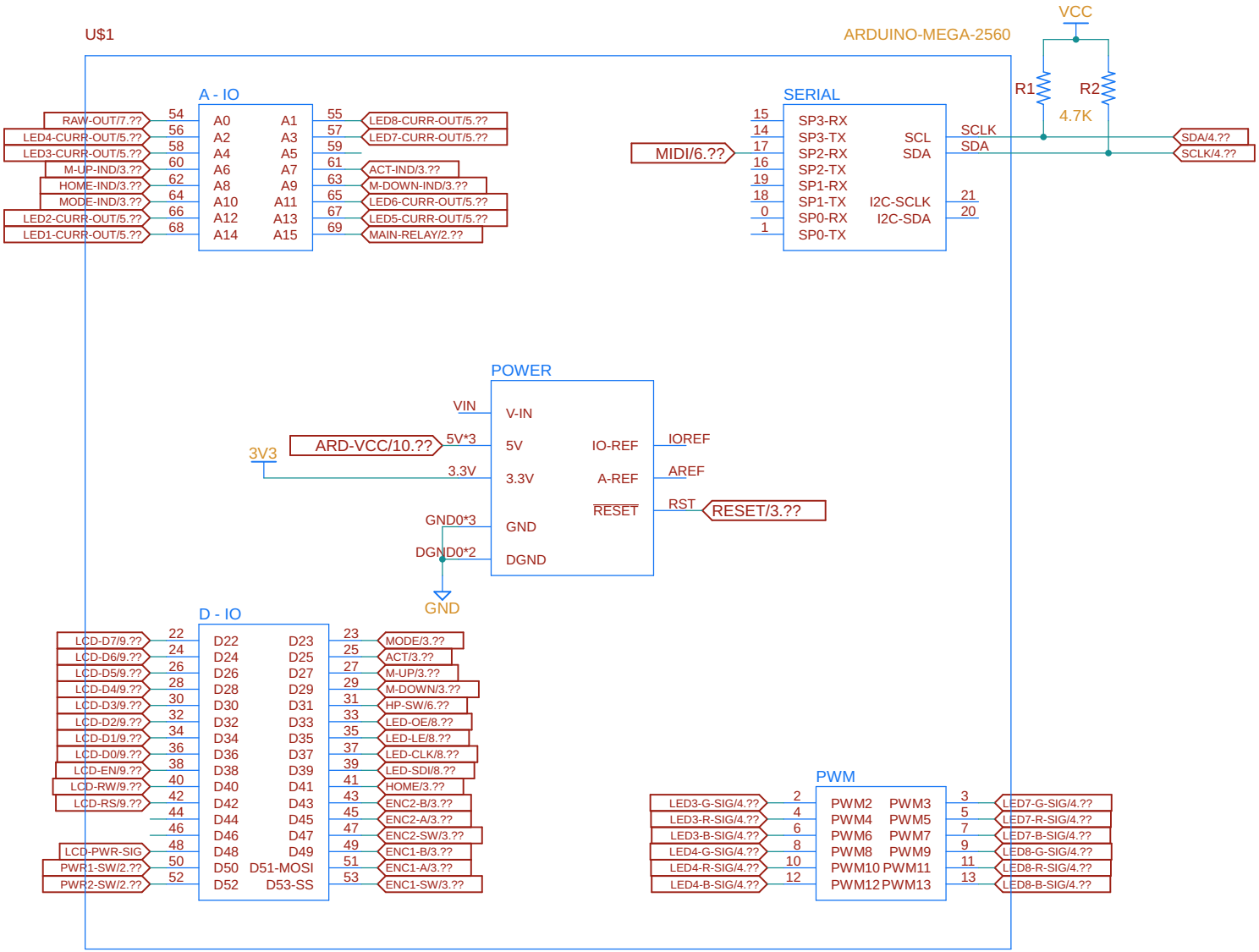
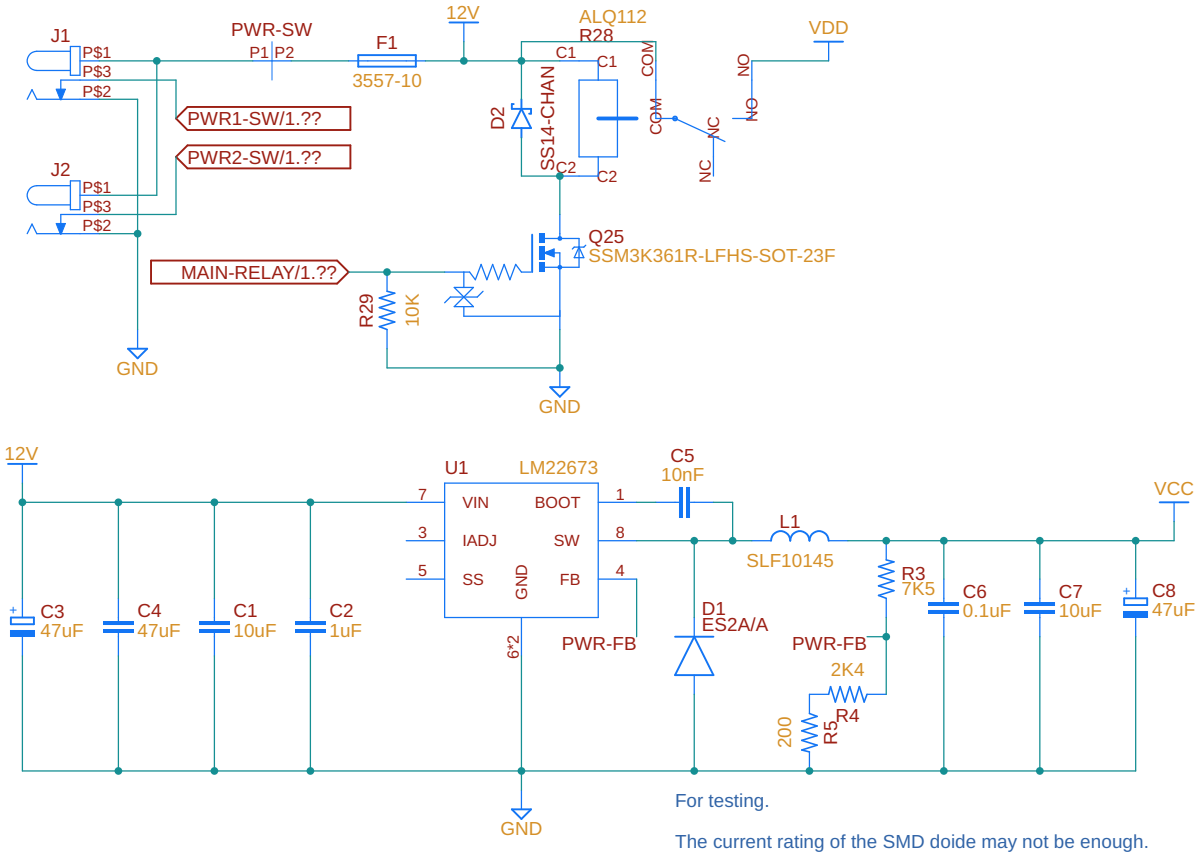
