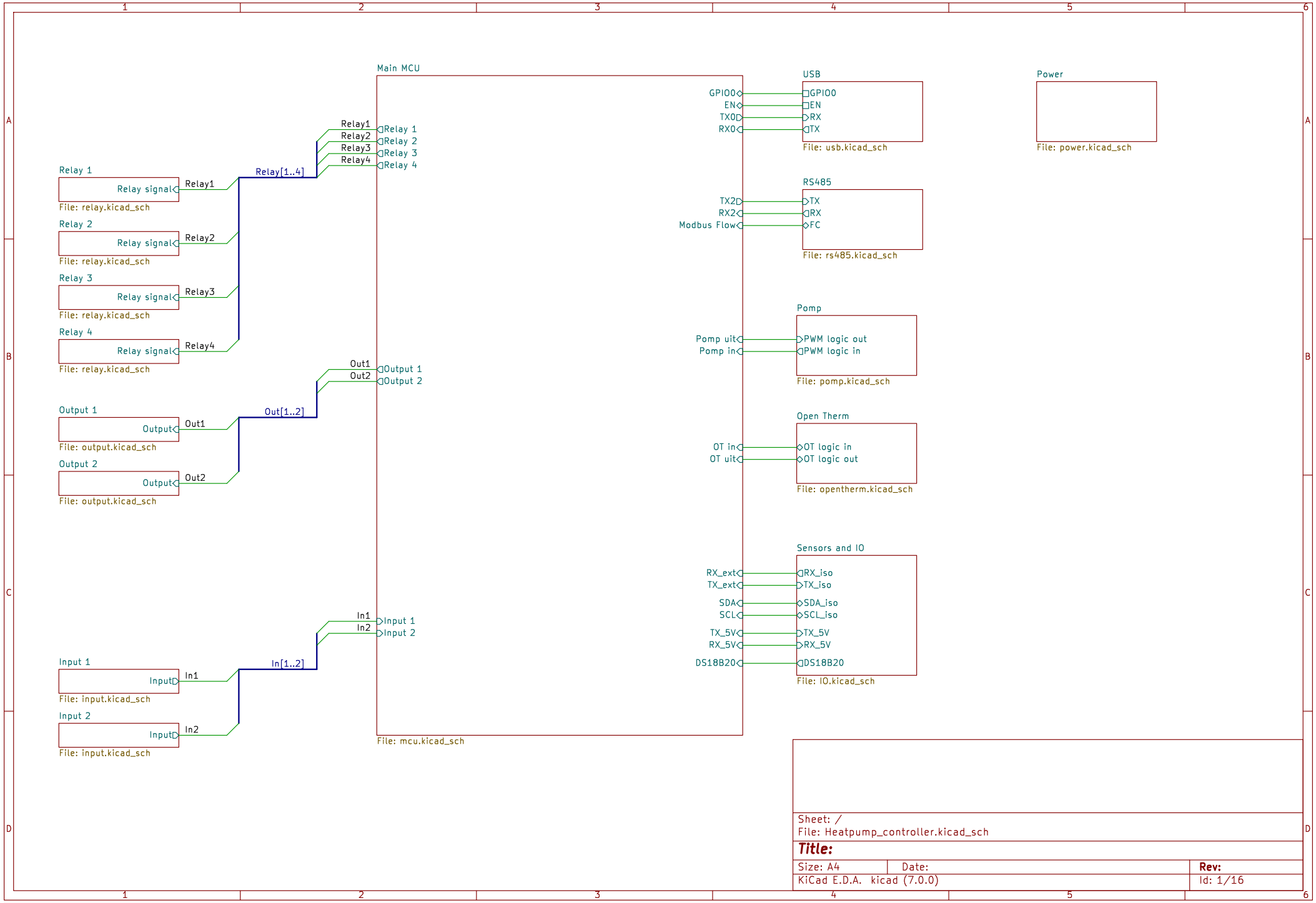
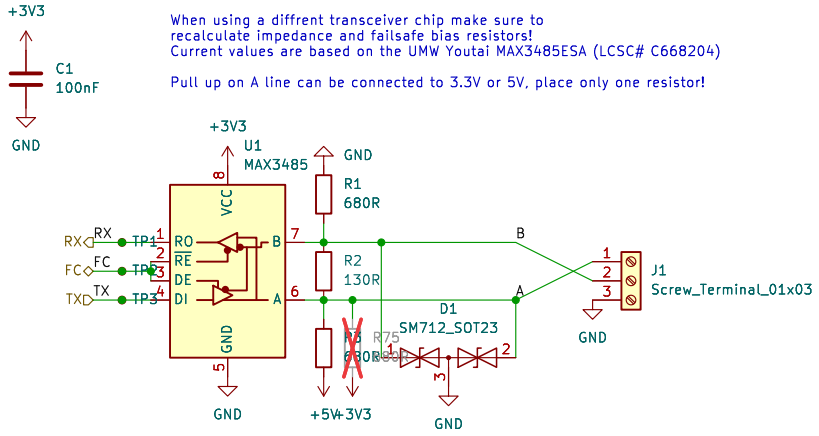


