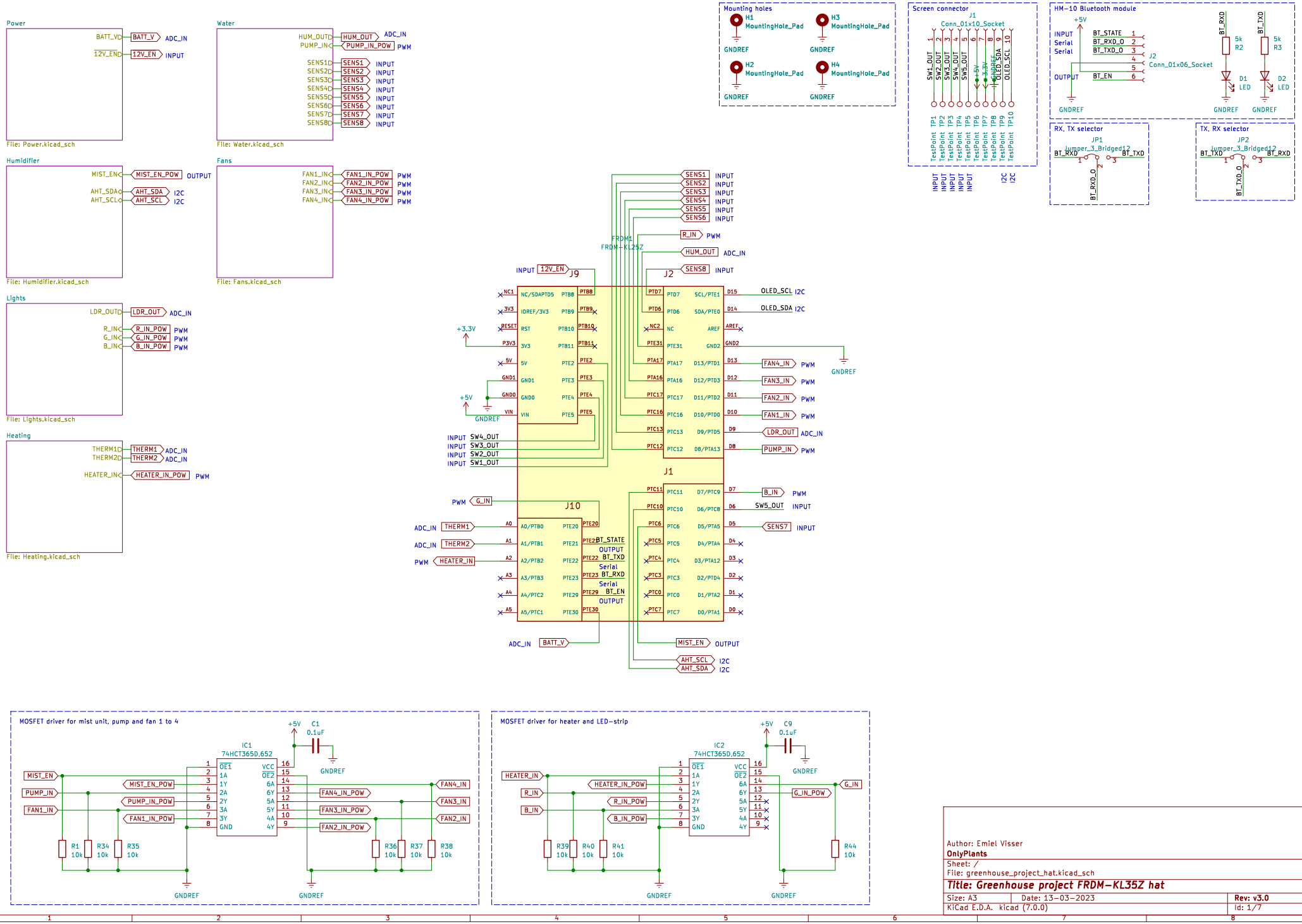
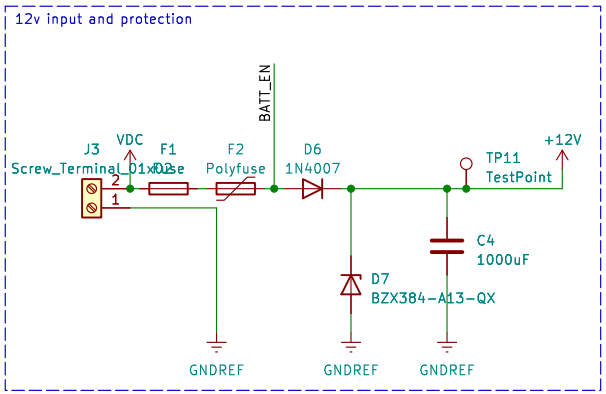
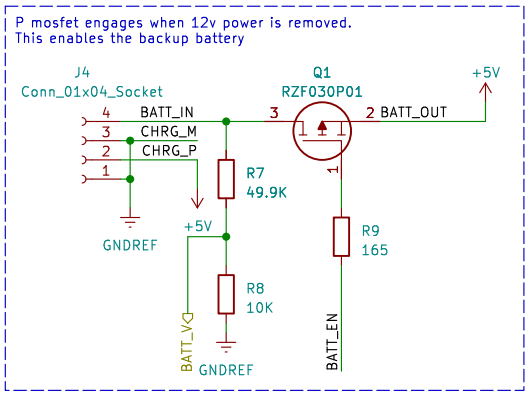