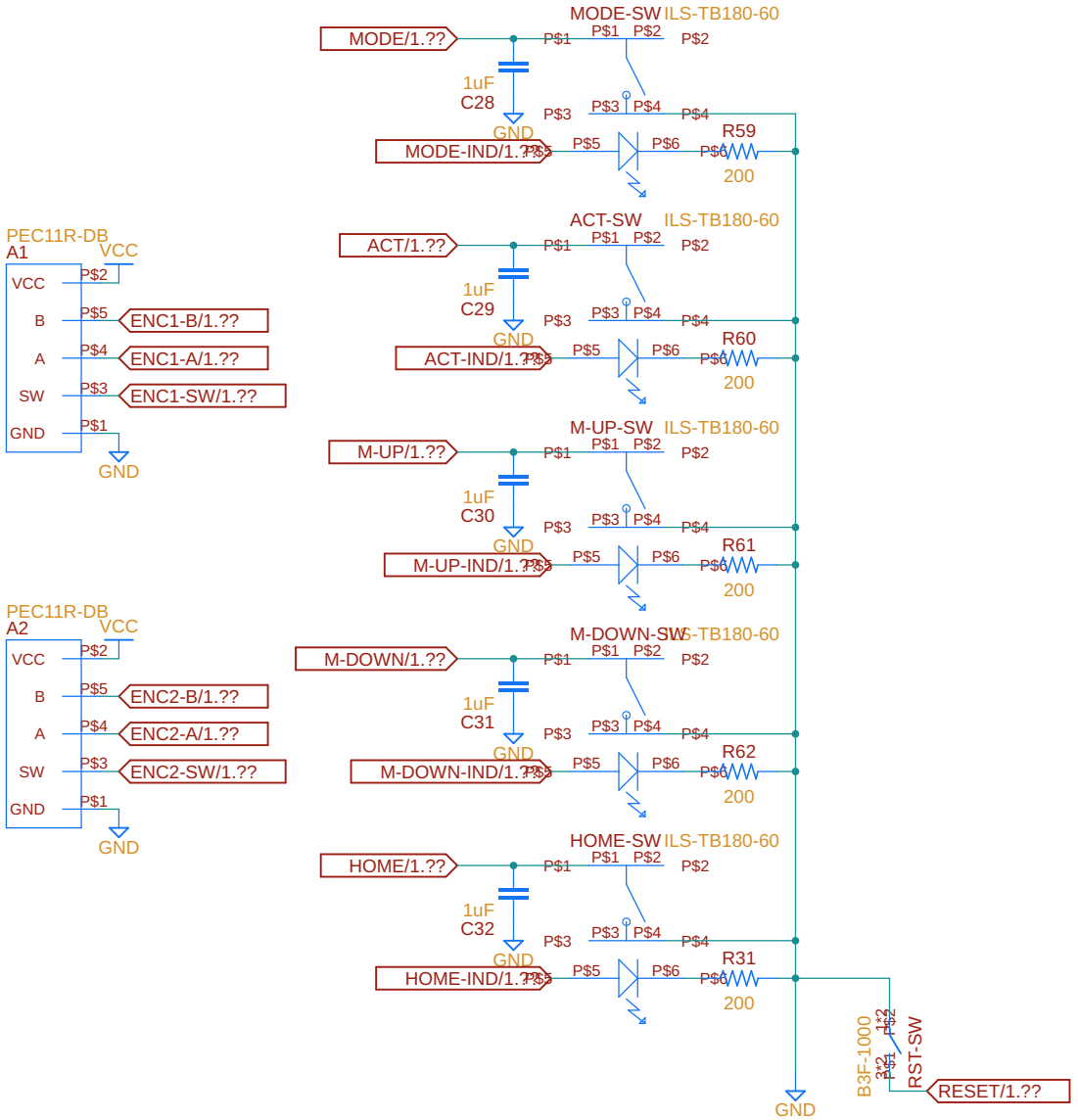
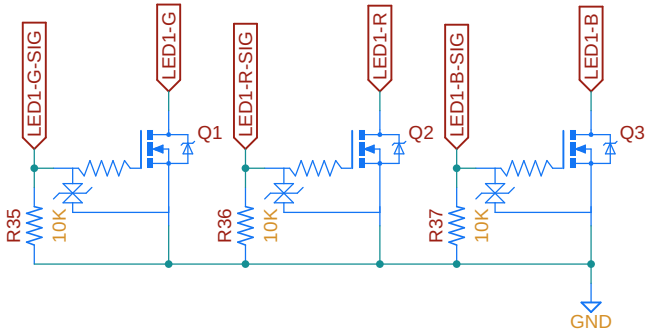

