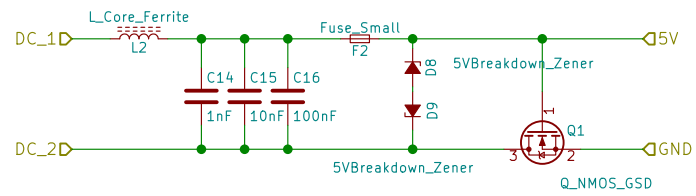
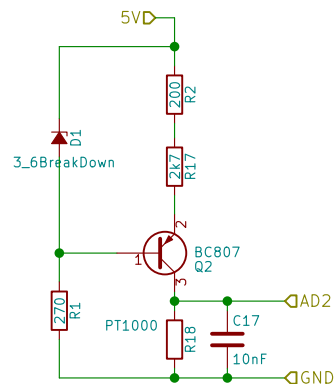


Rev:  
Id: 1/6



Sheet: /Input_filter/ File: Input_filter.sch		
Title:		
Size: A4	Date: 2020-07-18	Rev:
KiCad E.D.A. kicad 4.0.7-e2-637661ubuntu18.04.1		Id: 2/6



Design notes:  
 - load current will be approximately 1 mA  
 - 0,4K/mW self-heating -> it shall be compensated by SW

#### Calculations:

##### 1) Zener

$$V_t = 5V$$

$$I_{load} = 1mA$$

$$R_{maxload} = 1300 \text{ (at about } 78^\circ C \text{ according to datasheet)}$$

$$R_{maxload} = (V_t - V_z) / I_{load}$$

$$V_z = V_t - R_{maxload} * I_{load} = 3,7 \text{ (available is } 3,6V - \text{close enough)}$$

##### 2) Zener resistor

$$V_z = 3,6V$$

$$I_z = 5mA$$

$$R_z = (V_t - V_z) / I_z = 280 \text{ ohm (available is } 270 - \text{close enough)}$$

Sheet: /RTD\_temp\_sense/  
 File: RTD\_temp\_sense.sch

#### Title:

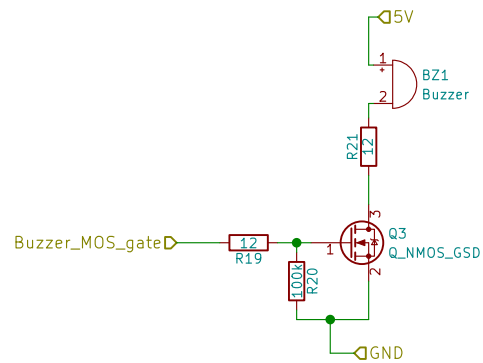
Size: A4

Date: 2020-07-18

Rev:

