H1
M3

H2
M3

H3
M3

H4
M3

power_in

File: power_in.kicad_sch

regulators

VDDA

File: regulators.kicad_sch

gate_driver

GHA
GHB
GHC
GLA
GLB
GLC
INHA
INHB
INHC
INLA
INLB
INLC
PHASE_A
PHASE_B
PHASE_C

File: gate_driver.kicad_sch

power_stage

GHA
GHB
GHC
GLA
GLB
GLC
ISNS_A_N
ISNS_A_P
ISNS_B_N
ISNS_B_P
ISNS_C_N
ISNS_C_P
PHASE_A
PHASE_B
PHASE_C

File: power_stage.kicad_sch

sensing

ISENSE_A
ISENSE_B
ISENSE_C
ISNS_A_N
ISNS_A_P
ISNS_B_N
ISNS_B_P
ISNS_C_N
ISNS_C_P
PHASE_A
PHASE_B
PHASE_C
VBUS_SENSE
VSENSE_A
VSENSE_B
VSENSE_C

File: sensing.kicad_sch

mcu

ENC_A
ENC_B
ENC_Z
HALL_A
HALL_B
HALL_C
INHA
INHB
INHC
INLA
INLB
INLC
ISENSE_A
ISENSE_B
ISENSE_C
UART_RX
UART_TX
VBUS_SENSE
VDDA
VSENSE_A
VSENSE_B
VSENSE_C