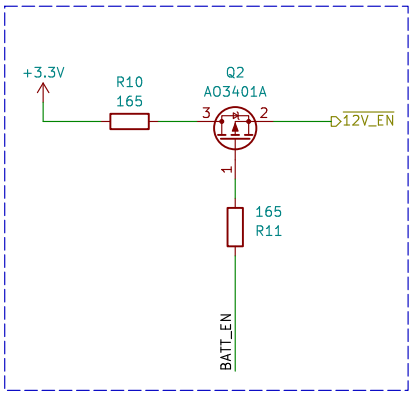
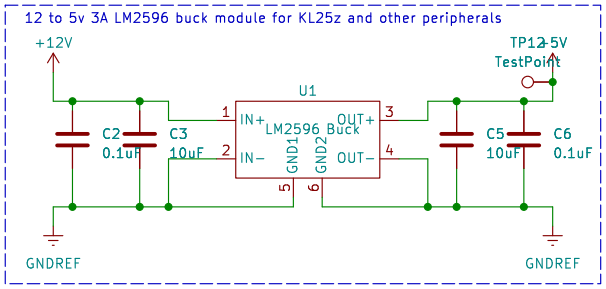
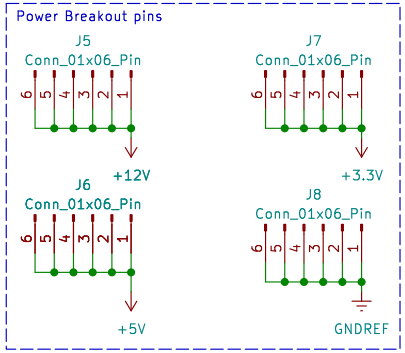