U$1
ARDUINO-MEGA-2560
VCC
R1
R2
4.7K
A - IO
RAW-OUT/7.??
LED4-CURR-OUT/5.??
LED3-CURR-OUT/5.??
M-UP-IND/3.??
HOME-IND/3.??
MODE-IND/3.??
LED2-CURR-OUT/5.??
LED1-CURR-OUT/5.??
LED8-CURR-OUT/5.??
LED7-CURR-OUT/5.??
ACT-IND/3.??
M-DOWN-IND/3.??
LED6-CURR-OUT/5.??
LED5-CURR-OUT/5.??
MAIN-RELAY/2.??
SERIAL
MIDI/6.??
SP3-RX
SP3-TX
SP2-RX
SP2-TX
SP1-RX
SP1-TX
SP0-RX
SP0-TX
SCL
SDA
I2C-SCLK
I2C-SDA
SCLK
SDA
SDA/4.??
SCLK/4.??
POWER
VIN
V-IN
ARD-VCC/10.??
5V*3
5V
3V3
3.3V
3.3V
IO-REF
A-REF
RESET
IOREF
AREF
RST
RESET/3.??
GND0*3
GND
DGND0*2
DGND
GND
D - IO
LCD-D7/9.??
LCD-D6/9.??
LCD-D5/9.??
LCD-D4/9.??
LCD-D3/9.??
LCD-D2/9.??
LCD-D1/9.??
LCD-D0/9.??
LCD-EN/9.??
LCD-RW/9.??
LCD-RS/9.??
LCD-PWR-SIG
PWR1-SW/2.??
PWR2-SW/2.??
MODE/3.??
ACT/3.??
M-UP/3.??
M-DOWN/3.??
HP-SW/6.??
LED-OE/8.??
LED-LE/8.??
LED-CLK/8.??
LED-SDI/8.??
HOME/3.??
ENC2-B/3.??
ENC2-A/3.??
ENC2-SW/3.??
ENC1-B/3.??
ENC1-A/3.??
ENC1-SW/3.??
PWM
LED3-G-SIG/4.??
LED3-R-SIG/4.??
LED3-B-SIG/4.??
LED4-G-SIG/4.??
LED4-R-SIG/4.??
LED4-B-SIG/4.??
PWM2
PWM3
PWM4
PWM5
PWM6
PWM7
PWM8
PWM9
PWM10
PWM11
PWM12
PWM13
LED7-G-SIG/4.??
LED7-R-SIG/4.??
LED7-B-SIG/4.??
LED8-G-SIG/4.??
LED8-R-SIG/4.??
LED8-B-SIG/4.??

