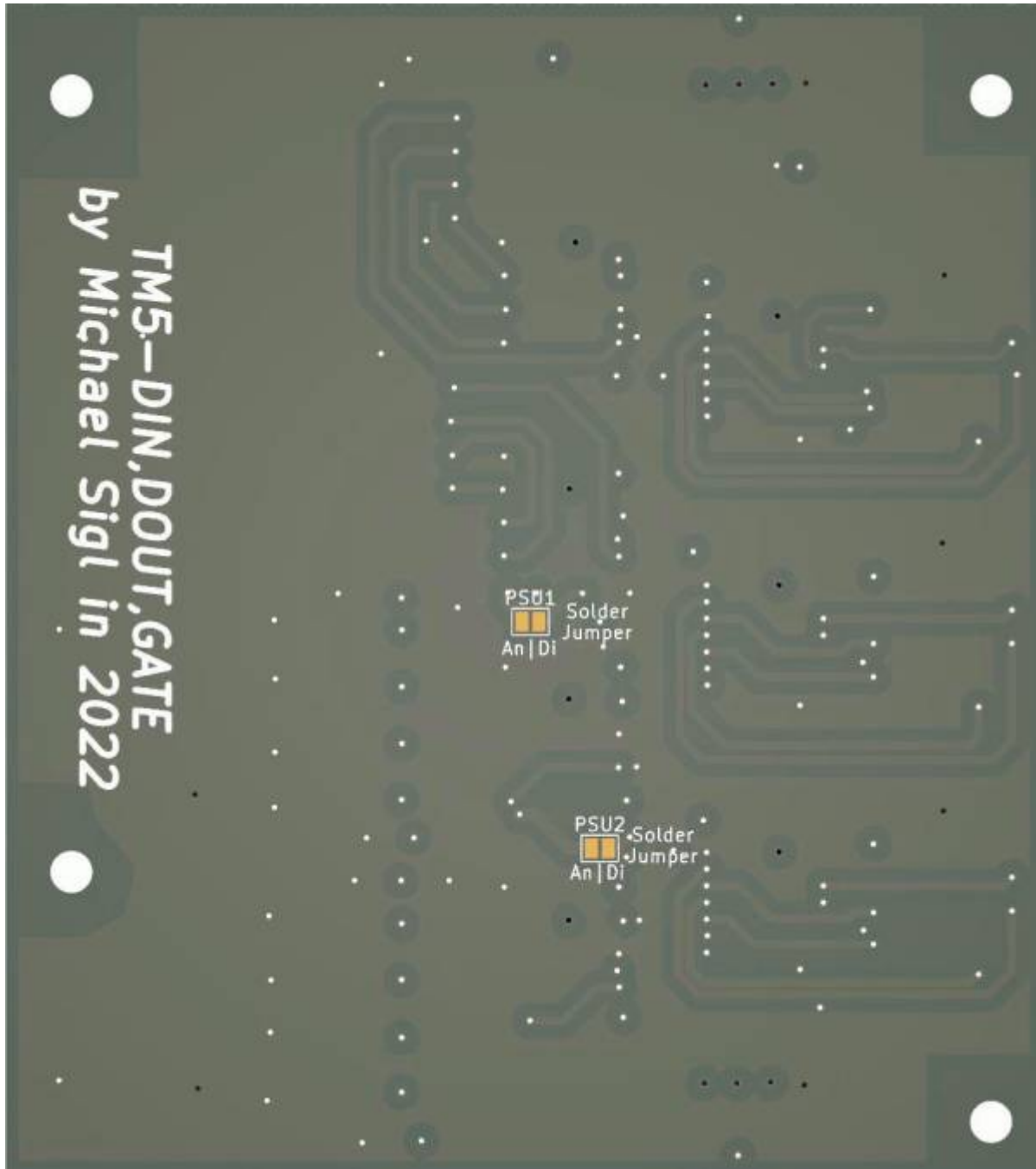


# TM5-DinDoutGates





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

it gives;

24 Digital Inputs 32 Digital Outputs \* while 16 Outputs are used for UI \* the other 16 are buffered, and are for use as 16 GATE/Trigger output at 5V Level

The Board is fully SMD, and made for pick and place - 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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