Power
BATT_V
ADC_IN
12V_EN
INPUT
File: Power.kicad_sch
Water
HUM_OUT
PUMP_IN
ADC_IN
PWM
SENS1
SENS2
SENS3
SENS4
SENS5
SENS6
SENS7
SENS8
INPUT
File: Water.kicad_sch
Humidifier
MIST_EN
MIST_EN_POW
OUTPUT
AHT_SDA
AHT_SCL
I2C
File: Humidifier.kicad_sch
Fans
FAN1_IN
FAN2_IN
FAN3_IN
FAN4_IN
FAN1_IN_POW
FAN2_IN_POW
FAN3_IN_POW
FAN4_IN_POW
PWM
File: Fans.kicad_sch
Lights
LDR_OUT
R_IN
G_IN
B_IN
R_IN_POW
G_IN_POW
B_IN_POW
File: Lights.kicad_sch
Heating
THERM1
THERM2
HEATER_IN
HEATER_IN_POW
File: Heating.kicad_sch
Mounting holes
H1
H2
H3
H4
MountingHole_Pad
GNDREF
Screen connector
J1
Conn_01x10_Socket
SW1_OUT
SW2_OUT
SW3_OUT
SW4_OUT
SW5_OUT
+5V
3.3V
OLED_SDA
OLED_SCL
TestPoint
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
HM-10 Bluetooth module
BT_STATE
BT_RXD_O
BT_TXD_O
BT_EN
J2
Conn_01x06_Socket
BT_RXD
BT_TXD
5k
R2
R3
D1
D2
LED
RX, TX selector
JP1
Jumper_3_Bridged12
BT_RXD
BT_TXD
BT_RXD_O
TX, RX selector
JP2
BT_TXD_O
FRDM1
FRDM-KL25Z
J9
J2
J1
J10
SENS1
SENS2
SENS3
SENS4
SENS5
SENS6
SENS8
R_IN
HUM_OUT
12V_EN
SW4_OUT
SW3_OUT
SW2_OUT
SW1_OUT
G_IN
THERM1
THERM2
HEATER_IN
BATT_V
MIST_EN
AHT_SCL
AHT_SDA
B_IN
SW5_OUT
SENS7
LDR_OUT
PUMP_IN
OLED_SCL
OLED_SDA
FAN4_IN
FAN3_IN
FAN2_IN
FAN1_IN
MOSFET driver for mist unit, pump and fan 1 to 4
IC1
74HCT365D,652
C1
0.1uF
MIST_EN_POW
PUMP_IN_POW
FAN1_IN_POW
FAN4_IN_POW
FAN3_IN_POW
FAN2_IN_POW
R1
R34
R35
R36
R37
R38
10k
MOSFET driver for heater and LED-strip
IC2
C9
HEATER_IN_POW
R_IN_POW
B_IN_POW
G_IN_POW
R39
R40
R41
R44
Author: Emiel Visser
OnlyPlants
Sheet: /
File: greenhouse_project_hat.kicad_sch
Title: Greenhouse project FRDM-KL35Z hat
Size: A3
Date: 13-03-2023
Rev: v3.0
KiCad E.D.A. kicad (7.0.0)
Id: 1/7