KiCad E.D.A. kicad 4.0.7-e2-637661ubuntu18.04.1

Id: 3/6



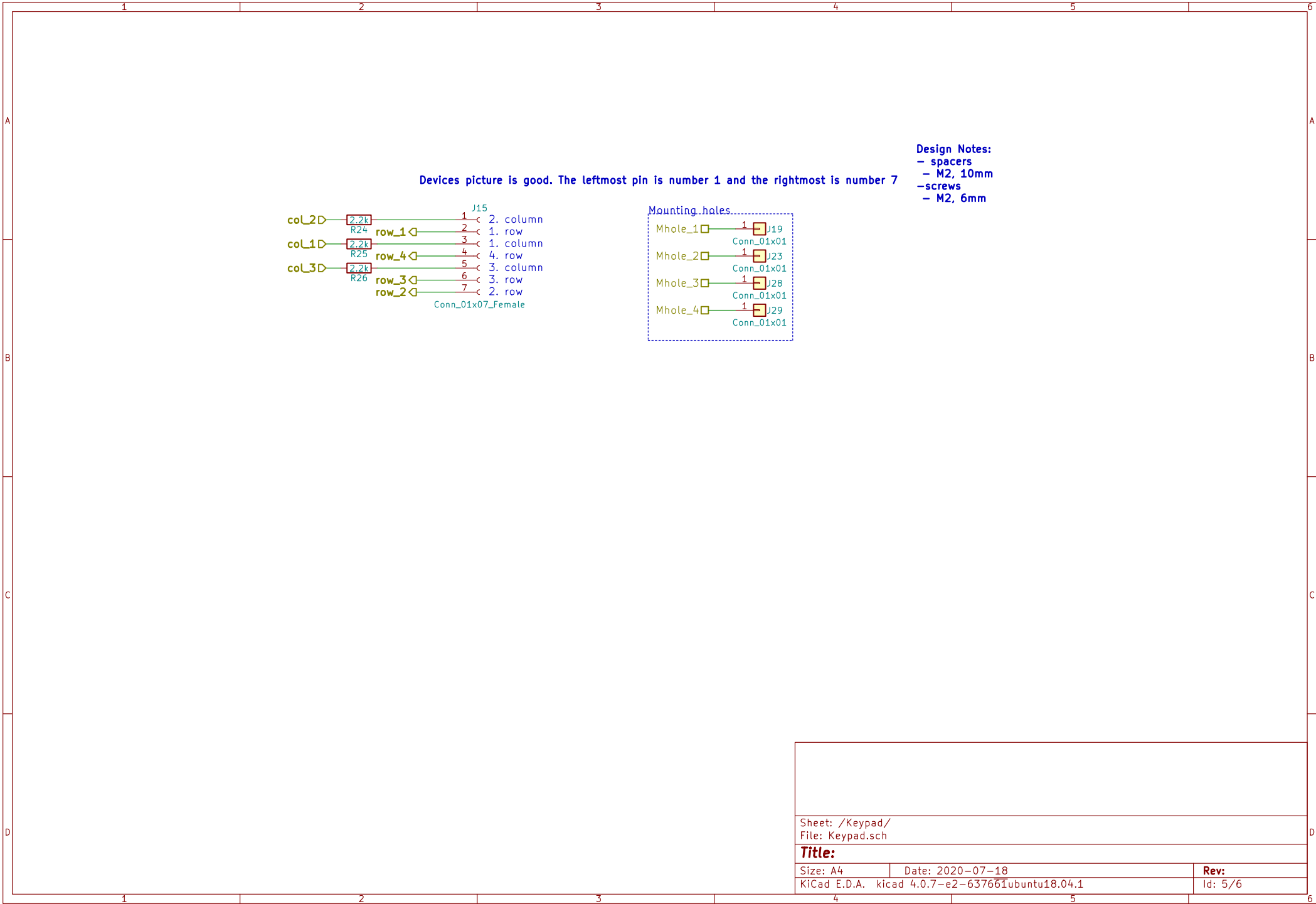
Sheet: /Buzzer/  
File: Buzzer.sch

**Title:**

Size: A4  
KiCad E.D.A. kicad 4.0.7-e2-637661ubuntu18.04.1

Date: 2020-07-18

**Rev:**  
Id: 4/6

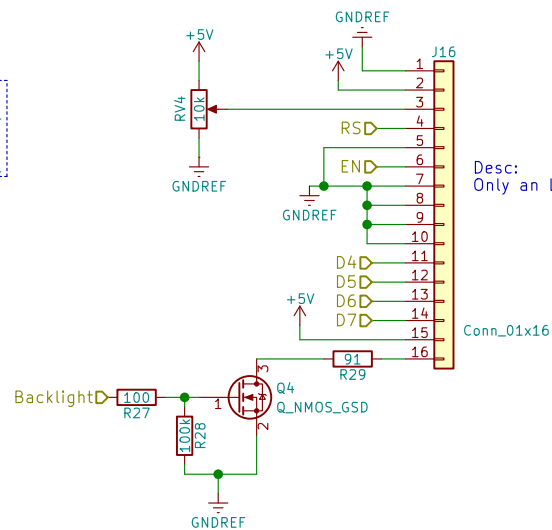
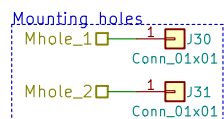


Sheet: /Keypad/  
File: Keypad.sch

**Title:**

Size: A4 Date: 2020-07-18  
KiCad E.D.A. kicad 4.0.7-e2-637661ubuntu18.04.1

**Rev:**  
Id: 5/6



Desc:  
Only an LCD female header.

Design Notes:  
- spacers:  
- M3, 11mm  
- screws:  
- M3, 4mm

Sheet: /LCD\_/  
File: LCD\_.sch

**Title:**

Size: A4  
KiCad E.D.A. kicad 4.0.7-e2-637661ubuntu18.04.1

Date: 2020-07-18

Rev:  
Id: 6/6