



# Schematic

[core4disc-schematic.pdf](#)



# Building and BOM

parts off it is pick and place the other part is handsolder

## BOM

the LCSC Parts are done with the Pick and place - so no need to order...

| Comment            | Designator                  | LCSC    | Lot |
|--------------------|-----------------------------|---------|-----|
| SN74HC541          | IC1                         | C116811 | 1   |
| 1K                 | Ra1,Rb1,Rc1,R5,R6,R7,R8,R24 | C11702  | 8   |
| J10B               | GPIO1                       | C124391 | 1   |
| AIN                | J5A/B1                      | C124391 | 1   |
| DIN/DOUT           | J8/1                        | C124391 | 1   |
| MCP3208            | IC2,IC3                     | C16939  | 2   |
| 10                 | R17                         | C17902  | 1   |
| 6N138-SMD          | O1,O2,O3,O4                 | C188666 | 4   |
| Pin-Header-2x4-SMD | AIN0,AIN1                   | C192300 | 2   |

| Comment   | Designator          | LCSC    | Lot |
|-----------|---------------------|---------|-----|
| J4A+B     | IIC1                | C192300 | 1   |
| J15A      | JA15                | C192300 | 1   |
| J10B      | JB10                | C192300 | 1   |
| -         | Midi1               | C192300 | 1   |
| LED       | LED1                | C2286   | 1   |
| 220       | R1-4,R13-21         | C25091  | 12  |
| 2K2       | R22,R23,R25,R26     | C25879  | 4   |
| 4K7       | R9,R10,R11,R12      | C25900  | 4   |
| 100n      | C4,C6,C7,C8,C10,C12 | C307331 | 6   |
| 10uF      | C1-5,C9,C11,C13-15  | C440198 | 9   |
| uSD-Molex | SD1                 | C585350 | 1   |
| 1N4148W   | D1,D2,D3,D4,D6      | C81598  | 5   |

The Mouser parts that have to be soldered by hand - you have to order them on your own...:

| Comment                 | Designator       | MouserNumber         | Lot |
|-------------------------|------------------|----------------------|-----|
| PW2                     | TSR_2-2450       | 495-TSR2-2450        | 1   |
| USB1                    | USB-B-Socket     | 538-67068-8000       | 1   |
| D5                      | 1N5818           | 583-1N5818-T         | 1   |
| Midi1                   | -                | 649-1012938390801ALF | 1   |
| Midi-IN1-2, Midi-OUT1-2 | Midi-KCDX-5S-S2  | 806-KCDX-5S-S2       | 4   |
| DISC1                   | STM32F4DISCOVERY | 511-STM32F407G-DISC1 | 1   |
| PW1                     | PJ-079BH         | 490-PJ-079BH         | 1   |
| SW1-3                   | Power            | 611-1101M2S4AV2BE2   | 3   |
| USB3                    | USB_A-Molex      | 538-89485-8000       | 1   |

## Order-List

copy following list into this [mouser.com-Link](https://www.mouser.com)

```
495-TSR2-2450|1
538-67068-8000|1
583-1N5818-T|1
649-1012938390801ALF|1
806-KCDX-5S-S2|4
511-STM32F407G-DISC1|1
490-PJ-079BH|1
611-1101M2S4AV2BE2|3
538-89485-8000|1
```

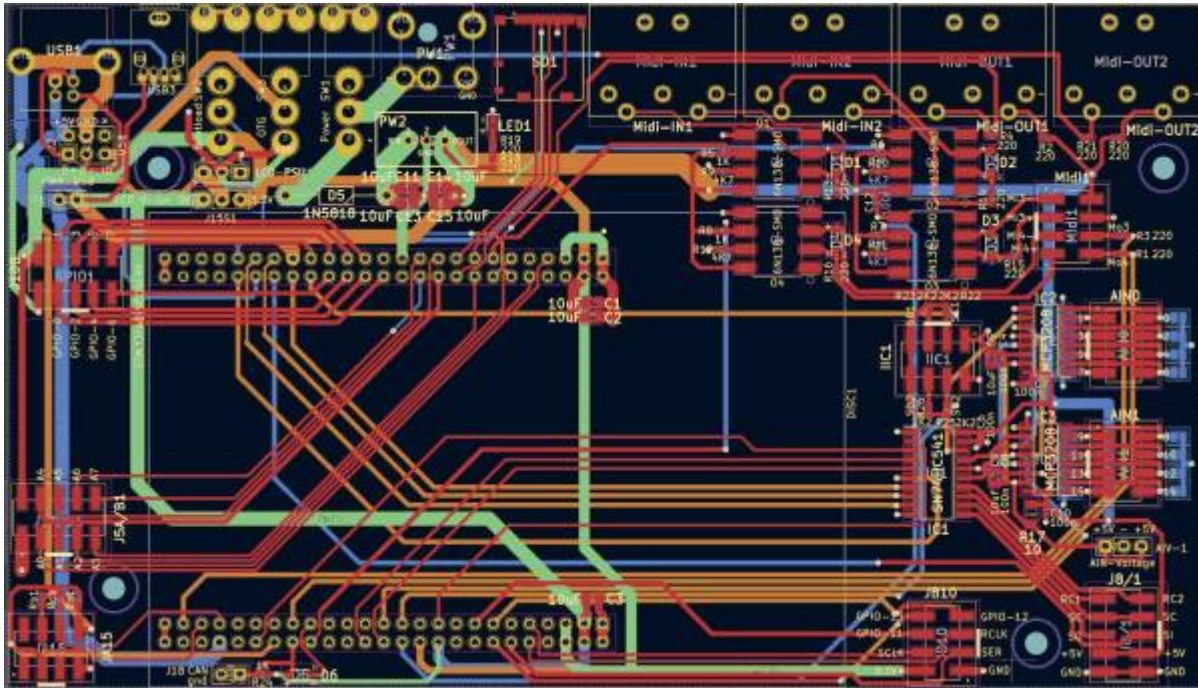
### Order from Reichelt:

2x [2x25Pin Female 2,54mm Headers](#)

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

1x [2x10Pin Male 2,54mm Headers](#)

- 5x PinHeader 2x5Pin FeMale
- 4x PinHeader 2x4Pin Female



## 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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