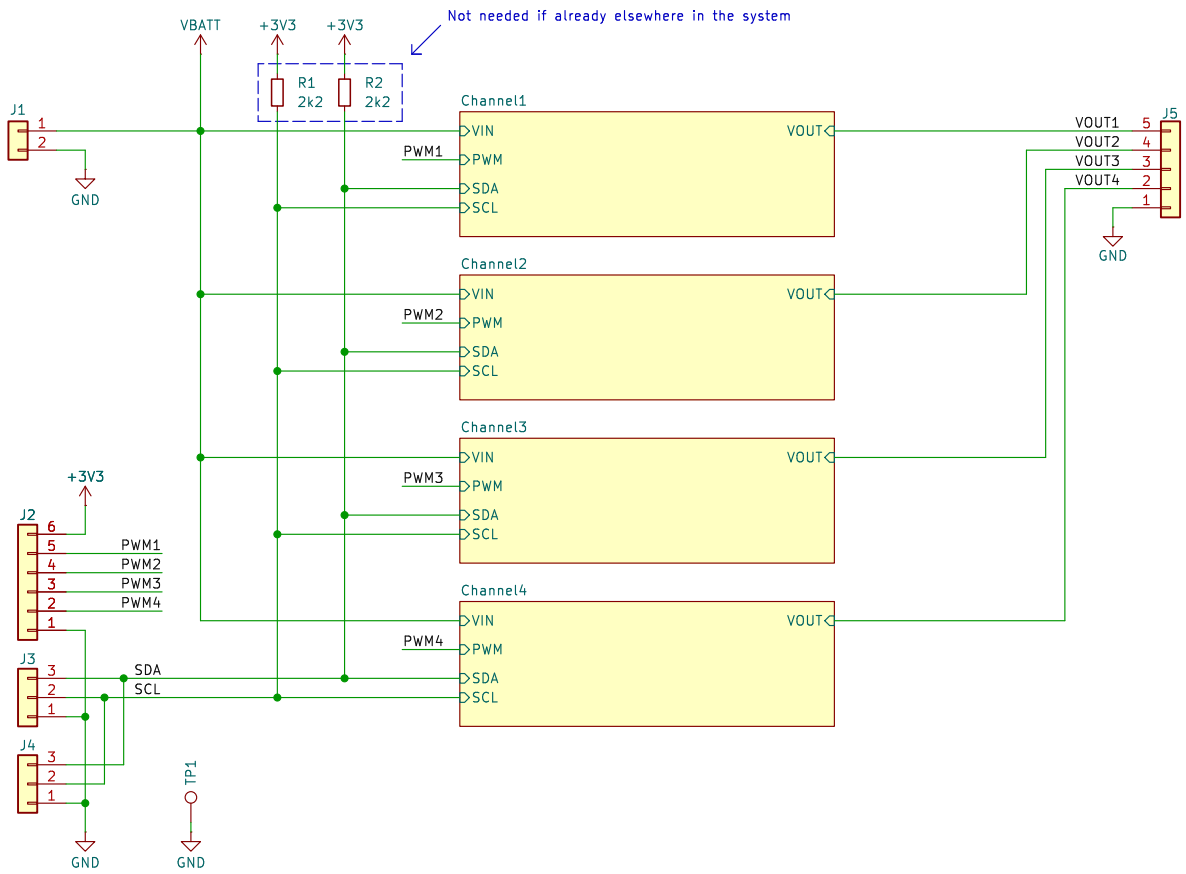
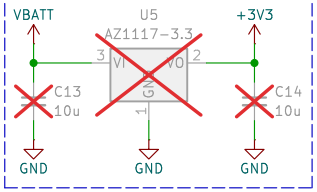


BACKUP REGULATOR (DNP)

This regulator is not needed. Will only be placed in case this board needs to be self-sufficient.



