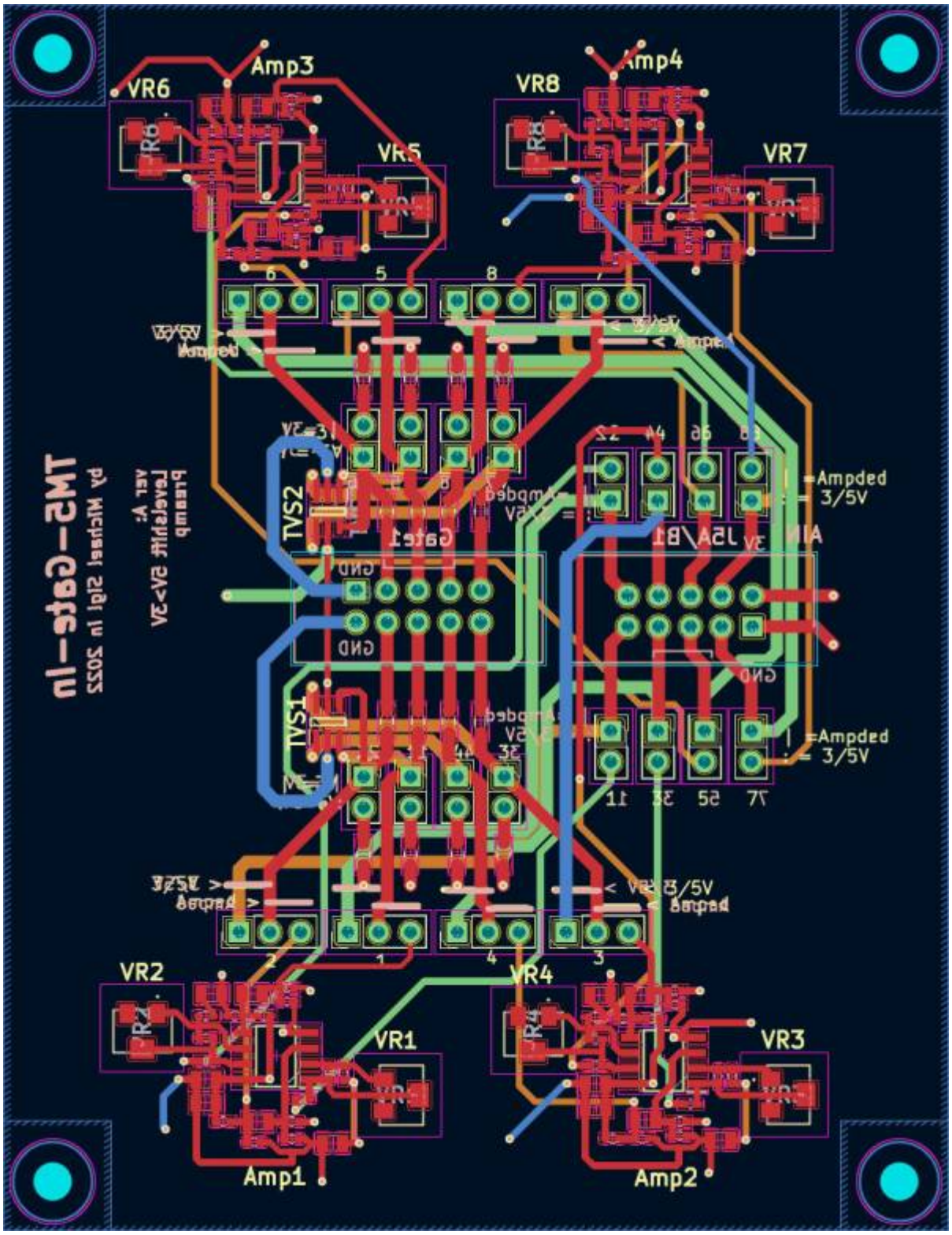
Comment	Designator	Footprint	LCSC
10uF	C1-18,C34-54	0805_C	CL21A106KAYNNNE
100n	C19-33	0402_C	C307331
-	CS1,LCD1-18,inB10,outB10,in15	PinHead-SMD-2,54mm Pitch	C192300
SN74HC541	IC1-7	SOIC127P780X200-20N	C116811
74HC595	IC8-10	SOIC-16	C5947
220 OHM	R1-54	0402_R	C25091
1K OHM	R55-96	0402_R	C11702

Order-List

copy following list into this mouser.com-Link

710-61200823021|22

Order from Reichelt:
17xFemale Pinheader 1x7pin



To Do

waiting for the assembled Prototype

Community users working on it

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

Just let a Private message on the forum to user already involved.
or join the forum: Triggermatrix 5

From:
https://wiki.midibox.org/ - **MIDIbox**

Permanent link:
https://wiki.midibox.org/doku.php?id=tm5-gateinput&rev=1672314484

Last update: **2022/12/29 11:48**