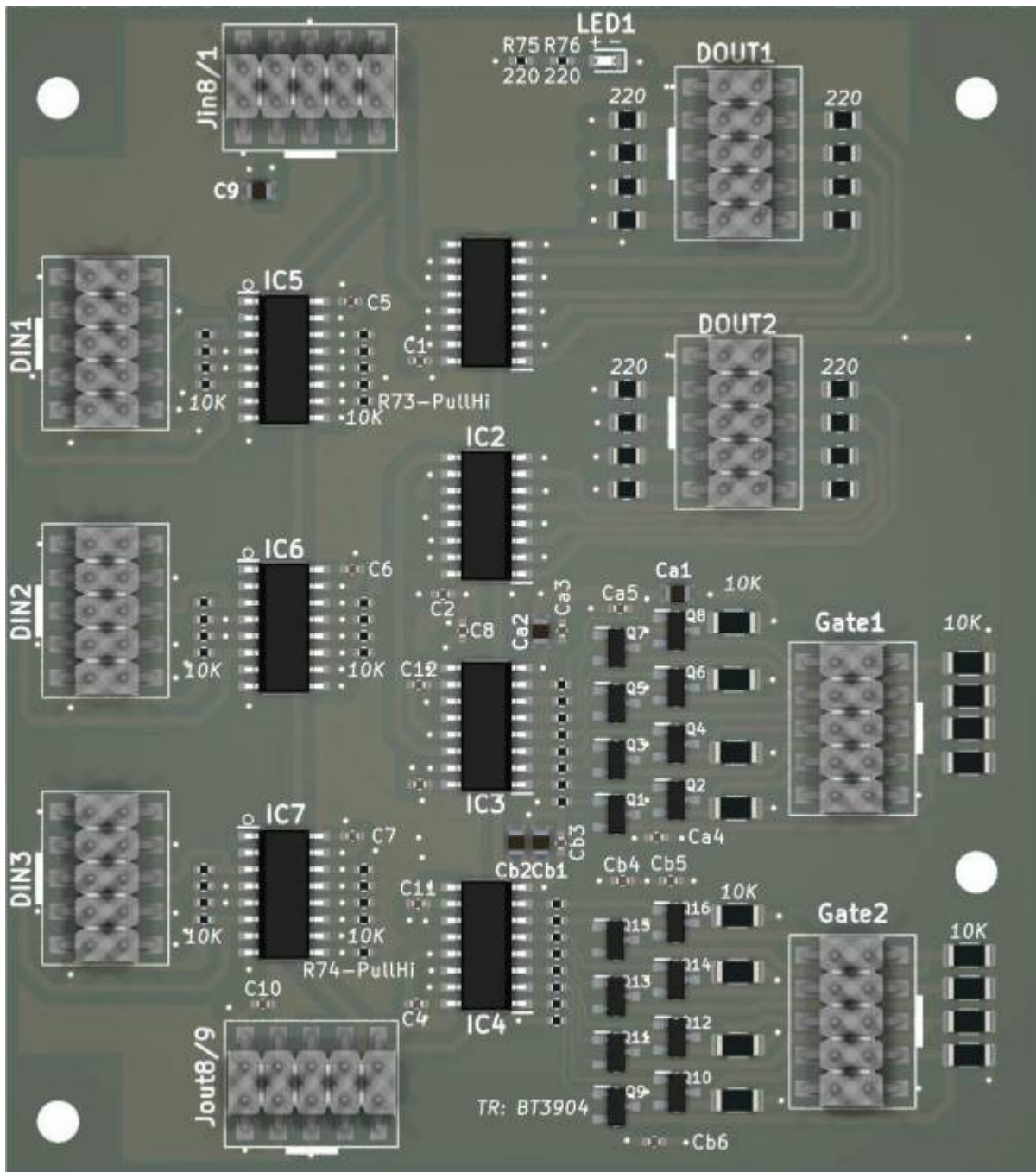