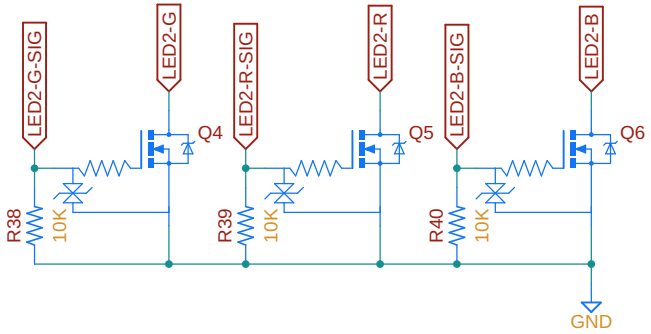


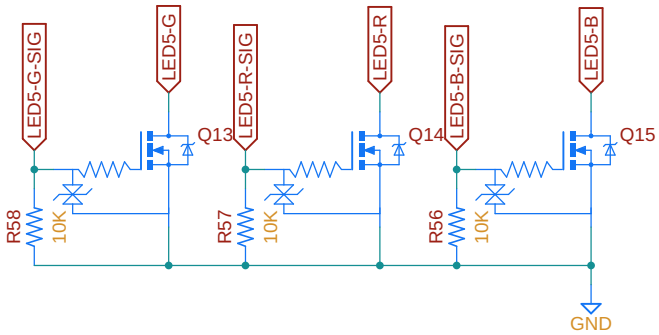
For testing.

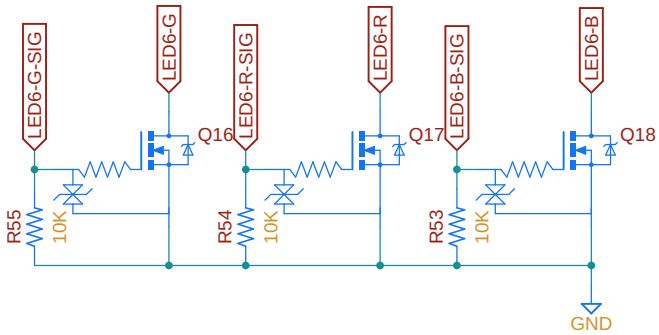
The current rating of the SMD doide may not be enough.