Sheet: /
File: Heatpump_controller.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 1/16



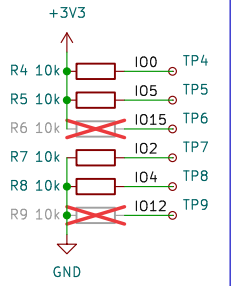
Sheet: /RS485/		
File: rs485.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 2/16

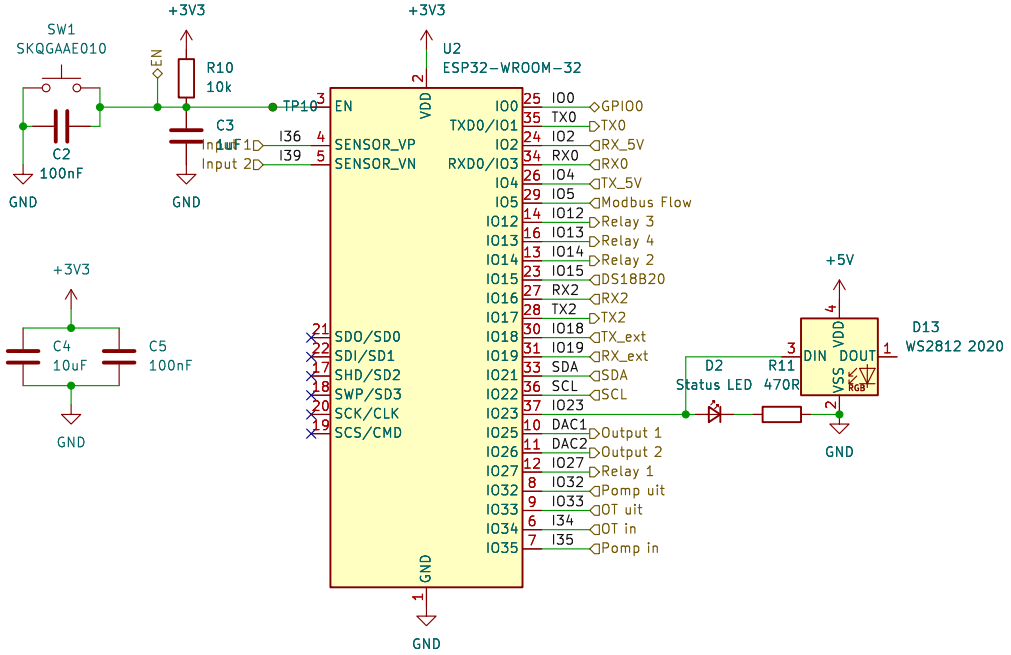
ESP 32 Bootstrap pins

Not required there is a weak pull up/down inside the ESP chip

IO15 is already pulled up for the DS18B20 bus