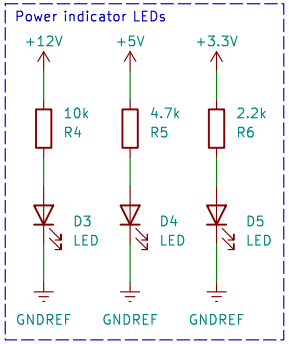








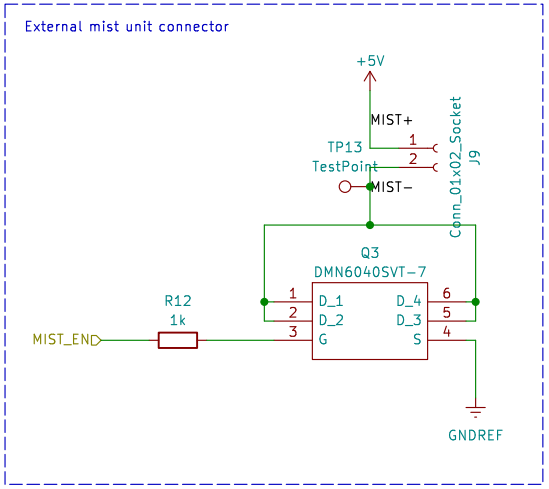


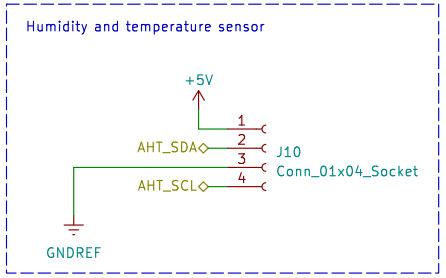


Author: Emiel Visser
OnlyPlants
Sheet: /Power/
File: Power.kicad_sch

Title: Greenhouse project FRDM-KL35Z hat

Size: A4	Date: 13-03-2023	**Rev: v3.0**
KiCad E.D.A. kicad (7.0.0)		Id: 2/7

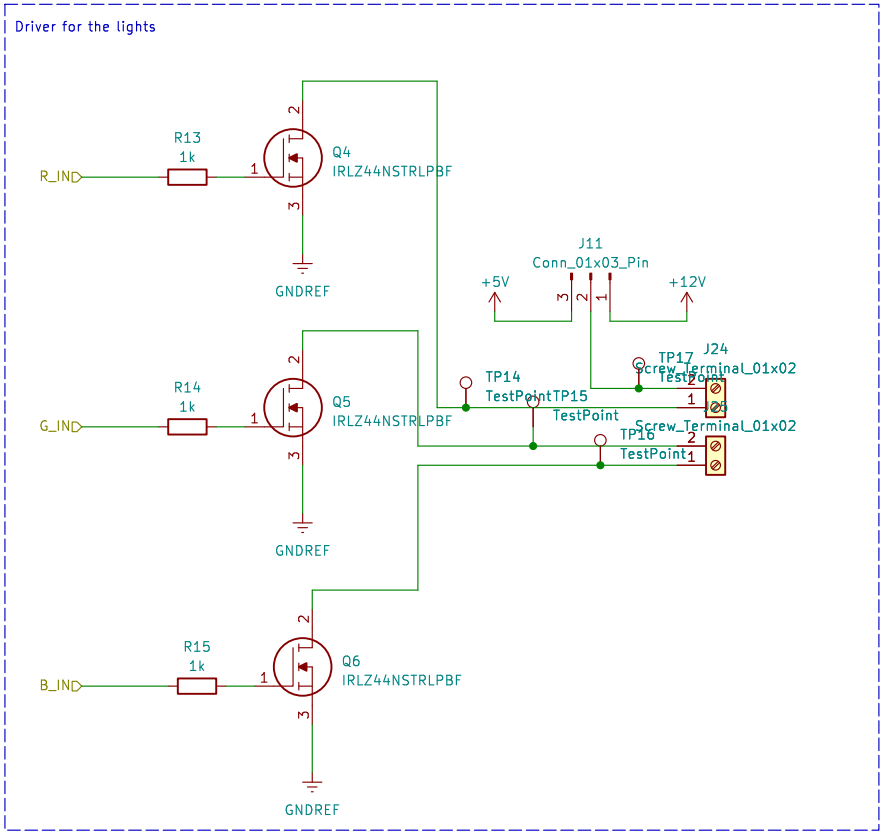


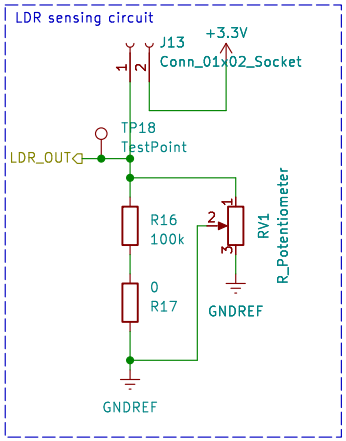


Author: Emiel Visser
OnlyPlants
Sheet: /Humidifier/
File: Humidifier.kicad_sch

Title: Greenhouse project FRDM−KL35Z hat

Size: A4	Date: 13−03−2023	**Rev: v3.0**