H5 QR code
H1 MountingHole_Pad
H2 MountingHole_Pad
H3 MountingHole_Pad
H4 MountingHole_Pad

Heating subgroup
Project Group B – MOD 11

Sheet: /
File: HeatingBoard.kicad_sch

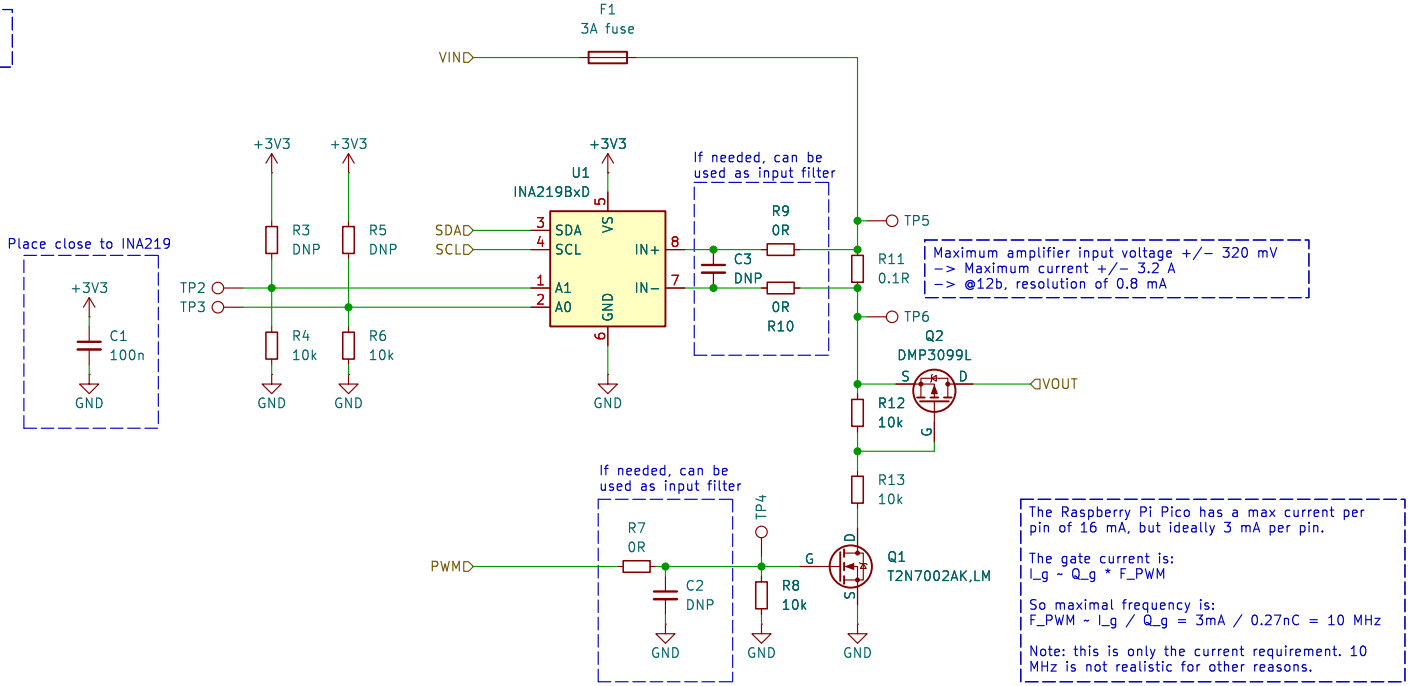
Title: Heating Control Board

Size: A4	Date: 2025-03-20	**Rev: V1**
KiCad E.D.A. 9.0.0		Id: 1/5

Table 1. INA219 Address Pins and Slave Addresses

A1	A0	SLAVE ADDRESS
GND	GND	1000000
GND	V_{S+}	1000001
GND	SDA	1000010
GND	SCL	1000011
V_{S+}	GND	1000100
V_{S+}	V_{S+}	1000101
V_{S+}	SDA	1000110
V_{S+}	SCL	1000111
SDA	GND	1001000
SDA	V_{S+}	1001001
SDA	SDA	1001010
SDA	SCL	1001011
SCL	GND	1001100
SCL	V_{S+}	1001101
SCL	SDA	1001110
SCL	SCL	1001111

The table above shows how to connect A1 and A0 to get a corresponding I2C address.



