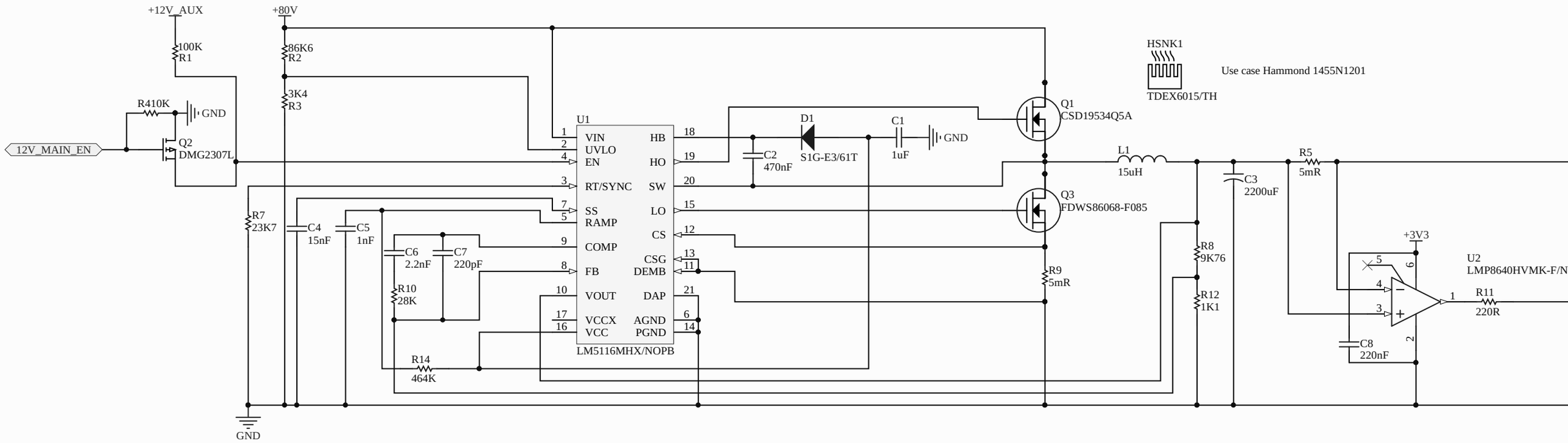
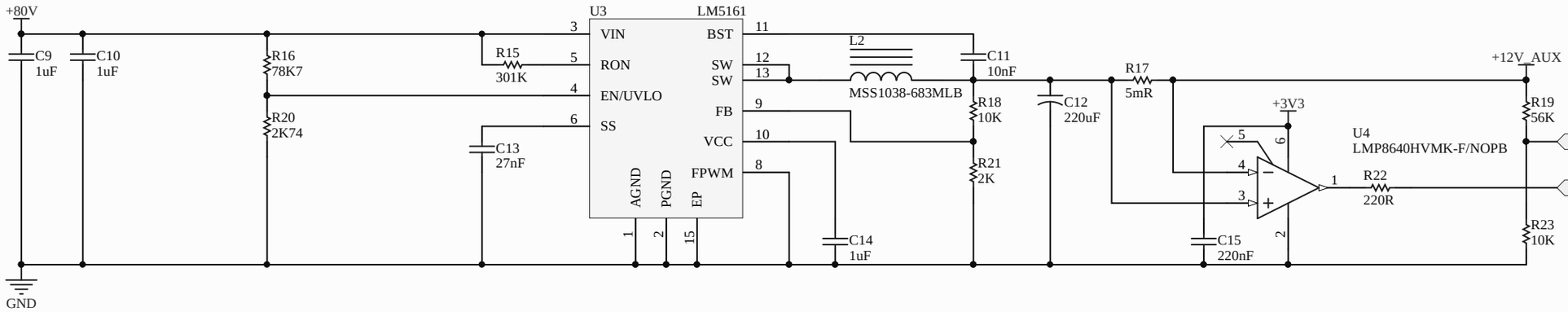
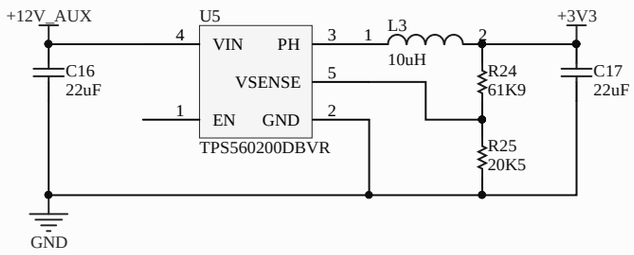
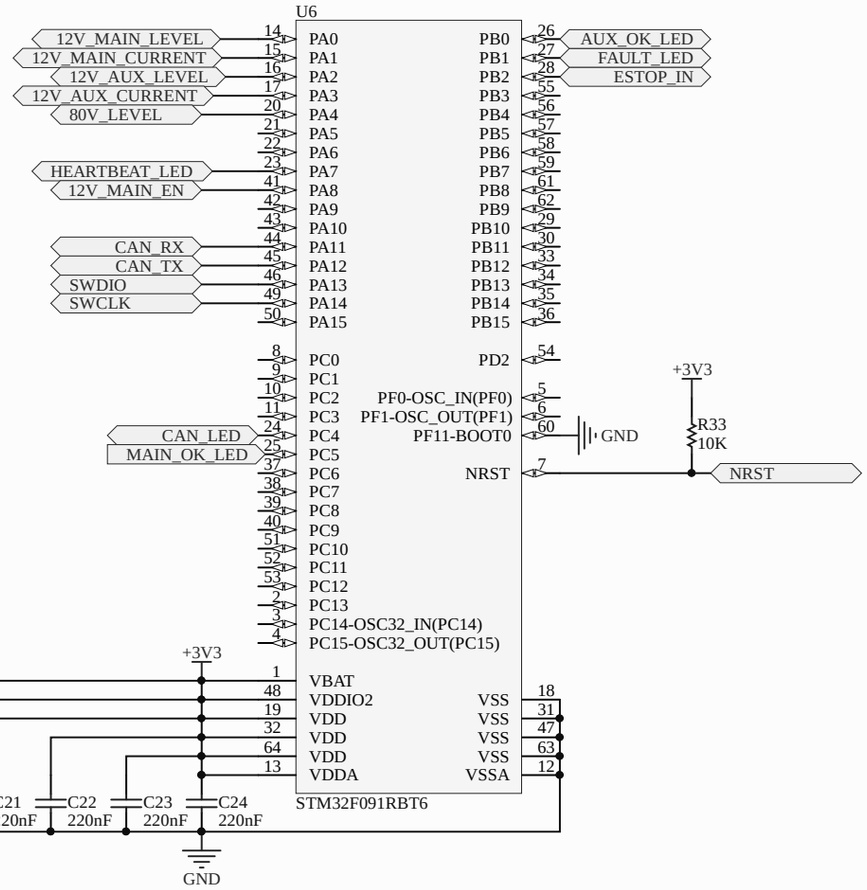
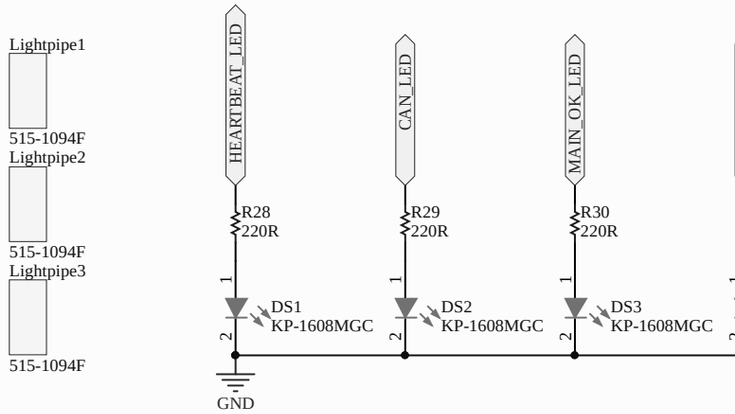
Description	Designator	Manufacturer	Manufacturer Part Number	ManufacturerPartNumber	Quantity	Value
CAP 1uF 25V ±10% 0603 (1608 Metric) Thickness 1mm SMD	C1				1	1uF
CAP 470nF 35V ±10% 0603 (1608 Metric) Thickness 1mm SMD	C2				1	470nF
Capacitor	C3	Panasonic		EEVFK1E222M	1	2200uF
CAP 15nF 10V ±5% 0603 (1608 Metric) Thickness 1mm SMD	C4				1	15nF
CAP 1nF 50V ±2% 0603 (1608 Metric) Thickness 1mm SMD	C5				1	1nF
CAP 2.2nF 25V ±5% 0603 (1608 Metric) Thickness 1mm SMD	C6				1	2.2nF
CAP 220pF 100V ±10% 0603 (1608 Metric) Thickness 1mm SMD	C7				1	220pF
CAP 220nF 16V ±10% 0603 (1608 Metric) Thickness 1mm SMD	C8, C15, C18, C19, C20, C21, C22, C23, C24				9	220nF
CAP 1uF 100V ±20% 1210 (3225 Metric) Thickness 2.8mm SMD	C9, C10				2	1uF
CAP 10nF 25V ±5% 0603 (1608 Metric) Thickness 1mm SMD	C11				1	10nF
Capacitor	C12	Panasonic		EEEFK1E221P	1	220uF
CAP 27nF 25V ±5% 0603 (1608 Metric) Thickness 1mm SMD	C13				1	27nF
CAP 1uF 16V ±5% 0805 (2012 Metric) Thickness 1.45mm SMD	C14				1	1uF
CAP 22uF 16V ±20% 0805 (2012 Metric) Thickness 1.45mm SMD	C16, C17				2	22uF