File: mcu.kicad_sch

io

ENC_A
ENC_B
ENC_Z
HALL_A
HALL_B
HALL_C
UART_RX
UART_TX

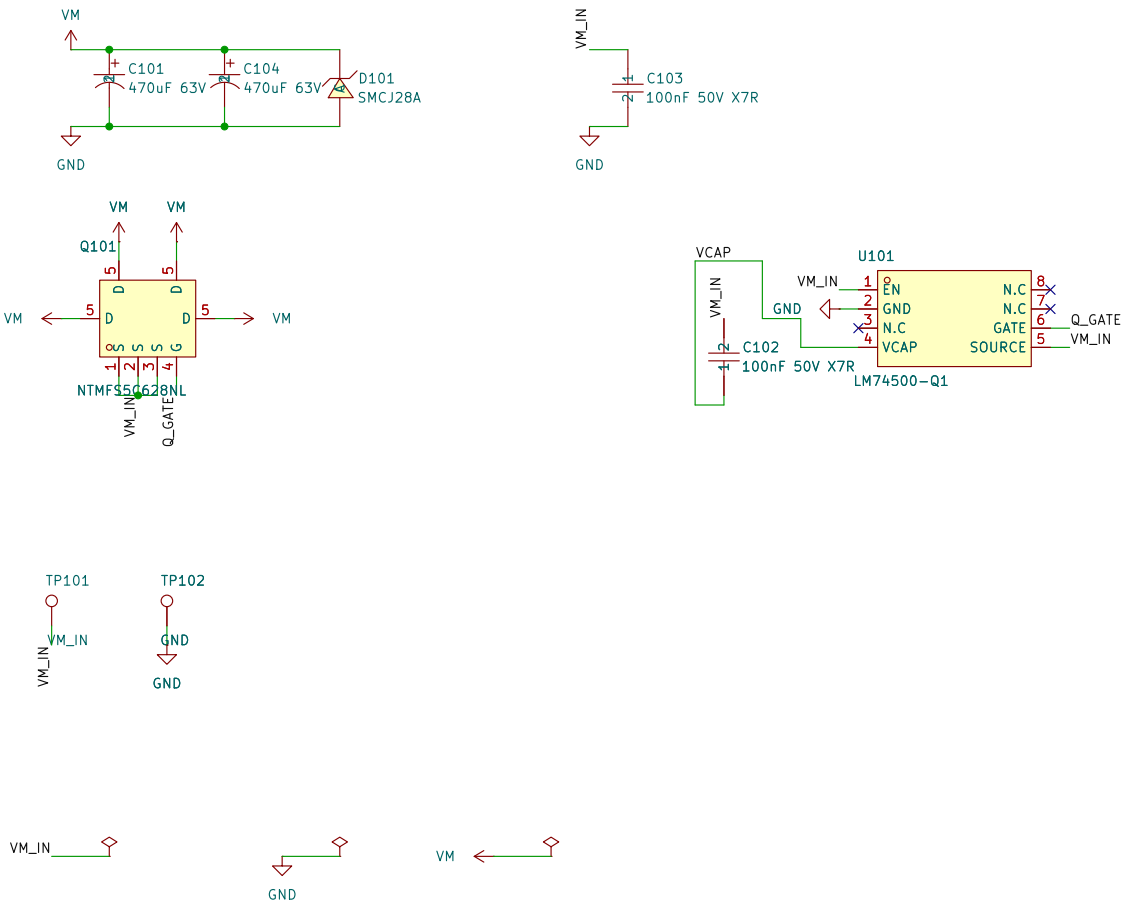
File: io.kicad_sch

hwde

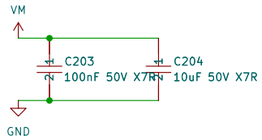
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File: PCB-0018-A_bldc-motor-driver.kicad_sch

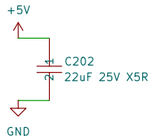
Title: PCB-0018 REV A 3-phase BLDC motor driver: root

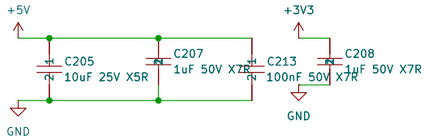
Size: A3	Date:	**Rev: 1**
KiCad E.D.A. 10.0.6		Id: 1/8

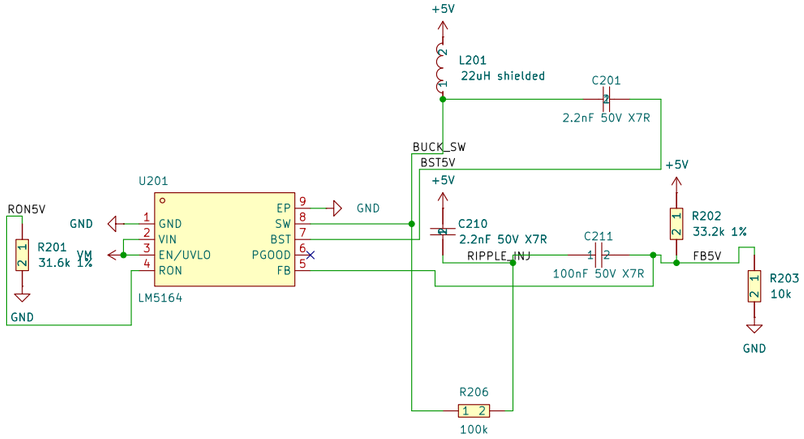


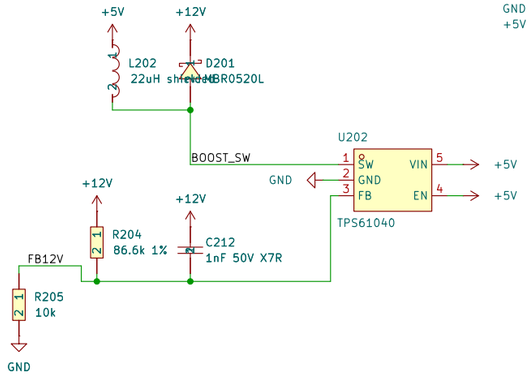
hwde		
Sheet: /power_in/		
File: power_in.kicad_sch		
Title: PCB-0018 REV A power_in: reverse-polarity protected VM entry		
Size: A4	Date: 2026-09-27	**Rev: 1**
KiCad E.D.A. 10.0.6		Id: 2/8