KiCad E.D.A. kicad (7.0.0)		Id: 3/7

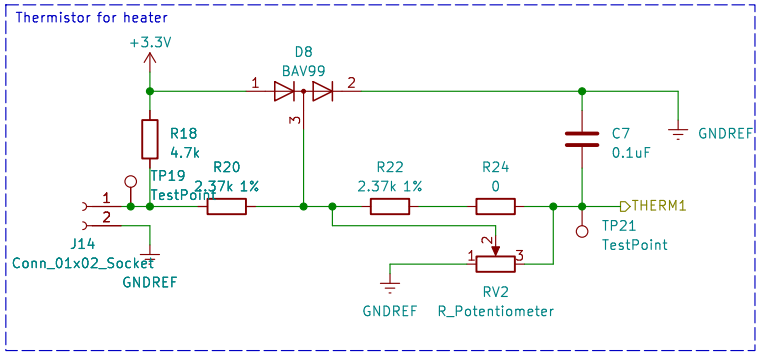


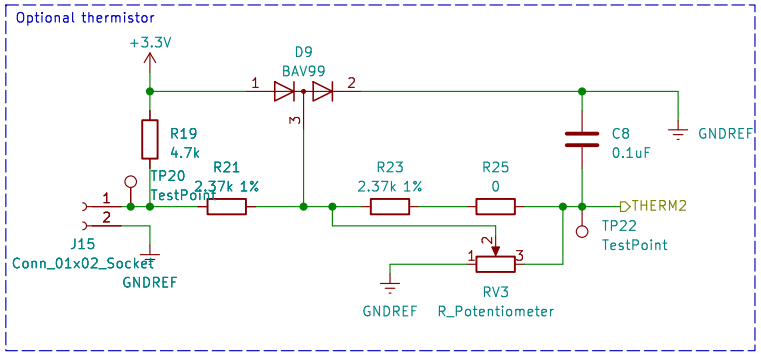


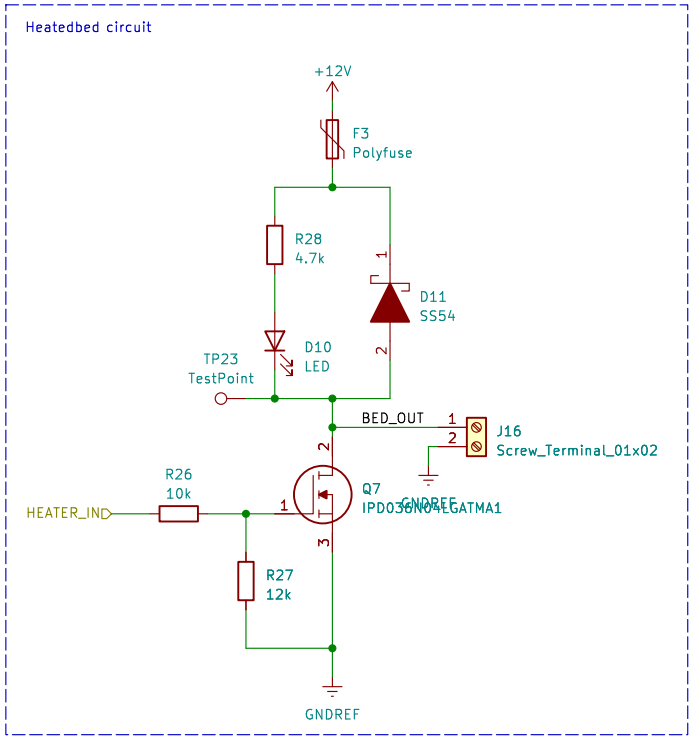
Author: Emiel Visser
OnlyPlants
Sheet: /Lights/
File: Lights.kicad_sch

Title: Greenhouse project FRDM-KL35Z hat

Size: A4	Date: 13-03-2023	**Rev: v3.0**
KiCad E.D.A. kicad (7.0.0)		Id: 4/7



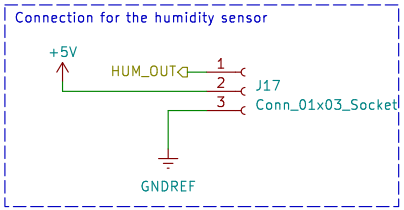


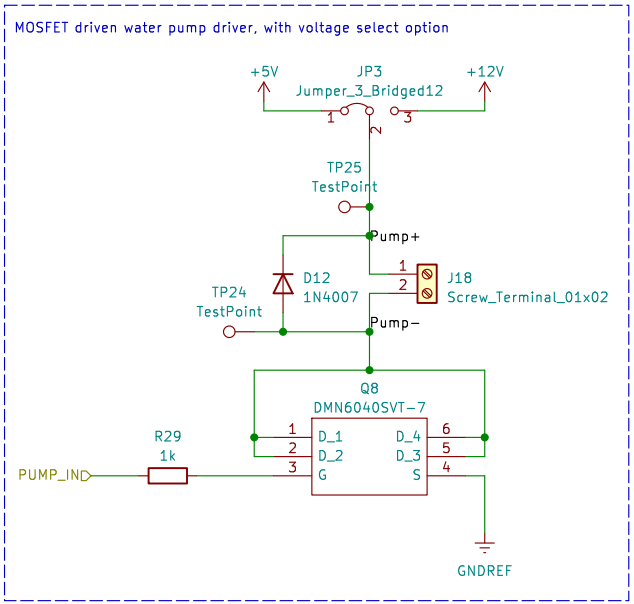


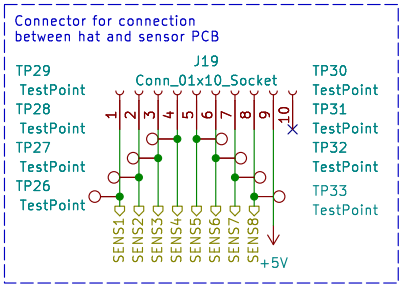
Author: Emiel Visser
OnlyPlants
Sheet: /Heating/
File: Heating.kicad_sch