Capacitor	C25, C26, C27	Panasonic		EEVFK2A331M	3	330uF
Surface Mount Glass Passivated Rectifier, 400 VDC, 1 A, -55 to 150 degC, 2-Pin SMD, RoHS, Tape and Reel	D1	Vishay Semiconductor			1	
LED, SMT, 0603(1608), 1.1mm thickness, Green	DS1, DS2, DS3, DS4	Kingbright			4	
LED, SMT, 0603(1608), 1.1mm thickness, Orange	DS5	Kingbright			1	
Fuse	F1				1	
Heatsink	HSNK1	Thermo Electric Devices			1	TDEX6015/TH
	L1	Coilcraft	SER2918H-153KL		1	15uH
Shielded Power Inductor, 15 uH, +/- 20%, 3.8 A, -40 to 125 degC, 2-Pin SMD, RoHS, Tape and Reel	L2	Coilcraft			1	
SMD-Shielded Power Inductor WE-PD, L = 10.0 µH	L3				1	
Lightpipe	Lightpipe1 Lightpipe2 Lightpipe3	Dialight			3	515-1094F
Mega-Fit Right-Angle Header, 2 Circuits, Tin (Sn) Plating, UL 94 V-0, Tray	P1, P3	Molex			2	76825-0002
Header, 5-Pin	P2				1	
Mini-Fit Jr. Header, 4 Circuits, Dual Row, Right-Angle, with Snap-in Plastic Peg PCB Lock, PA Polyamide Nylon 6/6 94V-0, 2.54µm Matte Tin (Sn) Plating	P4	Molex			1	39-30-0040
Mini-Fit Jr. Header, 2 Circuits, Dual Row, Right-Angle, with Snap-in Plastic Peg PCB Lock, PA Polyamide Nylon 6/6 94V-0, 2.54µm Matte Tin (Sn) Plating	P5	Molex			1	39-30-0020
Header, 2-Pin	P6				1	
100V NexFET N-ch MOSFET	Q1	Texas Instruments		CSD19534Q5A	1	CSD19534Q5A
P-CHANNEL ENHANCEMENT MODE MOSFET	Q2	Diodes Incorporated			1	DMG2307L