IO 12 is already weakly pulled down by relay 3



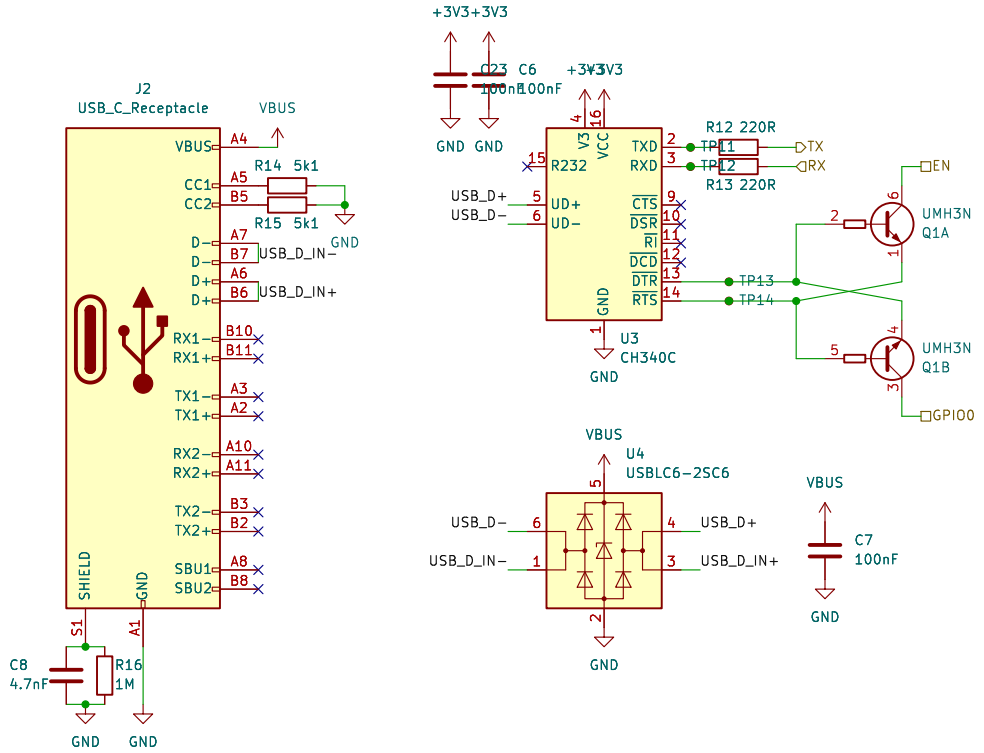


Sheet: /Main MCU/
File: mcu.kicad_sch

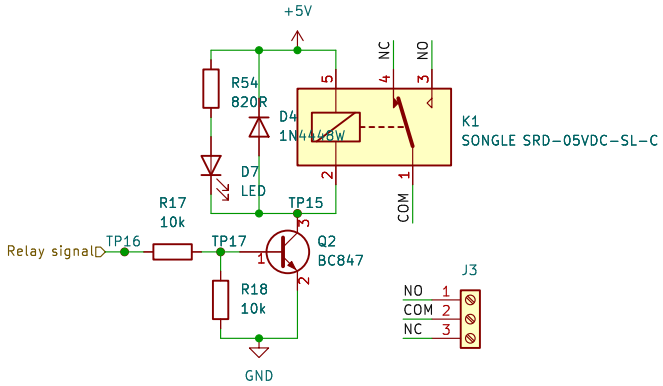
Title:

Size: A4 | Date: | **Rev:**

KiCad E.D.A. kicad (7.0.0) | Id: 3/16



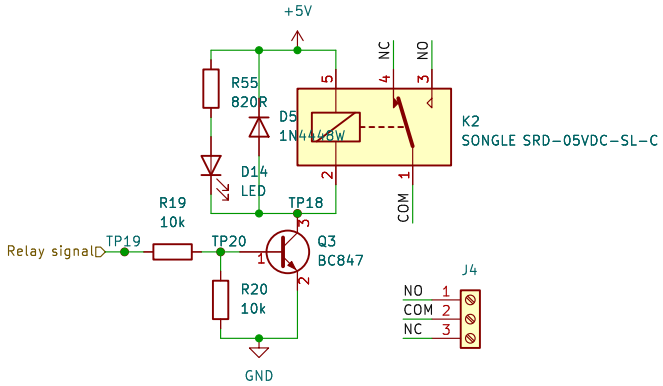
Sheet: /USB/		
File: usb.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 4/16