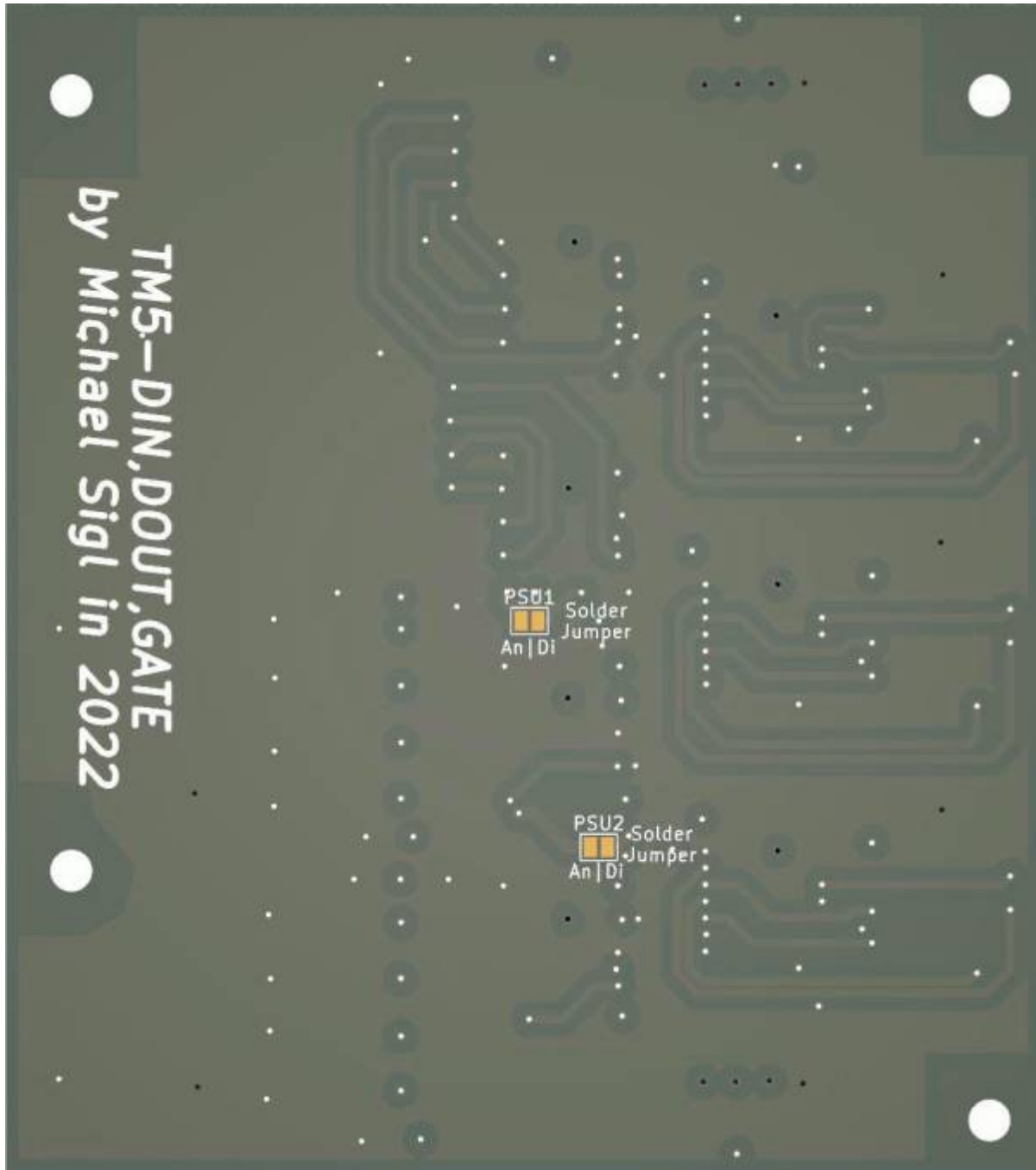