100V POWERTRENCH N-ch MOSFET	Q3	ON Semiconductor		FDWS8606-F085	1	FDWS8606-F085
100K 0.1W 1% 0603 (1608 Metric) SMD	R1				1	100K
86K6 0.1W 1% 0603 (1608 Metric) SMD	R2				1	86K6
3K4 0.1W 1% 0603 (1608 Metric) SMD	R3				1	3K4
10K 0.1W 5% 0603 (1608 Metric) SMD	R4, R33, R34				3	10K
	R5, R9, R17	Susumu			3	5mR
56K 0.1W 1% 0603 (1608 Metric) SMD	R6, R19				2	56K
23K7 0.1W 1% 0603 (1608 Metric) SMD	R7				1	23K7
9K76 0.1W 1% 0603 (1608 Metric) SMD	R8				1	9K76
28K 0.1W 1% 0603 (1608 Metric) SMD	R10				1	28K
220R 0.1W 5% 0603 (1608 Metric) SMD	R11, R22, R28, R29, R30, R31, R32, R35				8	220R
1K1 0.1W 1% 0603 (1608 Metric) SMD	R12				1	1K1
10K 0.1W 1% 0603 (1608 Metric) SMD	R13, R18, R23				3	10K
464K 0.1W 1% 0603 (1608 Metric) SMD	R14				1	464K
301K 0.1W 1% 0603 (1608 Metric) SMD	R15				1	301K
78K7 0.1W 1% 0603 (1608 Metric) SMD	R16				1	78K7
2K74 0.1W 1% 0603 (1608 Metric) SMD	R20				1	2K74
2K 0.1W 1% 0603 (1608 Metric) SMD	R21				1	2K
61K9 0.1W 1% 0603 (1608 Metric) SMD	R24				1	61K9
20K5 0.1W 1% 0603 (1608 Metric) SMD	R25				1	20K5
100K 0.125W 1% 0805 (2012 Metric) SMD	R26				1	100K
2K7 0.125W 1% 0805 (2012 Metric) SMD	R27				1	2K7
120R 0.125W 5% 0805 (2012 Metric) SMD	R36				1	120R
Wide Range Synchronous Buck Controller,		Texas Instrument				