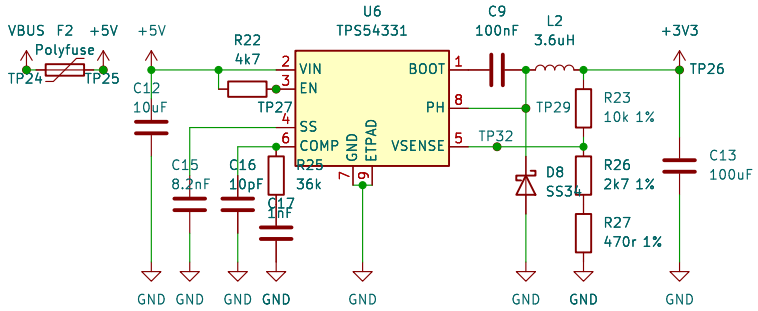
Sheet: /Relay 1/
File: relay.kicad_sch

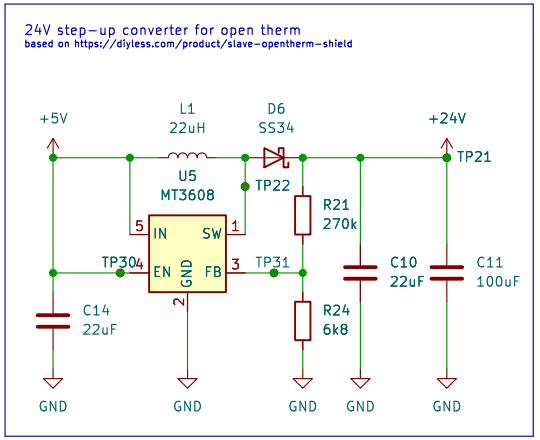
Title:

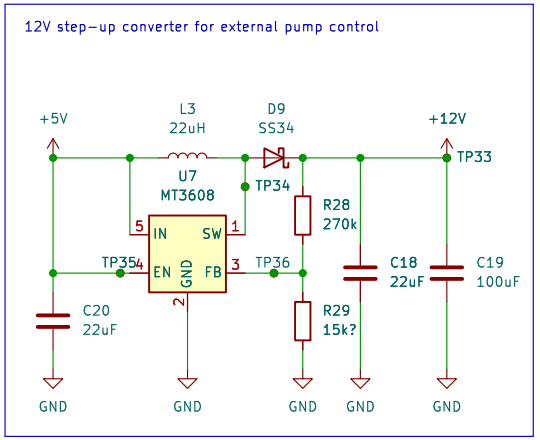
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 5/16



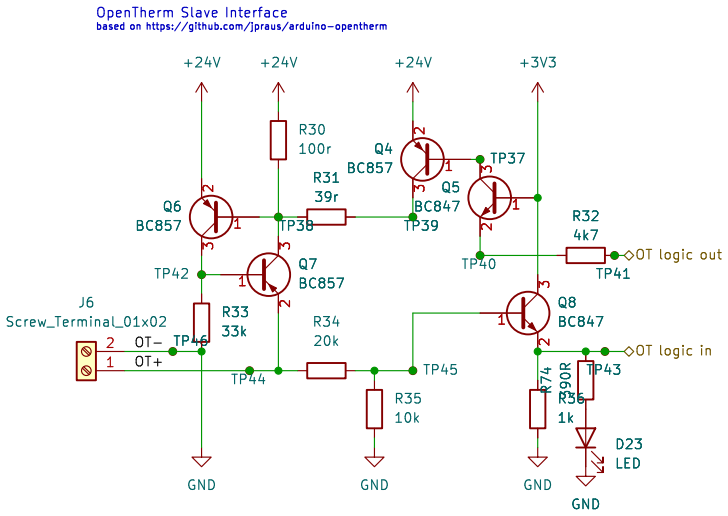
Sheet: /Relay 2/		
File: relay.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 6/16