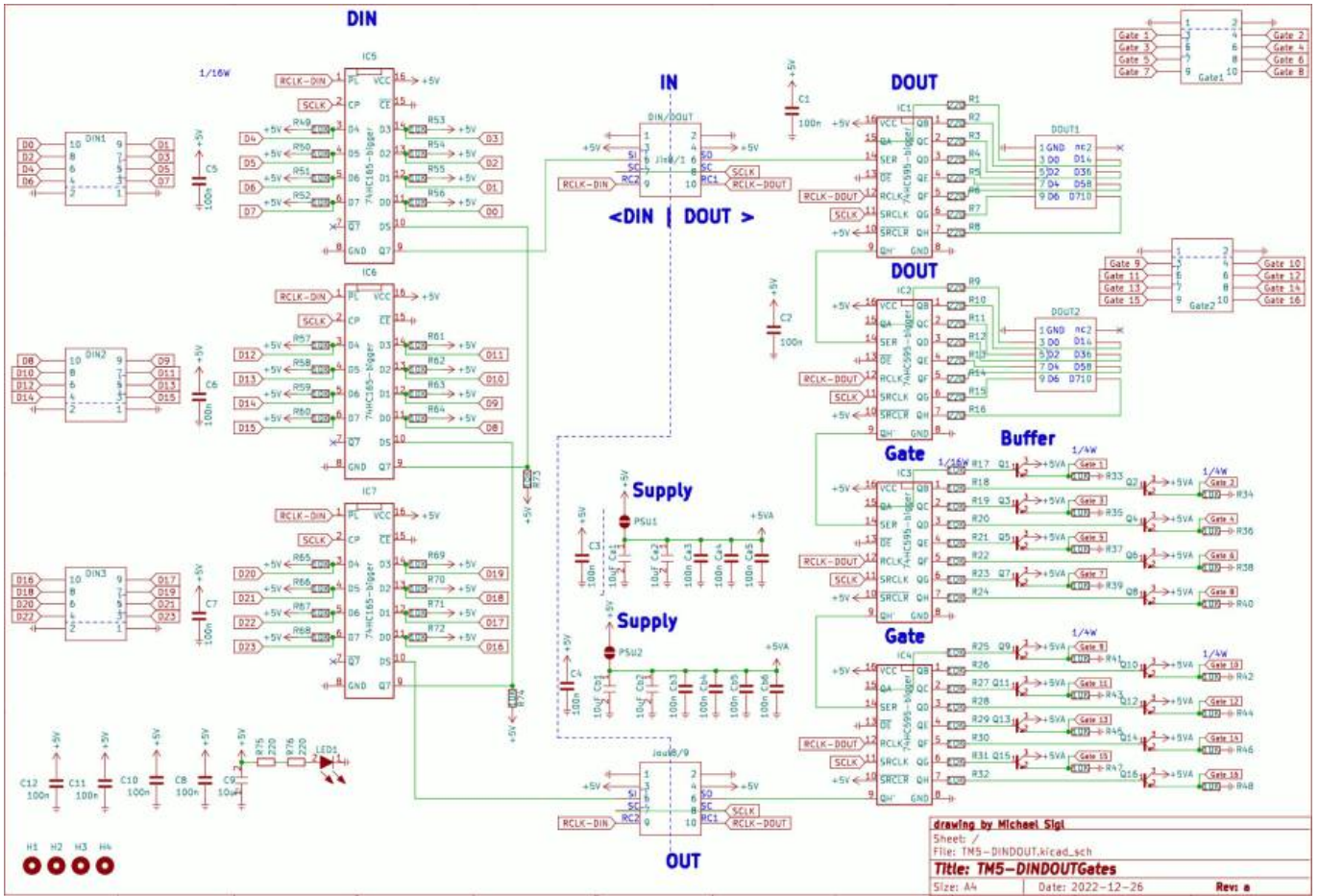
TM5-DinDoutGates





this is one essential part for my [triggermatrix5](#)
it gives 24 Digital Inputs, and 32 Digital Outputs, while 16 Outputs are used for UI, the other 16 are buffered, and are for use as 16 GATe/Triggger output at 5V Level
i created this board. its fully SMD, and made it pick and place ready - so no soldering required!