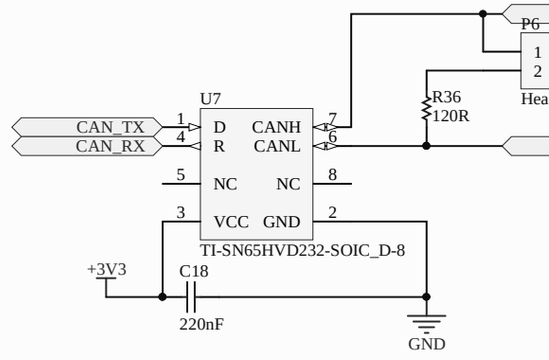

+12V_AUX
+80V
100K
R1
86K6
R2
3K4
R3
R410K
GND
12V_MAIN_EN
Q2
DMG2307L
U1
VIN
UVLO
EN
RT/SYNC
SS
RAMP
COMP
FB
VOUT
VCCX
VCC
HB
HO
SW
LO
CS
CSG
DEMB
DAP
AGND
PGND
LM5116MHX/NOPB
C2
470nF
D1
S1G-E3/61T
C1
1uF
GND
Q1
CSD19534Q5A
HSNK1
TDEX6015/TH
Use case Hammond 1455N1201
L1
15uH
C3
2200uF
R5
5mR
Q3
FDWS86068-F085
R7
23K7
C4
15nF
C5
1nF
C6
2.2nF
C7
220pF
R10
28K
R14
464K
R9
5mR
R8
9K76
R12
1K1
+3V3
U2
LMP8640HVMK-F/N
R11
220R
C8
220nF
GND