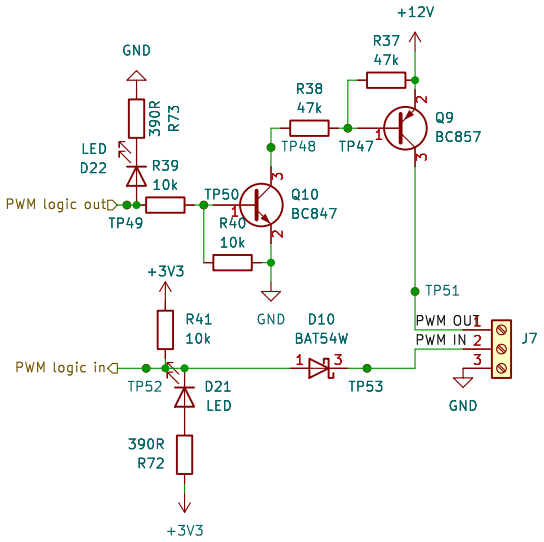




Sheet: /Power/		
File: power.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 7/16



Sheet: /Open Therm/		
File: opentherm.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 8/16

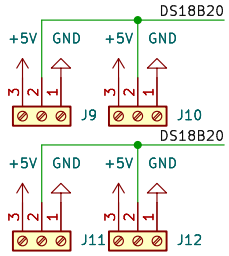


Sheet: /Pomp/
File: pomp.kicad_sch

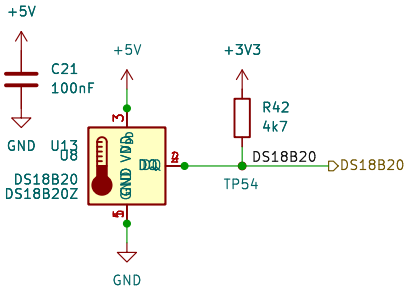
Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 9/16

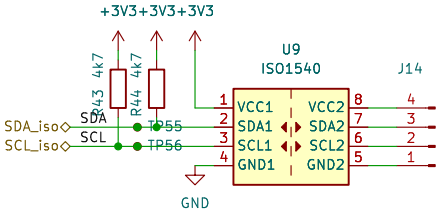
4 parallel connectors for easy connection
of external DS18B20 sensors

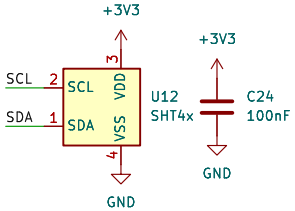


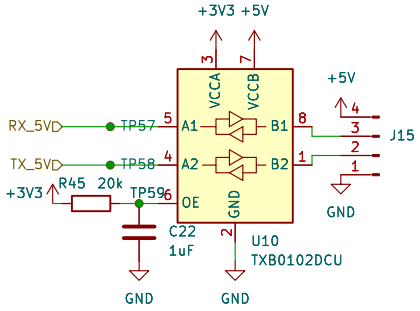
Dual footprint for SMD or TO92 DS18B20
on-board sensor



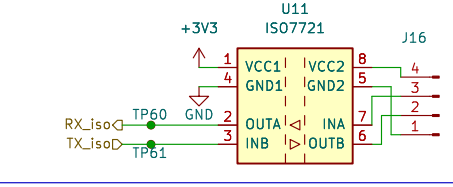
Isolated I2C Interface







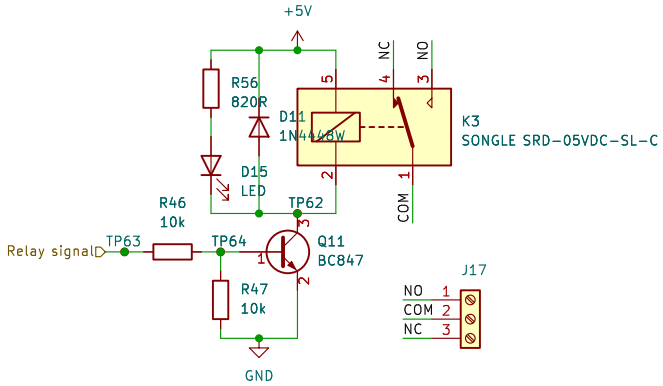
Isolated UART Interface



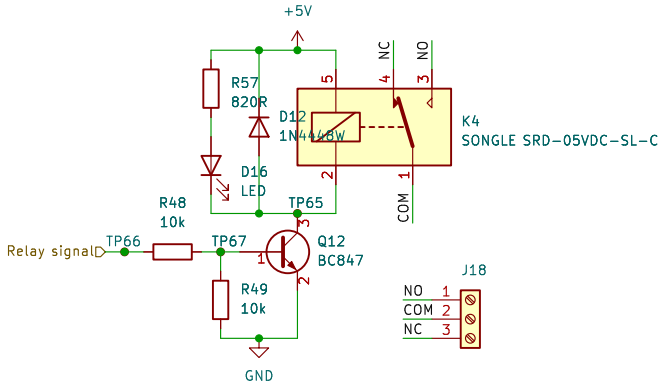
Sheet: /Sensors and IO/
File: IO.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 10/16