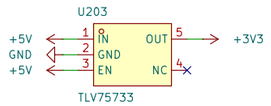


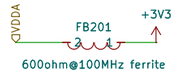


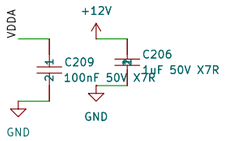












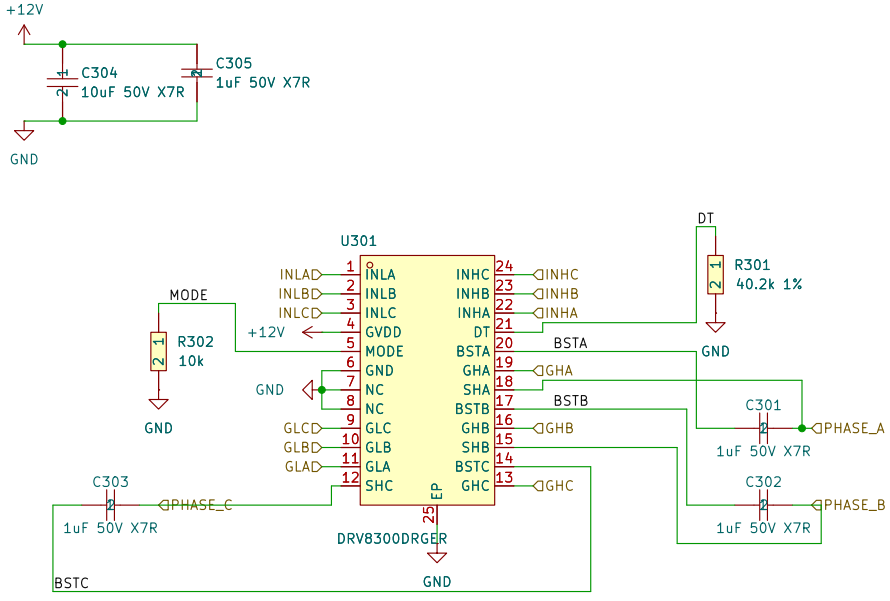


hwde

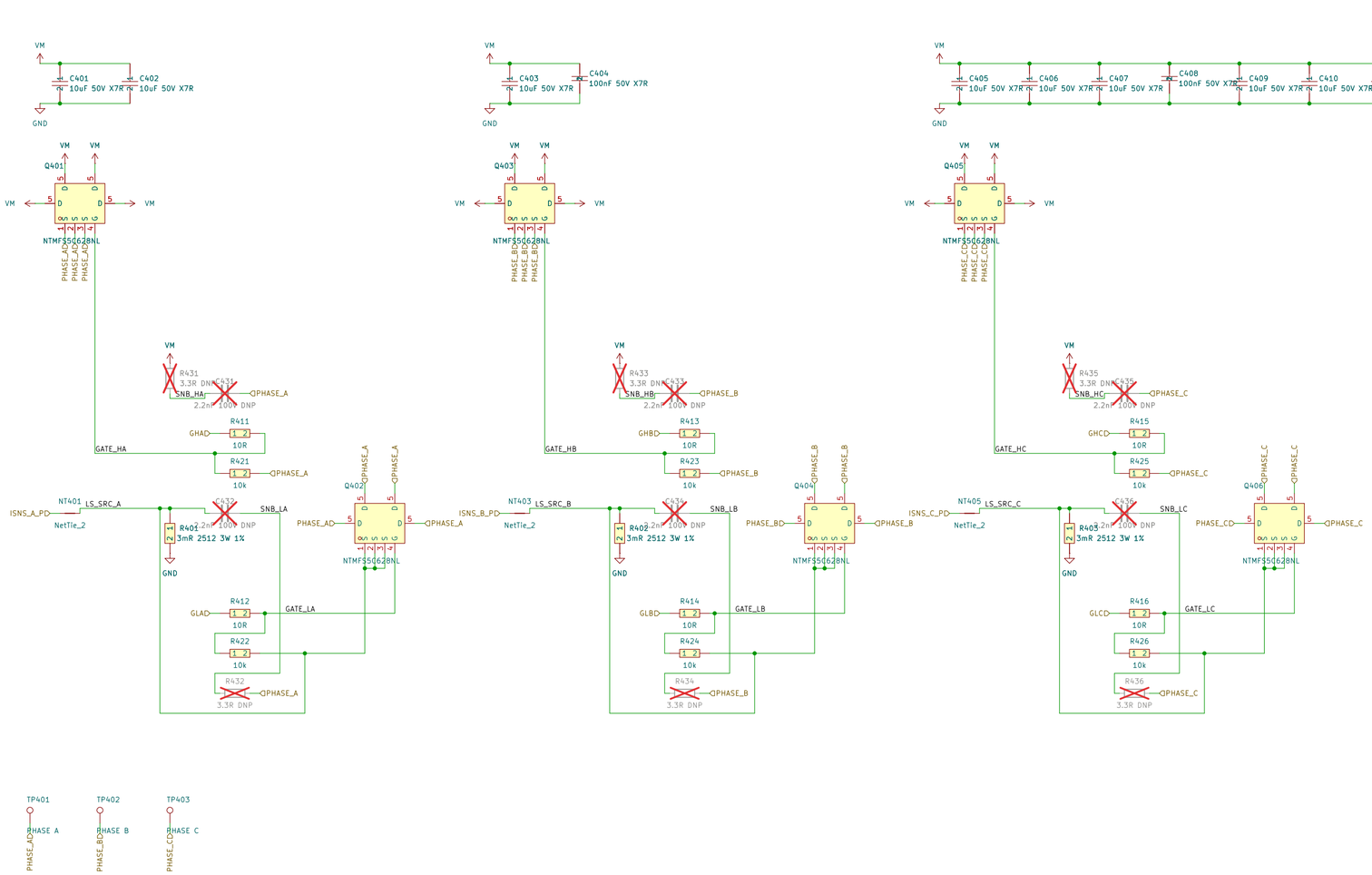
Sheet: /regulators/
File: regulators.kicad_sch