Title: Greenhouse project FRDM-KL35Z hat

Size: A4	Date: 13-03-2023	**Rev: v3.0**
KiCad E.D.A. kicad (7.0.0)		Id: 5/7





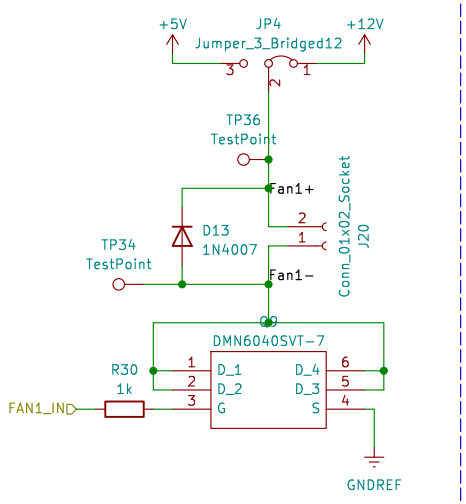


Author: Emiel Visser
OnlyPlants
Sheet: /Water/
File: Water.kicad_sch

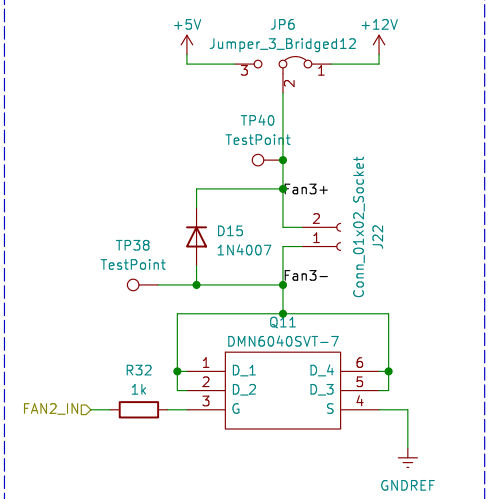
Title: Greenhouse project FRDM-KL35Z hat

Size: A4	Date: 13-03-2023	**Rev: v3.0**
KiCad E.D.A. kicad (7.0.0)		Id: 6/7

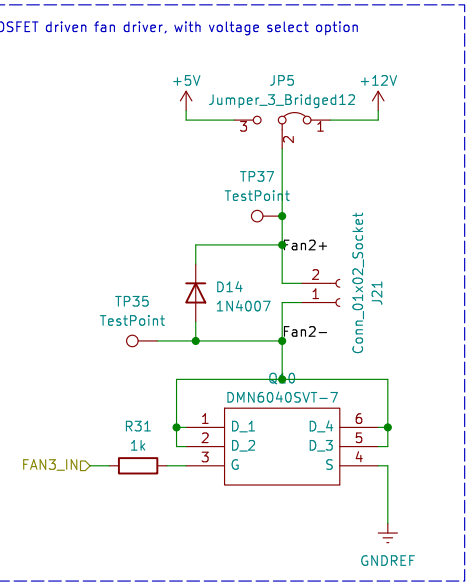
MOSFET driven fan driver, with voltage select option



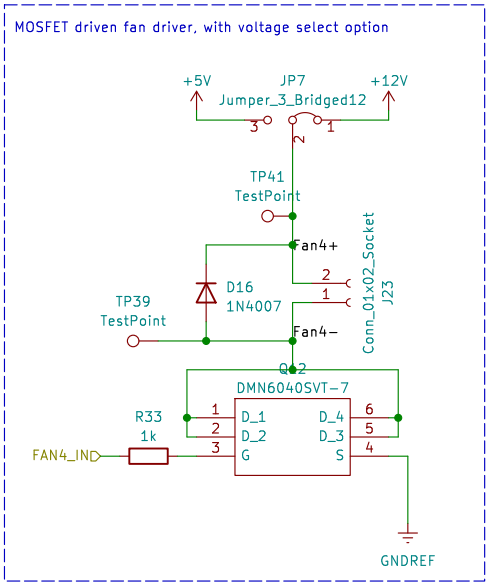
MOSFET driven fan driver, with voltage select option



MOSFET driven fan driver, with voltage select option



MOSFET driven fan driver, with voltage select option



Author: Emiel Visser
OnlyPlants
Sheet: /Fans/
File: Fans.kicad_sch

Title: Greenhouse project FRDM-KL35Z hat

Size: A4	Date: 13-03-2023	**Rev: v3.0**
KiCad E.D.A. kicad (7.0.0)		Id: 7/7