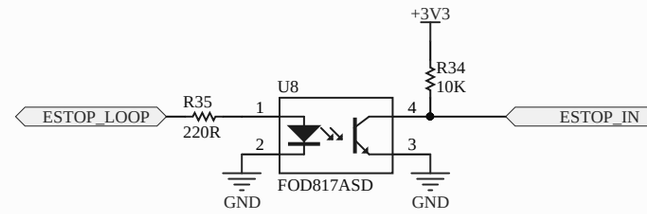

+80V
C9
1uF
C10
1uF
R16
78K7
R15
301K
R20
2K74
C13
27nF
U3
LM5161
VIN
RON
EN/UVLO
SS
AGND
PGND
EP
BST
SW
SW
FB
VCC
FPWM
3
5
4
6
1
2
15
11
12
13
9
10
8
L2
MSS1038-683MLB
C11
10nF
R18
10K
R21
2K
C14
1uF
C12
220uF
R17
5mR
+12V_AUX
R19
56K
+3V3
U4
LMP8640HVMK-F/NOPB
R22
220R
C15
220nF
R23
10K
12V_AUX
12V_AUX
GND

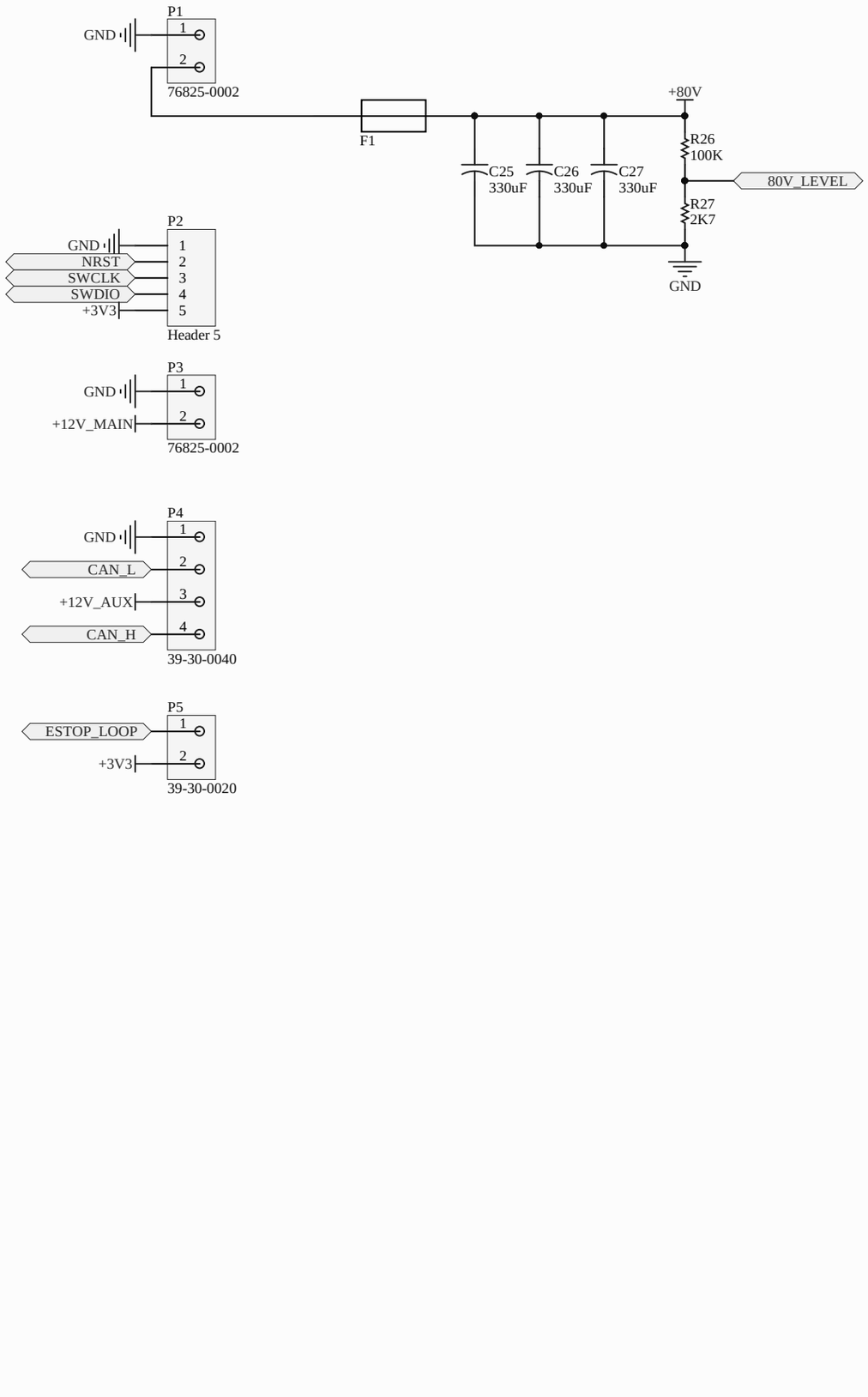

+12V_AUX
C16
22uF
U5
VIN
PH
VSENSE
EN
GND
TPS560200DBVR
4
3
5
1
2
L3
10uH
1
2
R24
61K9
R25
20K5
+3V3
C17
22uF
GND


U6
12V_MAIN_LEVEL
12V_MAIN_CURRENT
12V_AUX_LEVEL
12V_AUX_CURRENT
80V_LEVEL
HEARTBEAT_LED
12V_MAIN_EN
CAN_RX
CAN_TX
SWDIO
SWCLK
CAN_LED
MAIN_OK_LED
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15
PC0
PC1
PC2
PC3
PC4
PC5
PC6
PC7
PC8
PC9
PC10
PC11
PC12
PC13
PC14-OSC32_IN(PC14)
PC15-OSC32_OUT(PC15)
VBAT
VDDIO2
VDD
VDD
VDD
VDDA