Title: PCB-0018 REV A regulators: VM->5V buck, 5V->12V boost, 5V->3V3

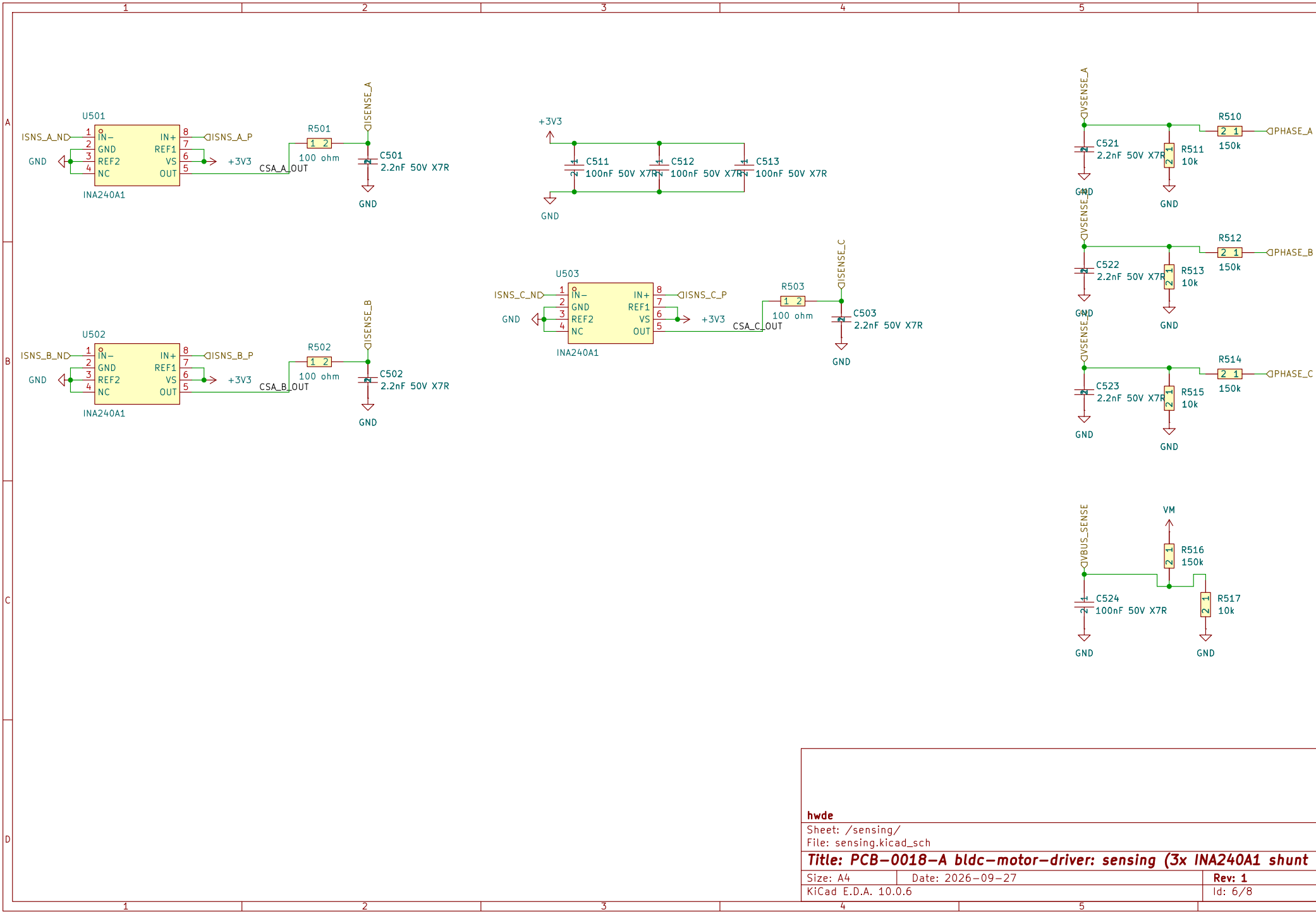
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KiCad E.D.A. 10.0.6		Id: 3/8