Heating subgroup
Project Group B – MOD 11
Sheet: /Channel1/
File: Channel.kicad_sch

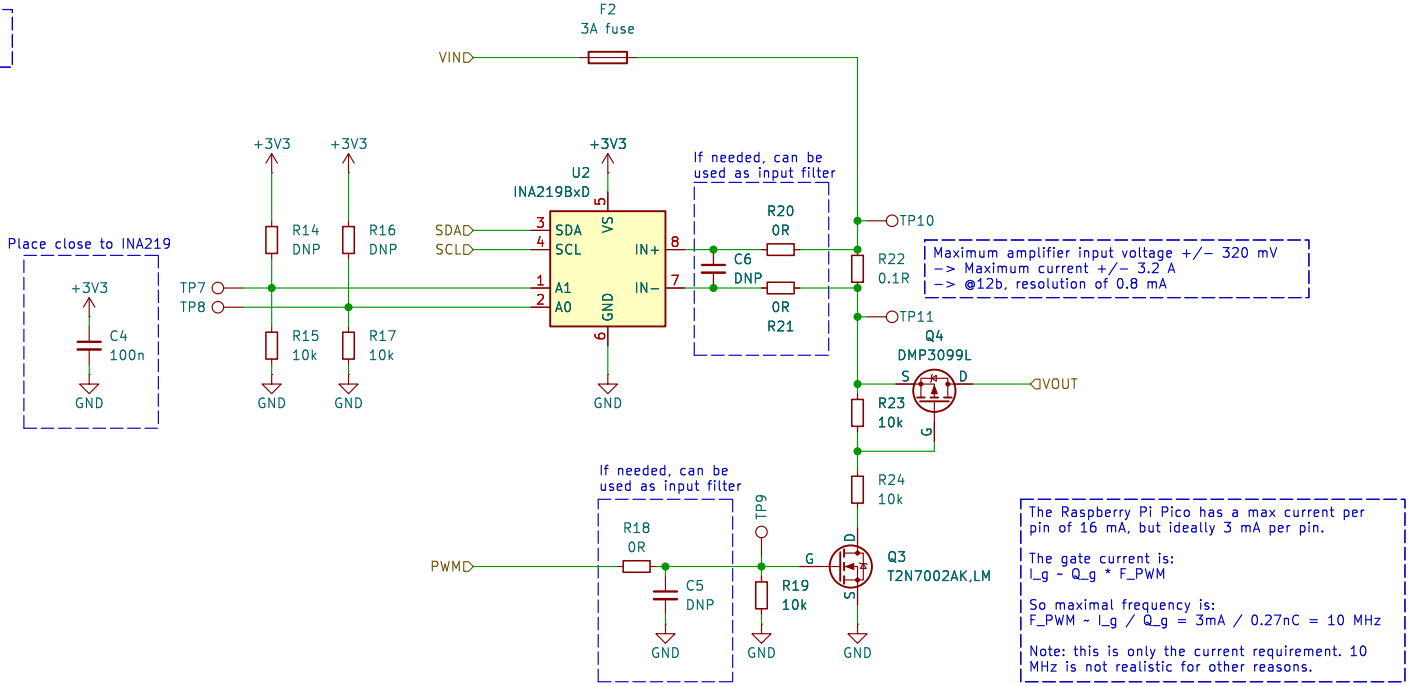
Title: Current sensor + switch

Size: A4	Date: 2025-03-20	**Rev: V1**
KiCad E.D.A. 9.0.0		Id: 2/5

Table 1. INA219 Address Pins and Slave Addresses

A1	A0	SLAVE ADDRESS
GND	GND	1000000
GND	V_{S+}	1000001
GND	SDA	1000010
GND	SCL	1000011
V_{S+}	GND	1000100
V_{S+}	V_{S+}	1000101
V_{S+}	SDA	1000110
V_{S+}	SCL	1000111
SDA	GND	1001000
SDA	V_{S+}	1001001
SDA	SDA	1001010
SDA	SCL	1001011
SCL	GND	1001100
SCL	V_{S+}	1001101
SCL	SDA	1001110
SCL	SCL	1001111

The table above shows how to connect A1 and A0 to get a corresponding I2C address.