Schematic

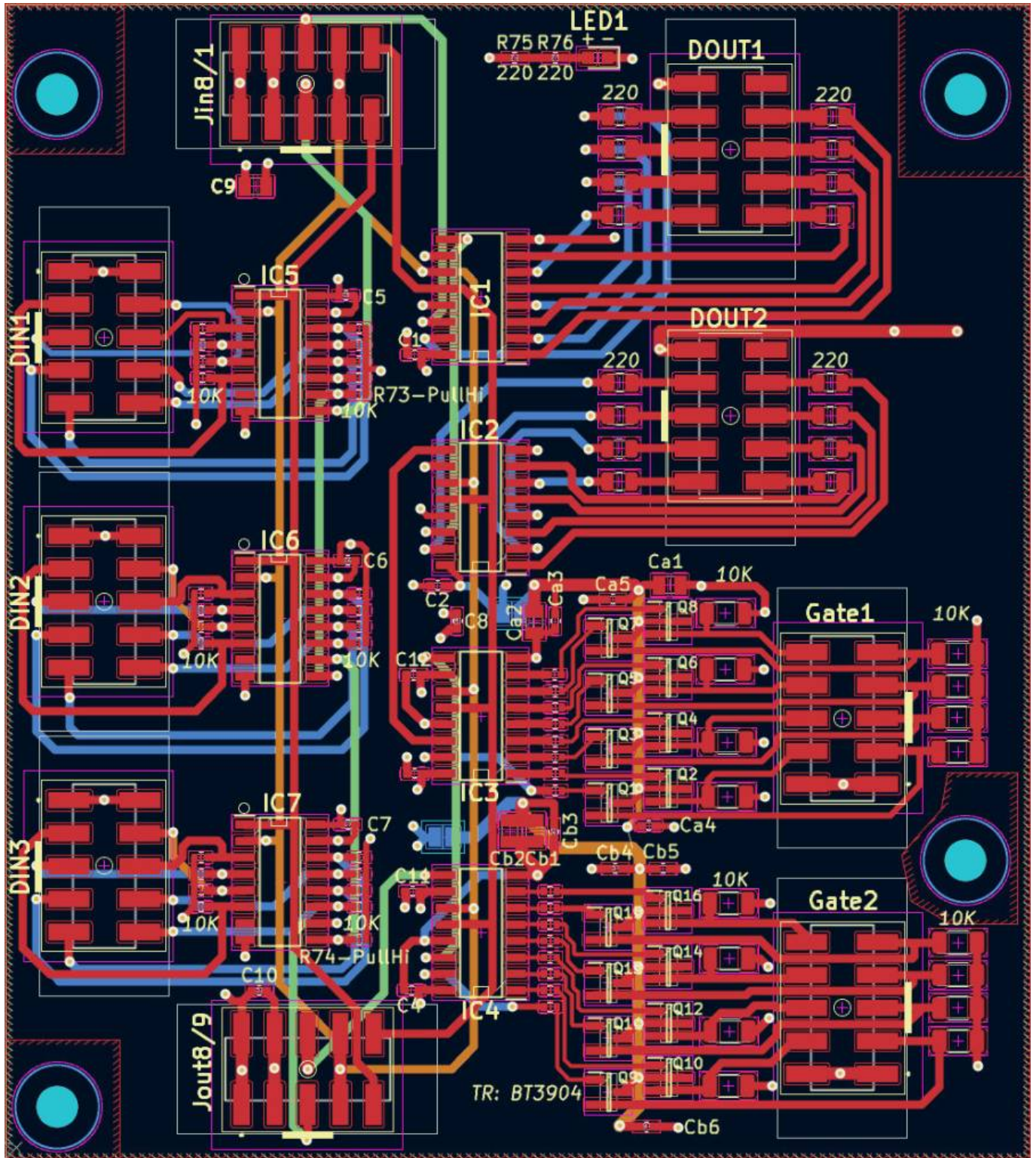


Building and BOM

Its build by pick and place robots... so no need to build

BOM

| qty | reference | value | footprint | jlc |
|-----|---|-----------------|-----------------|---------|
| 18 | C1 - C12, Ca3, Ca4, Ca5, Cb3, Cb4, Cb5, Cb6 | 100n | C_0402 | C307331 |
| 5 | C9, Ca1, Ca2, Cb1, Cb2 | 10uF | C0805 | C440198 |
| 5 | DIN1, DIN2, DIN3, Gate1, Gate2 | Gates | Pin-Head-10-SMD | C124391 |
| 4 | DOUT1, DOUT2, Jin8/1, Jout8/9 DIN/DOUT | Pin-Head-10-SMD | C124391 | |
| 4 | IC1, IC2, IC3, IC4 | 74HC595-bigger | HC595-smd | C5947 |
| 3 | IC5, IC6, IC7 | 74HC165-bigger | HC165-smd | C5613 |
| 1 | LED1 | LED | LED-0603 | C2286 |
| 16 | Q1 - Q16 | MMBT3904-7-F | MMBT3904-7-F | C20526 |
| 16 | R1 - R16 | 220 | R_0805 | C25294 |
| 42 | R17 - R74 | 10K | R_0402 | C25744 |
| 16 | R33 - R48 | 10K | R_1206 | C17902 |
| 2 | R75, R76 | 220 | R_0402 | C25091 |



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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