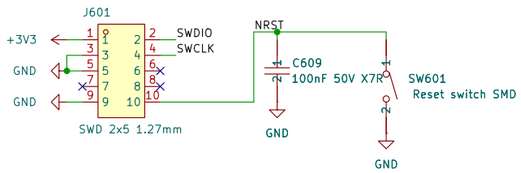
hwde		
Sheet: /gate_driver/		
File: gate_driver.kicad_sch		
Title: PCB-0018 REV A gate driver: DRV8300D, GVDD 12 V, 6-PWM, 200 ns		
Size: A5	Date: 2026-09-27	**Rev: 1**
KiCad E.D.A. 10.0.6		Id: 4/8

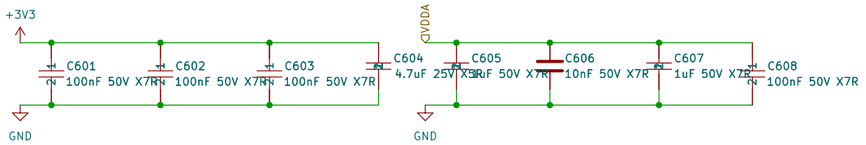


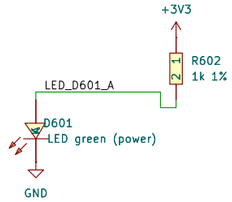
hwde	
Sheet: /power_stage/	
File: power_stage.kicad_sch	
Title: PCB-0018 REV A power stage: 3x NTMFS5C628NL half-bridge, 3 mOhm	
Size: A2	Date: 2026-09-27
KiCad E.D.A. 10.0.6	Id: 5/8

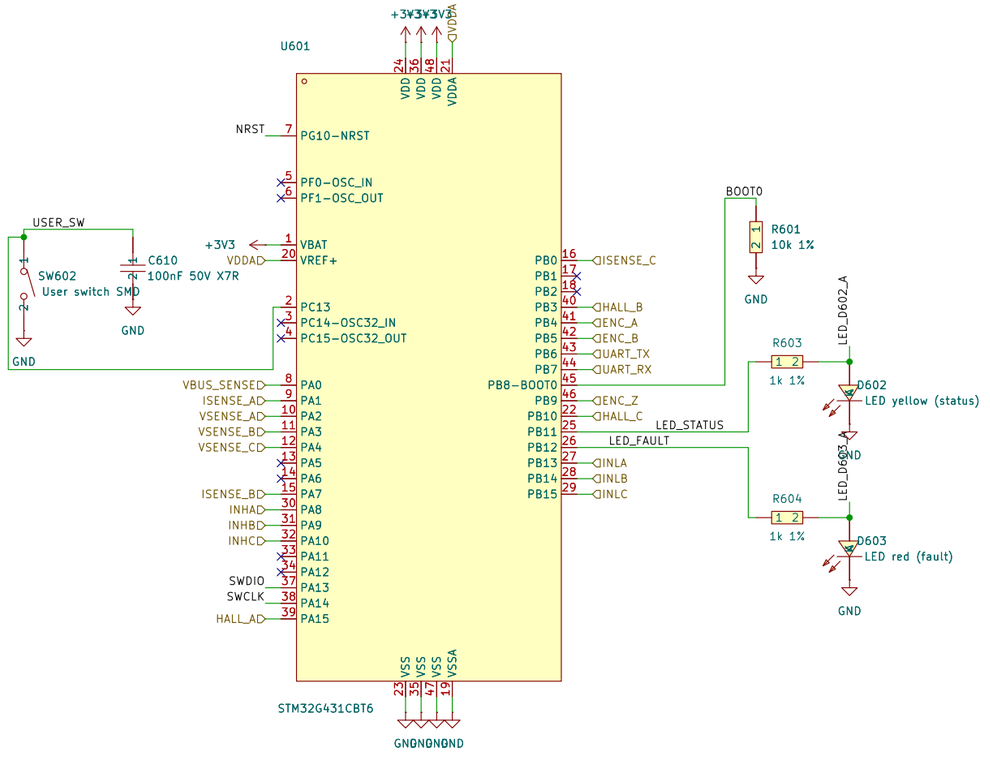


hwde		
Sheet: /sensing/		
File: sensing.kicad_sch		
Title: PCB−0018−A bldc−motor−driver: sensing (3x INA240A1 shunt CSA + p		
Size: A4	Date: 2026−09−27	**Rev: 1**
KiCad E.D.A. 10.0.6		Id: 6/8