Heating subgroup
Project Group B – MOD 11
Sheet: /Channel2/
File: Channel.kicad_sch

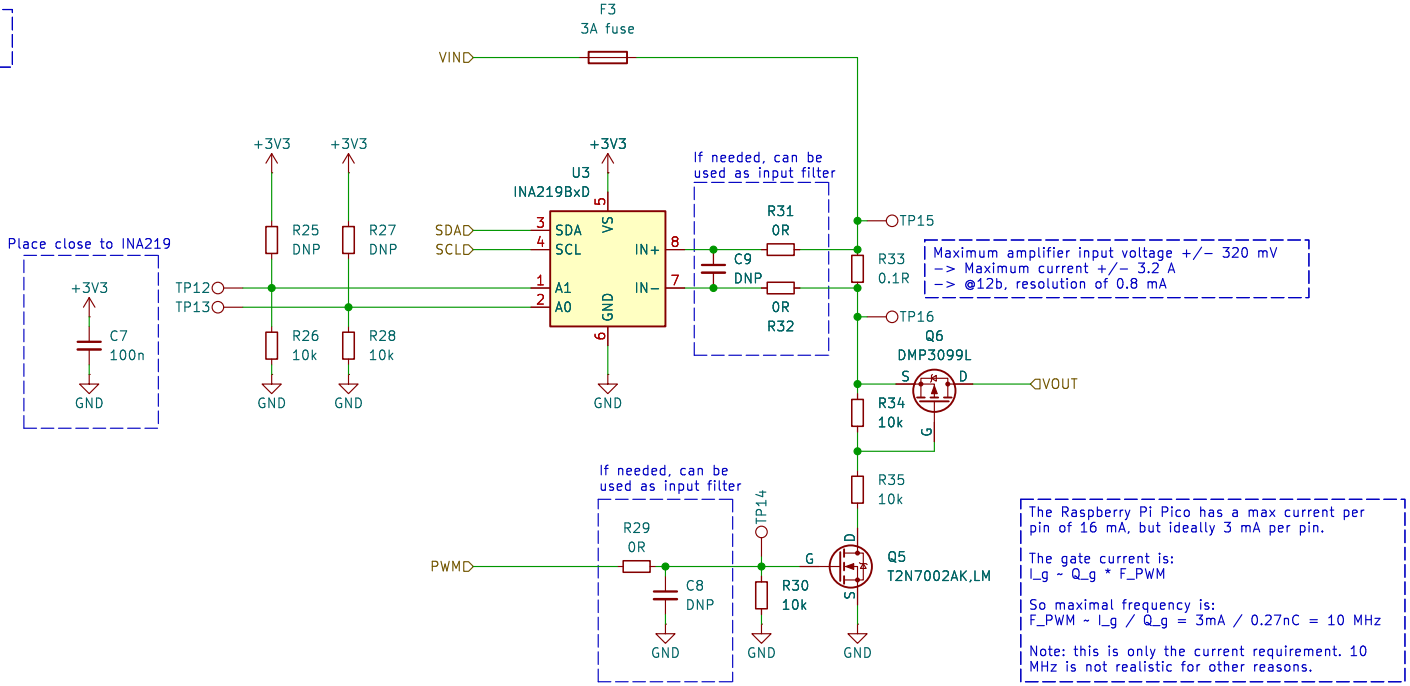
Title: Current sensor + switch

Size: A4	Date: 2025-03-20	**Rev: V1**
KiCad E.D.A. 9.0.0		Id: 3/5

Table 1. INA219 Address Pins and Slave Addresses

A1	A0	SLAVE ADDRESS
GND	GND	1000000
GND	V_{S+}	1000001
GND	SDA	1000010
GND	SCL	1000011
V_{S+}	GND	1000100
V_{S+}	V_{S+}	1000101
V_{S+}	SDA	1000110
V_{S+}	SCL	1000111
SDA	GND	1001000
SDA	V_{S+}	1001001
SDA	SDA	1001010
SDA	SCL	1001011
SCL	GND	1001100
SCL	V_{S+}	1001101
SCL	SDA	1001110
SCL	SCL	1001111

The table above shows how to connect A1 and A0 to get a corresponding I2C address.