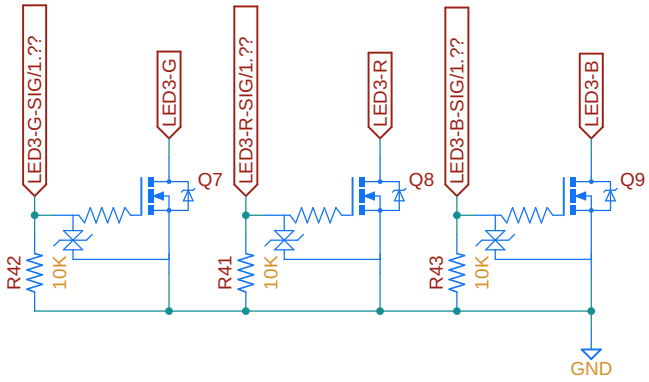

MODE-SW ILS-TB180-60
MODE/1.??
1uF
C28
GND
MODE-IND/1.??
R59
200
ACT-SW ILS-TB180-60
ACT/1.??
1uF
C29
GND
ACT-IND/1.??
R60
200
PEC11R-DB
A1
VCC
VCC
B
A
SW
GND
ENC1-B/1.??
ENC1-A/1.??
ENC1-SW/1.??
GND
M-UP-SW ILS-TB180-60
M-UP/1.??
1uF
C30
GND
M-UP-IND/1.??
R61
200
PEC11R-DB
A2
VCC
VCC
B
A
SW
GND
ENC2-B/1.??
ENC2-A/1.??
ENC2-SW/1.??
GND
M-DOWN-SW ILS-TB180-60
M-DOWN/1.??
1uF
C31
GND
M-DOWN-IND/1.??
R62
200
HOME-SW ILS-TB180-60
HOME/1.??
1uF
C32
GND
HOME-IND/1.??
R31
200
B3F-1000
RST-SW
RESET/1.??
GND