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15
PD2
PF0-OSC_IN(PF0)
PF1-OSC_OUT(PF1)
PF11-BOOT0
NRST
VSS
VSS
VSS
VSS
VSSA
AUX_OK_LED
FAULT_LED
ESTOP_IN
+3V3
GND
R33
10K
NRST
STM32F091RBT6
C19 220nF
C20 220nF
C21 220nF
C22 220nF
C23 220nF
C24 220nF


Lightpipe1
515-1094F
Lightpipe2
515-1094F
Lightpipe3
515-1094F
HEARTBEAT_LED
CAN_LED
MAIN_OK_LED
R28
220R
R29
220R
R30
220R
DS1
KP-1608MGC
DS2
KP-1608MGC
DS3
KP-1608MGC
GND


U7
CAN_TX
CAN_RX
D
R
CANH
CANL
NC
NC
VCC
GND
TI-SN65HVD232-SOIC_D-8
R36
120R
+3V3
C18
220nF
GND


+3V3
R34
10K
U8
ESTOP_LOOP
R35
220R
ESTOP_IN
FOD817ASD
GND
GND


P1
GND
1
2
76825-0002
F1
+80V
C25
330uF
C26
330uF
C27
330uF
R26
100K
80V_LEVEL
R27
2K7
GND
P2
GND
NRST
SWCLK
SWDIO
+3V3
1
2
3
4
5
Header 5
P3
GND
+12V_MAIN
1
2
76825-0002
P4
GND
CAN_L
+12V_AUX
CAN_H
1
2
3
4
39-30-0040
P5
ESTOP_LOOP
+3V3
1
2
39-30-0020