Heating subgroup
Project Group B – MOD 11

Sheet: /Channel3/
File: Channel.kicad_sch

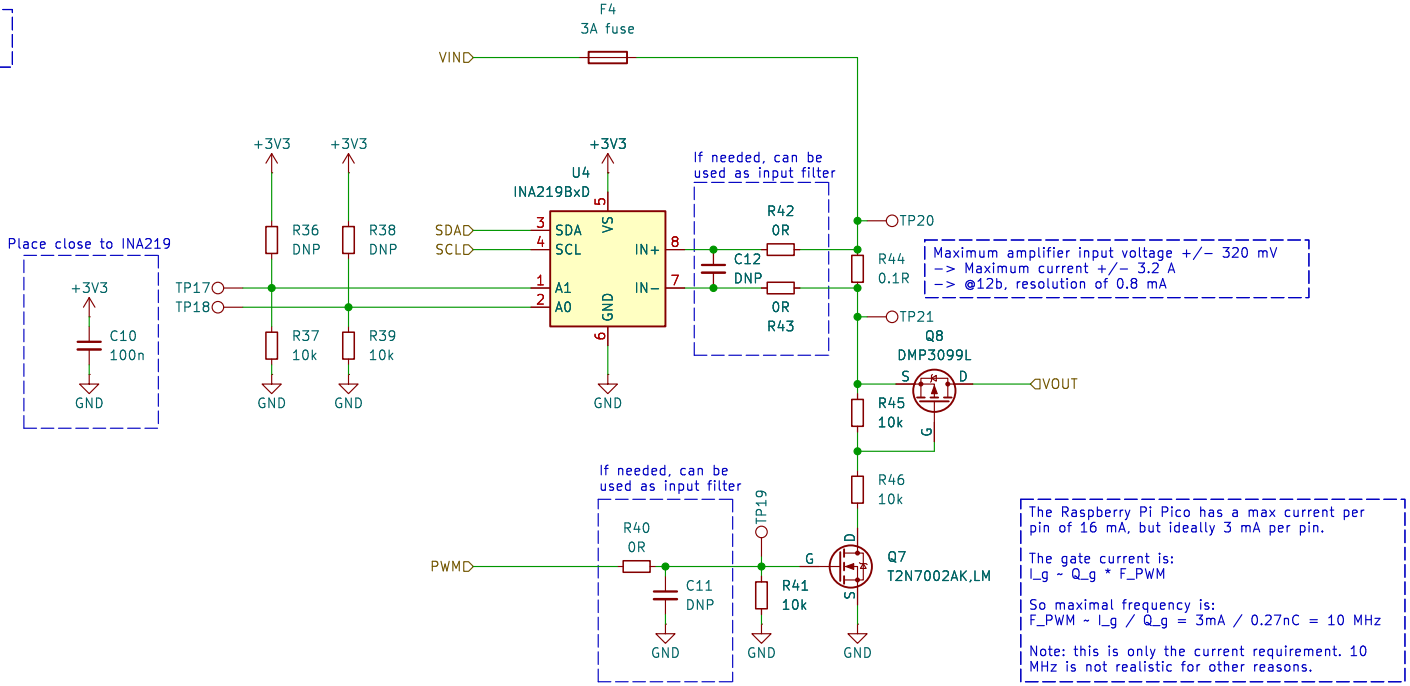
Title: Current sensor + switch

Size: A4	Date: 2025-03-20	**Rev: V1**
KiCad E.D.A. 9.0.0		Id: 4/5

Table 1. INA219 Address Pins and Slave Addresses

A1	A0	SLAVE ADDRESS
GND	GND	1000000
GND	V_{S+}	1000001
GND	SDA	1000010
GND	SCL	1000011
V_{S+}	GND	1000100
V_{S+}	V_{S+}	1000101
V_{S+}	SDA	1000110
V_{S+}	SCL	1000111
SDA	GND	1001000
SDA	V_{S+}	1001001
SDA	SDA	1001010
SDA	SCL	1001011
SCL	GND	1001100
SCL	V_{S+}	1001101
SCL	SDA	1001110
SCL	SCL	1001111

The table above shows how to connect A1 and A0 to get a corresponding I2C address.



Heating subgroup
Project Group B – MOD 11
Sheet: /Channel4/
File: Channel.kicad_sch

Title: Current sensor + switch

Size: A4	Date: 2025-03-20	**Rev: V1**
KiCad E.D.A. 9.0.0		Id: 5/5