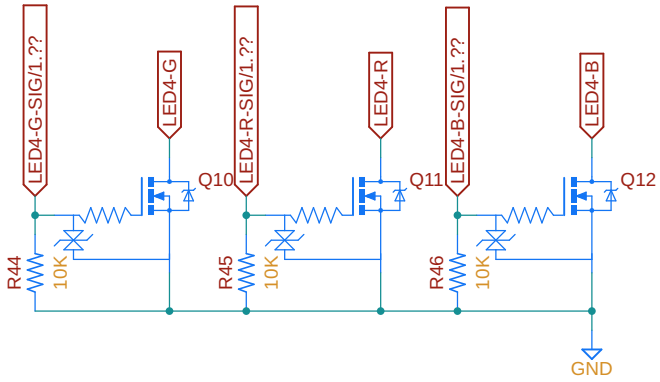

LED1-G-SIG
LED1-G
Q1
R35
10K
LED1-R-SIG
LED1-R
Q2
R36
10K
LED1-B-SIG
LED1-B
Q3
R37
10K
GND

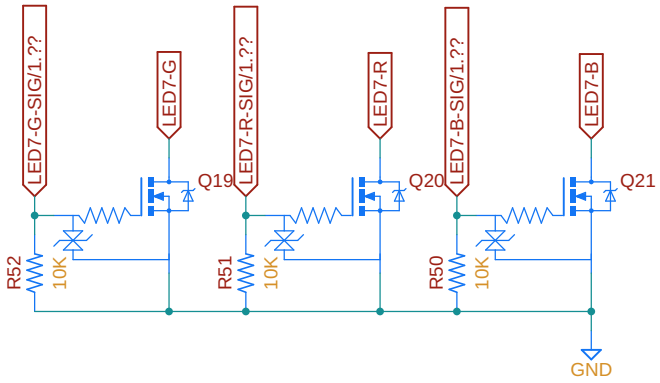

LED2-G-SIG
LED2-G
Q4
R38
10K
LED2-R-SIG
LED2-R
Q5
R39
10K
LED2-B-SIG
LED2-B
Q6
R40
10K
GND

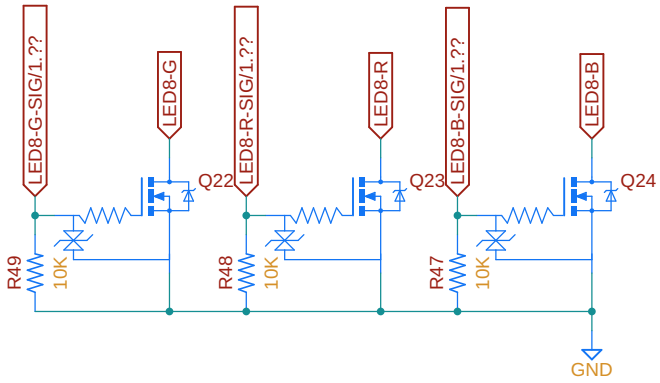

LED5-G-SIG
LED5-G
Q13
R58
10K
LED5-R-SIG
LED5-R
Q14
R57
10K
LED5-B-SIG
LED5-B
Q15
R56
10K
GND

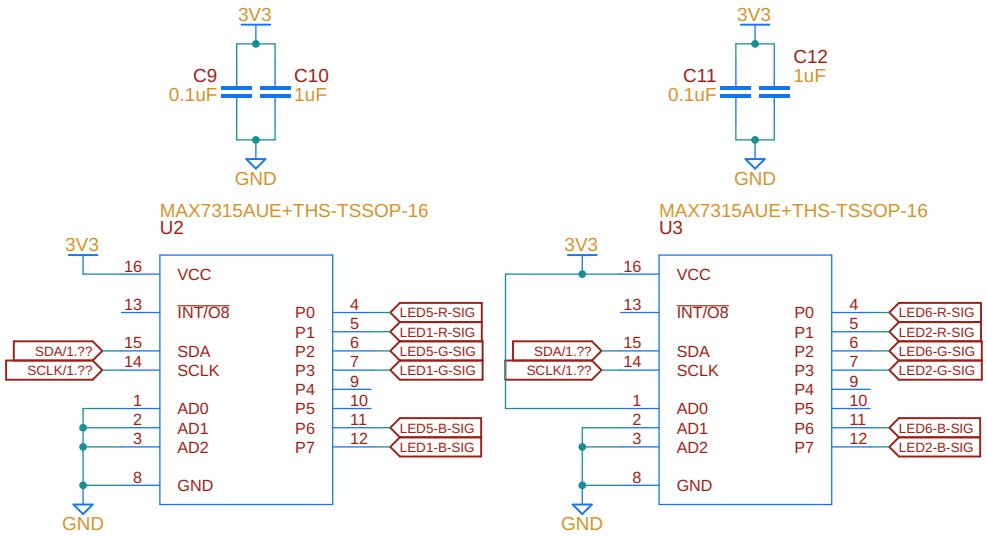

LED6-G-SIG
LED6-G
Q16
R55
10K
LED6-R-SIG
LED6-R
Q17
R54
10K
LED6-B-SIG
LED6-B
Q18
R53
10K
GND


