ANALOG

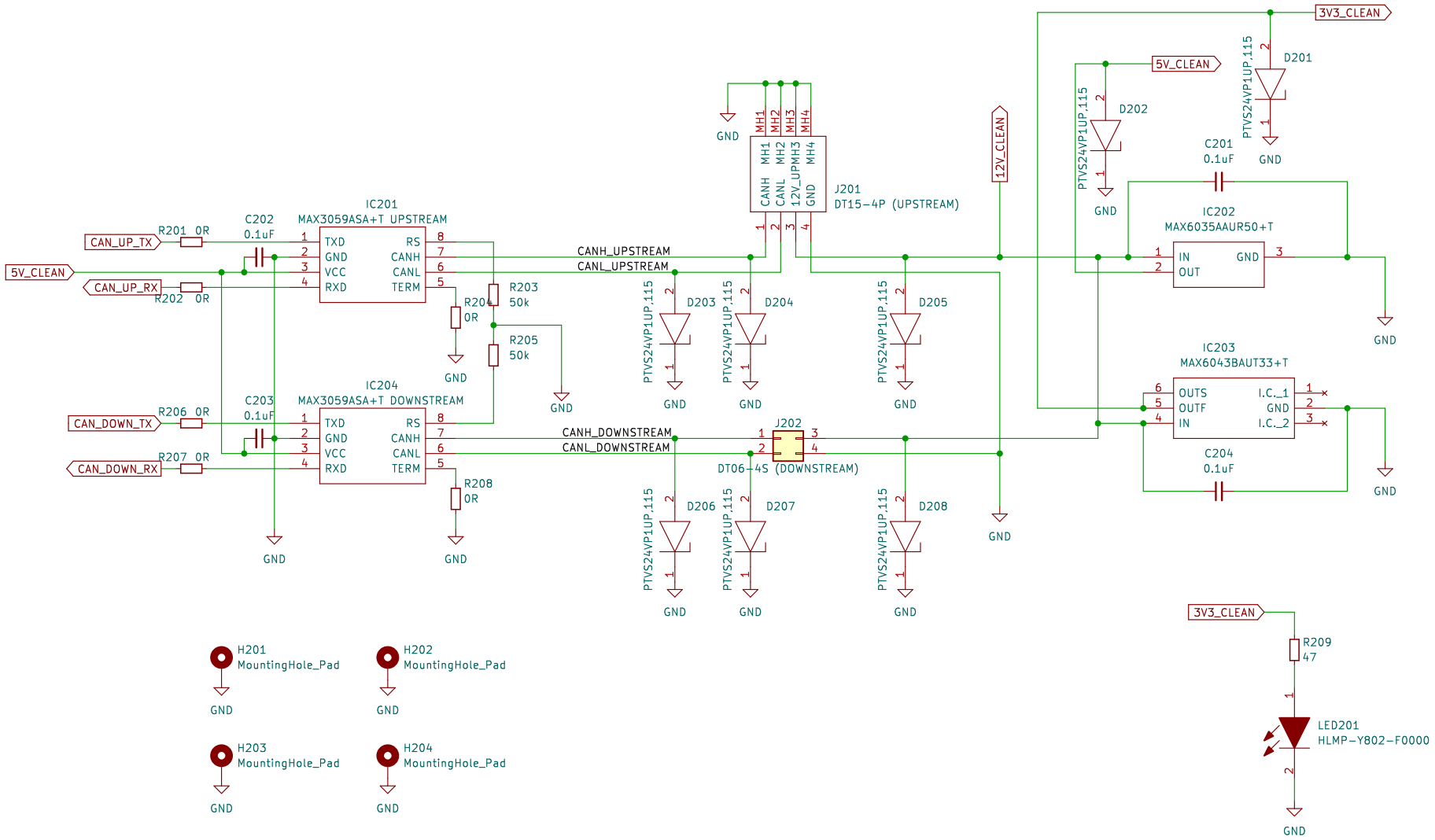
File: ANALOG.kicad_sch

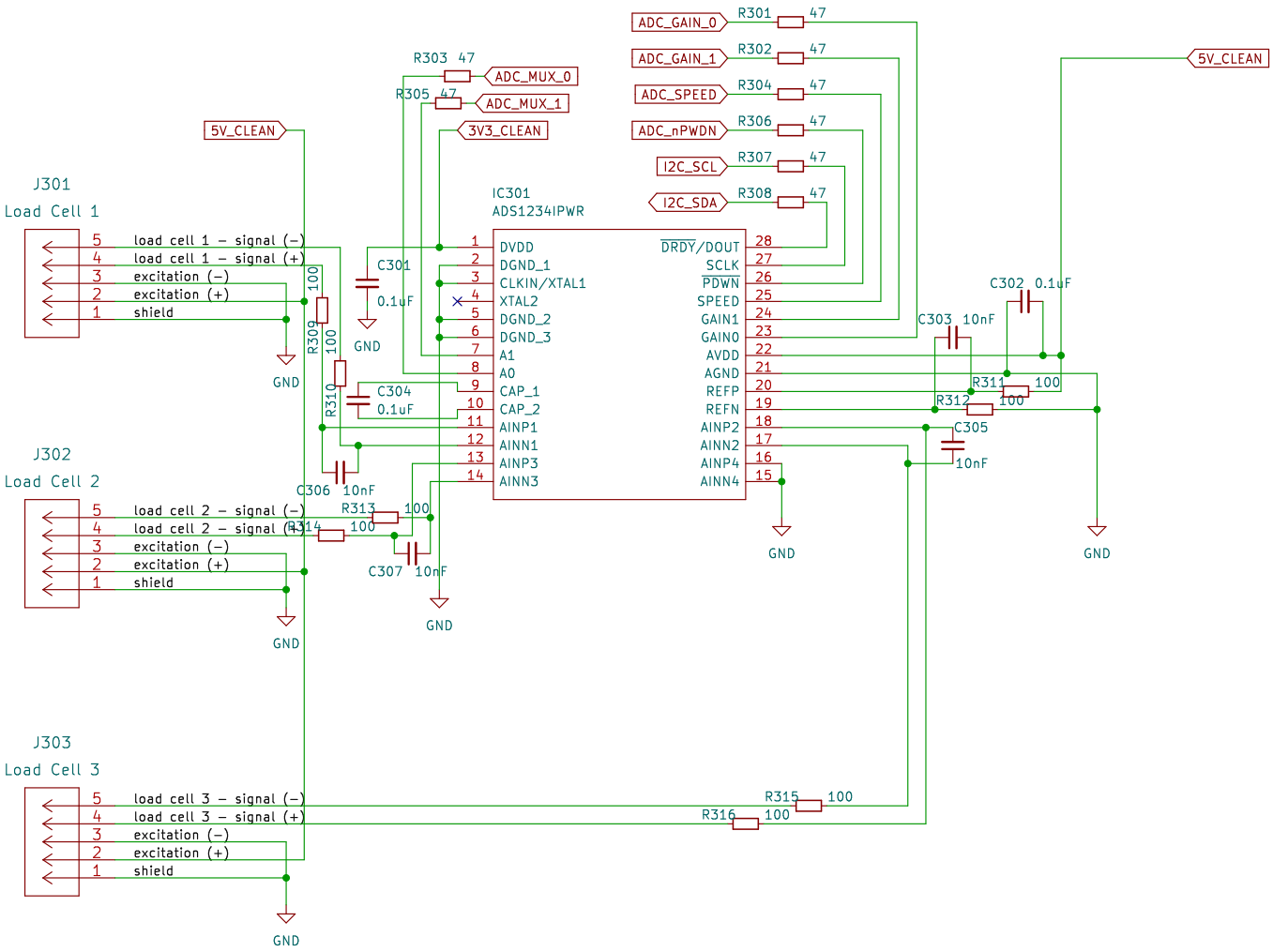
CANPWR

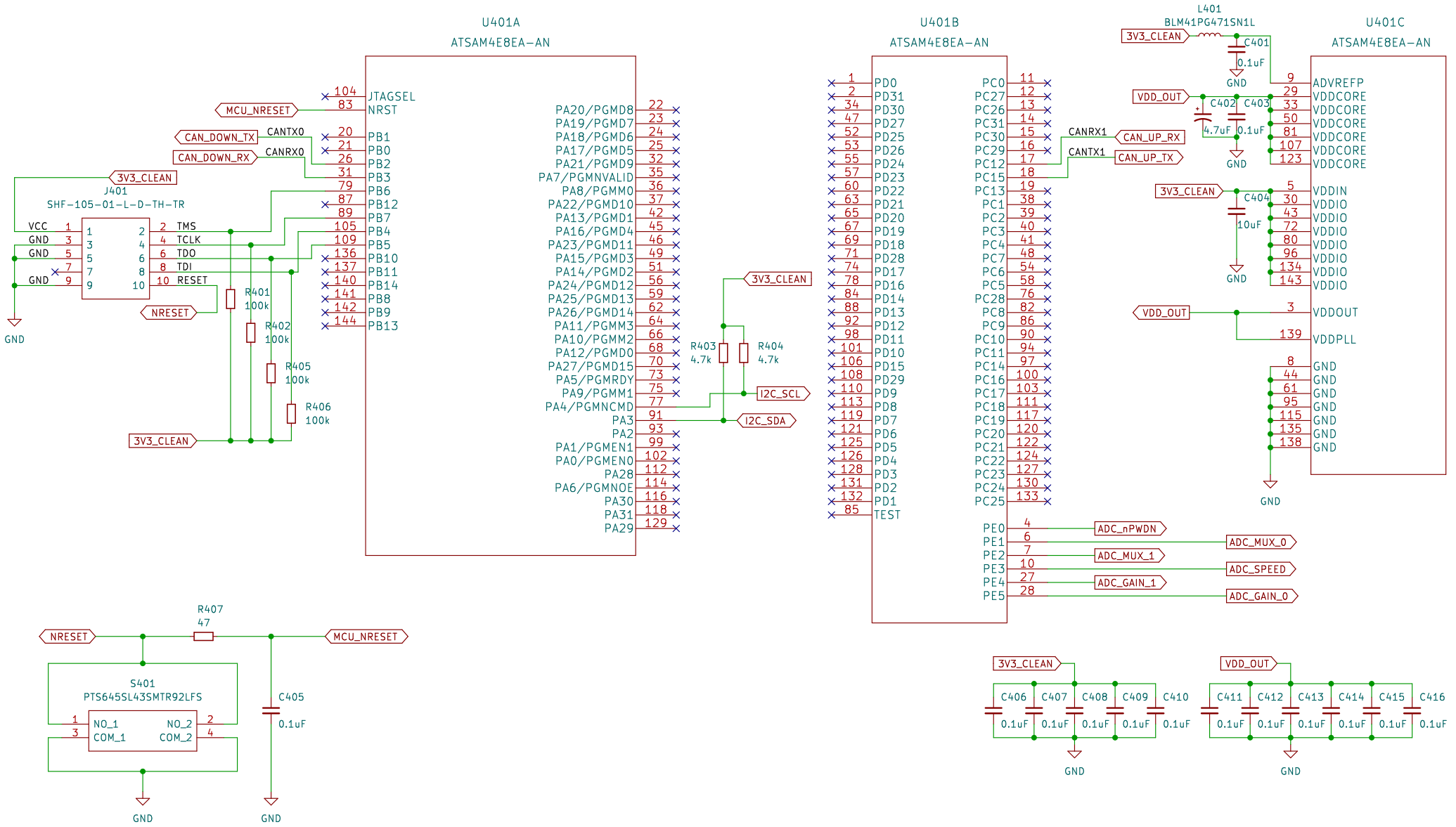
File: CANPWR.kicad_sch

MCU

File: MCU.kicad_sch


3V3_CLEAN
5V_CLEAN
12V_CLEAN
D201
PTVS24VP1UP.115
D202
C201
0.1uF
IC202
MAX6035AAUR50+T
IN
OUT
GND
IC203
MAX6043BAUT33+T
OUTS
OUTF
IN
I.C._1
I.C._2
C204
0.1uF
J201
DT15-4P (UPSTREAM)
MH1
MH2
MH3
MH4
CANH
CANL
12V_UPM
J202
DT06-4S (DOWNSTREAM)
CANH_UPSTREAM
CANL_UPSTREAM
CANH_DOWNSTREAM
CANL_DOWNSTREAM
IC201
MAX3059ASA+T UPSTREAM
IC204
MAX3059ASA+T DOWNSTREAM
TXD
RXD
VCC
RS
TERM
CAN_UP_TX
CAN_UP_RX
CAN_DOWN_TX
CAN_DOWN_RX
R201 0R
R202 0R
R203 50k
R204 0R
R205 50k
R206 0R
R207 0R
R208 0R
C202 0.1uF
C203 0.1uF
D203
D204
D205
D206
D207
D208
H201 MountingHole_Pad
H202 MountingHole_Pad
H203 MountingHole_Pad
H204 MountingHole_Pad
R209 47
LED201 HLMP-Y802-F0000