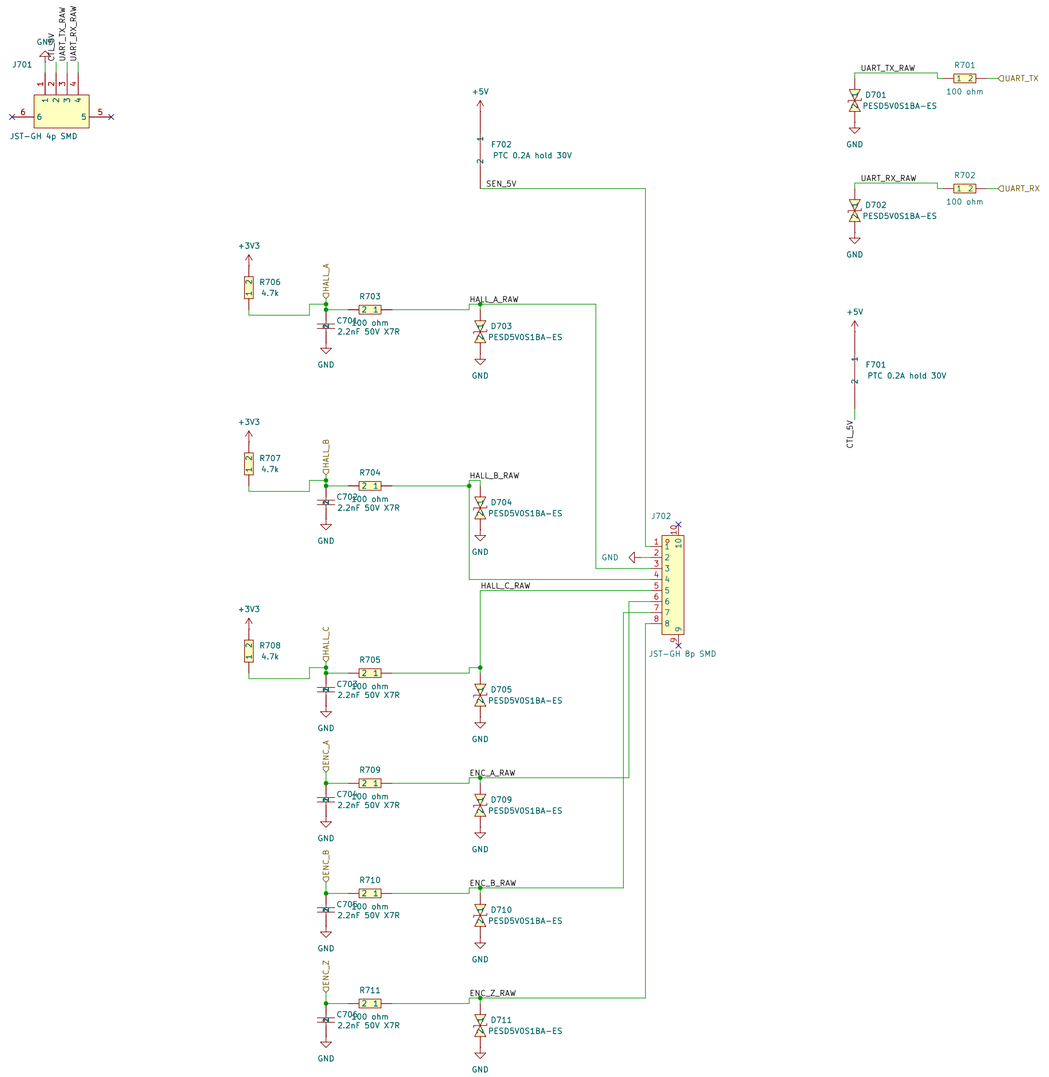








hwde			
Sheet: /mcu/			
File: mcu.kicad_sch			
Title: PCB-0018-A bldc-motor-driver: mcu (STM32G431CBT6)			
Size: A3	Date: 2026-09-27		**Rev: 1**
KiCad E.D.A. 10.0.6			Id: 7/8



hwde		
Sheet: /io/		
File: io.kicad_sch		
Title: PCB-0018-A bldc-motor-driver: io (JST-GH control + sensor connec		
Size: A2	Date: 2026-09-27	**Rev: 1**
KiCad E.D.A. 10.0.6		Id: 8/8