LED3-G-SIG/1.??
LED3-G
Q7
R42
10K
LED3-R-SIG/1.??
LED3-R
Q8
R41
10K
LED3-B-SIG/1.??
LED3-B
Q9
R43
10K
GND

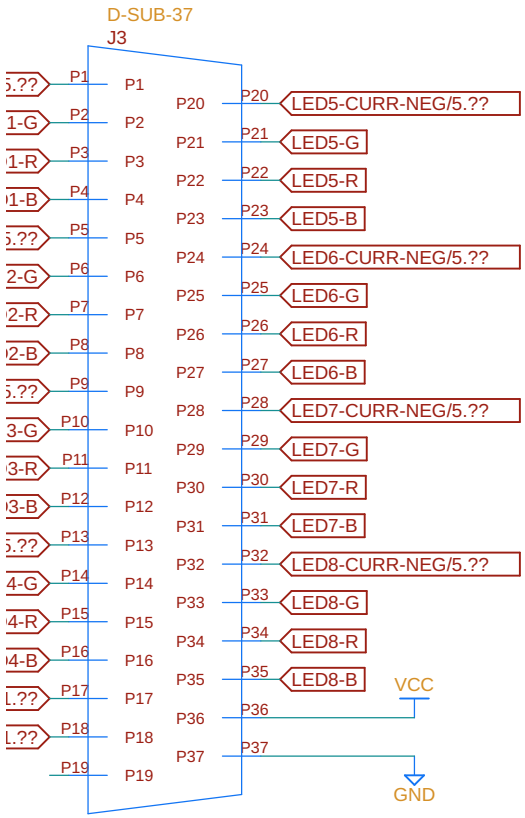

LED4-G-SIG/1.??
LED4-G
Q10
R44
10K
LED4-R-SIG/1.??
LED4-R
Q11
R45
10K
LED4-B-SIG/1.??
LED4-B
Q12
R46
10K
GND

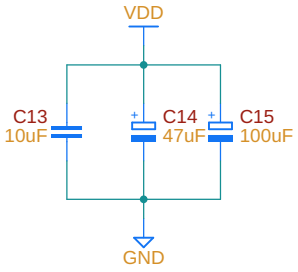

LED7-G-SIG/1.??
LED7-G
Q19
R52
10K
LED7-R-SIG/1.??
LED7-R
Q20
R51
10K
LED7-B-SIG/1.??
LED7-B
Q21
R50
10K
GND

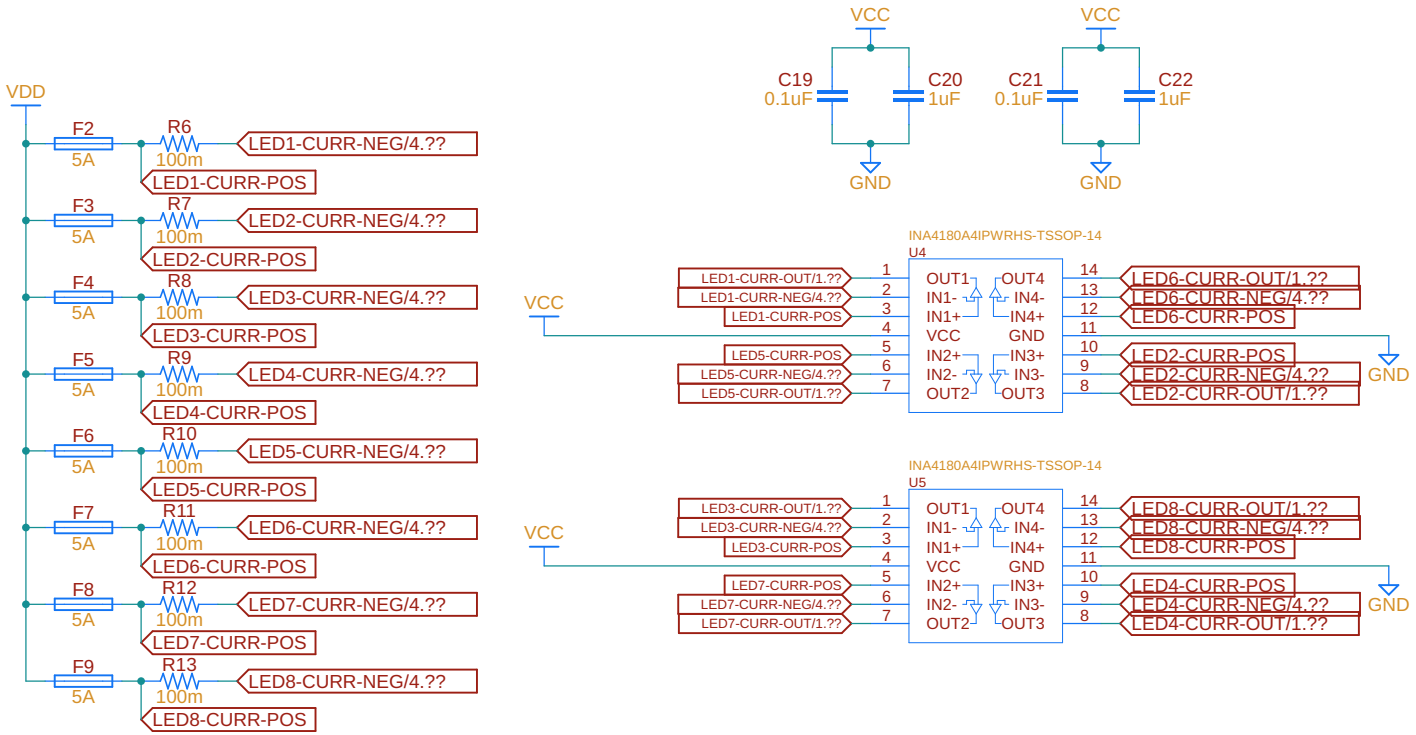

LED8-G-SIG/1.??
LED8-G
Q22
R49
10K
LED8-R-SIG/1.??
LED8-R
Q23
R48
10K
LED8-B-SIG/1.??