J301
Load Cell 1
5 load cell 1 – signal (–)
4 load cell 1 – signal (+)
3 excitation (–)
2 excitation (+)
1 shield
J302
Load Cell 2
5 load cell 2 – signal (–)
4 load cell 2 – signal (+)
3 excitation (–)
2 excitation (+)
1 shield
J303
Load Cell 3
5 load cell 3 – signal (–)
4 load cell 3 – signal (+)
3 excitation (–)
2 excitation (+)
1 shield
IC301
ADS1234IPWR
1 DVDD
2 DGND_1
3 CLKIN/XTAL1
4 XTAL2
5 DGND_2
6 DGND_3
7 A1
8 A0
9 CAP_1
10 CAP_2
11 AINP1
12 AINN1
13 AINP3
14 AINN3
28 DRDY/DOUT
27 SCLK
26 PDWN
25 SPEED
24 GAIN1
23 GAIN0
22 AVDD
21 AGND
20 REFP
19 REFN
18 AINP2
17 AINN2
16 AINP4
15 AINN4
ADC_GAIN_0
ADC_GAIN_1
ADC_SPEED
ADC_nPWDN
I2C_SCL
I2C_SDA
ADC_MUX_0
ADC_MUX_1
3V3_CLEAN
5V_CLEAN
R301 47
R302 47
R303 47
R304 47
R305 47
R306 47
R307 47
R308 47
R309 100
R310 100
R311 100
R312 100
R313 100
R314 100
R315 100
R316 100
C301 0.1uF
C302 0.1uF
C303 10nF
C304 0.1uF
C305 10nF
C306 10nF
C307 10nF
GND


U401A
ATSAM4E8EA-AN
JTAGSEL
NRST
PB1
PB0
PB2
PB3
PB6
PB12
PB7
PB4
PB5
PB10
PB11
PB14
PB8
PB9
PB13
PA20/PGMD8
PA19/PGMD7
PA18/PGMD6
PA17/PGMD5
PA21/PGMD9
PA7/PGMNVALID
PA8/PGMM0
PA22/PGMD10
PA13/PGMD1
PA16/PGMD4
PA23/PGMD11
PA15/PGMD3
PA14/PGMD2
PA24/PGMD12
PA25/PGMD13
PA26/PGMD14
PA11/PGMM3
PA10/PGMM2
PA12/PGMD0
PA27/PGMD15
PA5/PGMRDY
PA9/PGMM1
PA4/PGMNCMD
PA3
PA2
PA1/PGMEN1
PA0/PGMEN0
PA28
PA6/PGMNOE
PA30
PA31
PA29
MCU_NRESET
CAN_DOWN_TX
CANTX0
CAN_DOWN_RX
CANRX0
3V3_CLEAN
J401
SHF-105-01-L-D-TH-TR
VCC
GND
GND
GND
TMS
TCLK
TDO
TDI
RESET
NRESET
R401
100k
R402
100k
R405
100k
R406
100k
R403
4.7k
R404
4.7k
I2C_SCL
I2C_SDA
U401B
ATSAM4E8EA-AN
PD0
PD31
PD30
PD27
PD25
PD26
PD24
PD23
PD22
PD21
PD20
PD19
PD18
PD28
PD17
PD16
PD14
PD13
PD12
PD11
PD10
PD15
PD29
PD9
PD8
PD7
PD6
PD5
PD4
PD3
PD2
PD1
TEST
PC0
PC27
PC26
PC31
PC30
PC29
PC12
PC15
PC13
PC1
PC2
PC3
PC4
PC7
PC6
PC5
PC28
PC8
PC9
PC10
PC11
PC14
PC16
PC17
PC18
PC19
PC20
PC21
PC22
PC23
PC24
PC25
CANRX1
CANTX1
CAN_UP_RX
CAN_UP_TX
PE0
PE1
PE2
PE3
PE4
PE5
ADC_nPWDN
ADC_MUX_0
ADC_MUX_1
ADC_SPEED
ADC_GAIN_1
ADC_GAIN_0
L401
BLM41PG471SN1L
C401
0.1uF
U401C
ATSAM4E8EA-AN
ADVREFP
VDDCORE
VDDIN
VDDIO
VDDOUT
VDDPLL
GND
VDD_OUT
C402
4.7uF
C403
0.1uF
C404
10uF
R407
47
NRESET
MCU_NRESET
S401
PTS645SL43SMTR92LFS
NO_1
NO_2
COM_1
COM_2
C405
0.1uF
C406
C407
C408
C409
C410
C411
C412
C413
C414
C415
C416