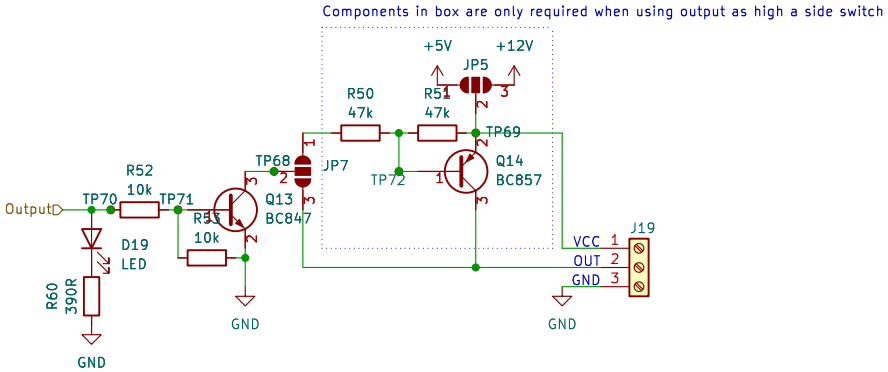
Sheet: /Relay 3/		
File: relay.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 11/16



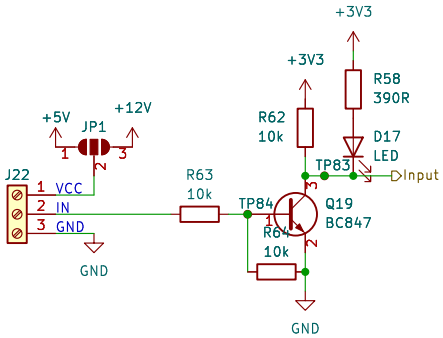
Sheet: /Relay 4/
File: relay.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 12/16



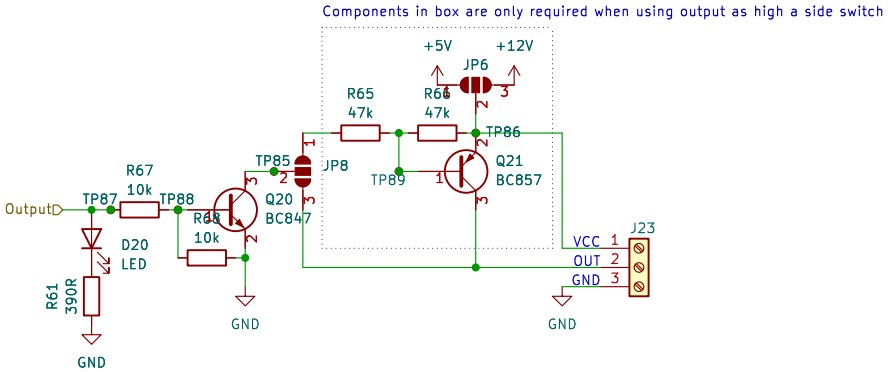
Sheet: /Output 2/		
File: output.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 13/16



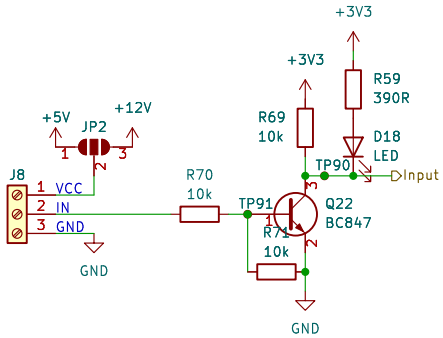
Sheet: /Input 1/
File: input.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 16/16



Sheet: /Output 1/		
File: output.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 17/16



Sheet: /Input 2/
File: input.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (7.0.0)		Id: 18/16