LED8-B
Q24
R47
10K
GND

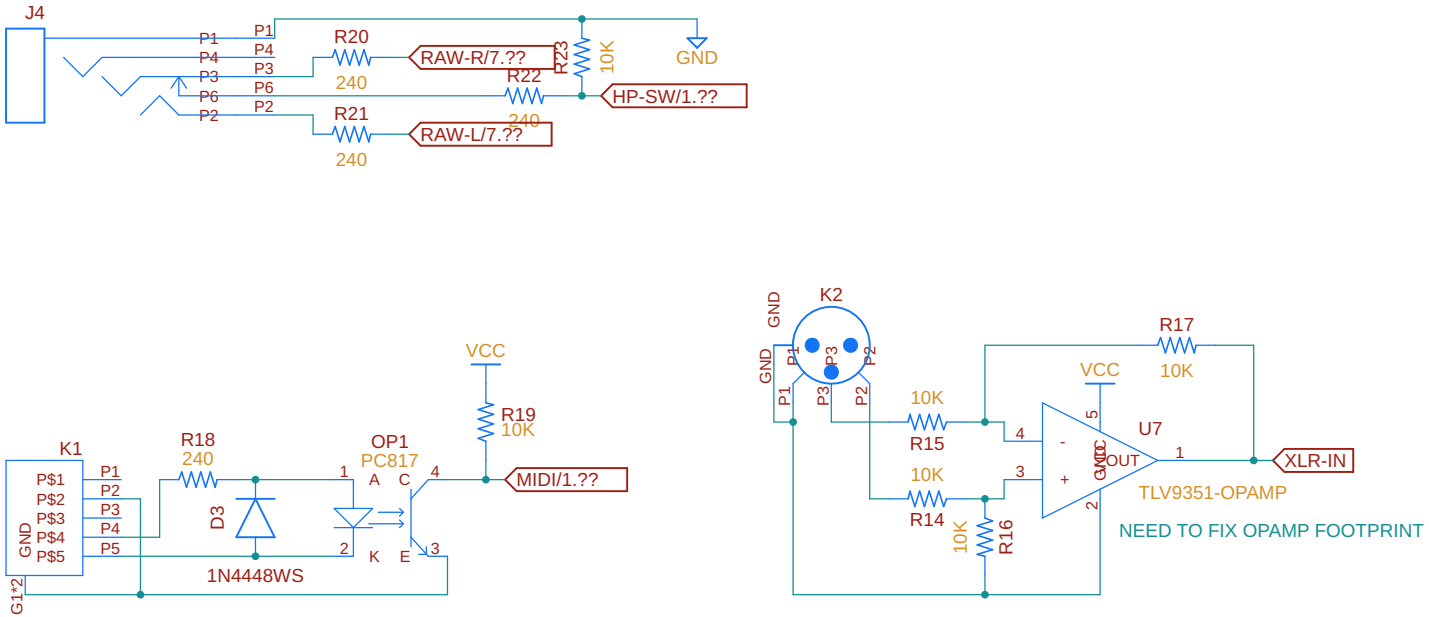


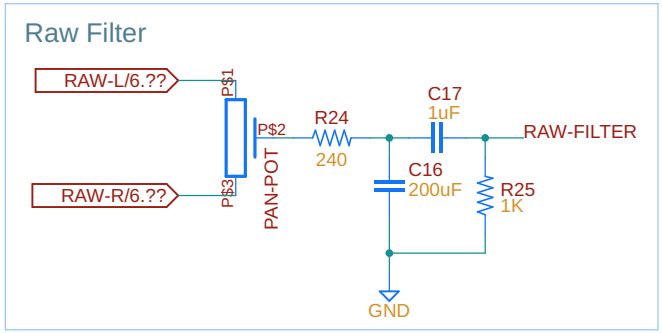
LED1-CURR-NEG/5
LED
LED
LED
LED2-CURR-NEG/5
LED
LED
LED
LED3-CURR-NEG/5
LED
LED
LED
LED4-CURR-NEG/5
LED
LED
LED
SDA/1
SCLK/1

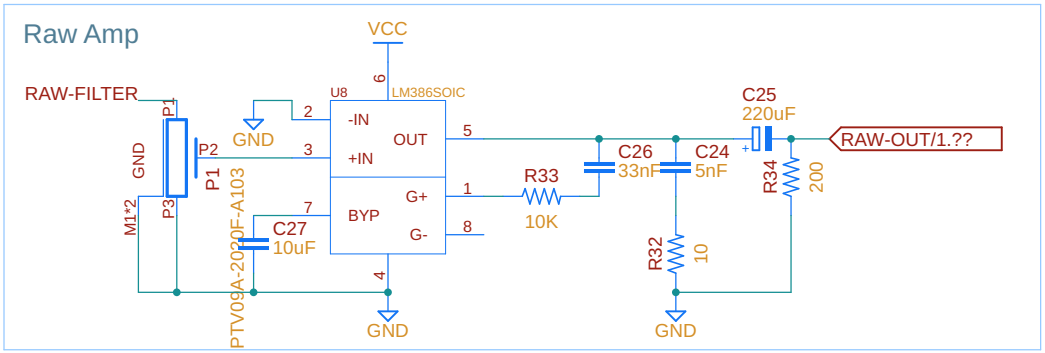

D-SUB-37
J3
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
P31
P32
P33
P34
P35
P36
P37
LED5-CURR-NEG/5.??
LED5-G
LED5-R
LED5-B
LED6-CURR-NEG/5.??
LED6-G
LED6-R
LED6-B
LED7-CURR-NEG/5.??
LED7-G
LED7-R
LED7-B
LED8-CURR-NEG/5.??
LED8-G
LED8-R
LED8-B
VCC
GND

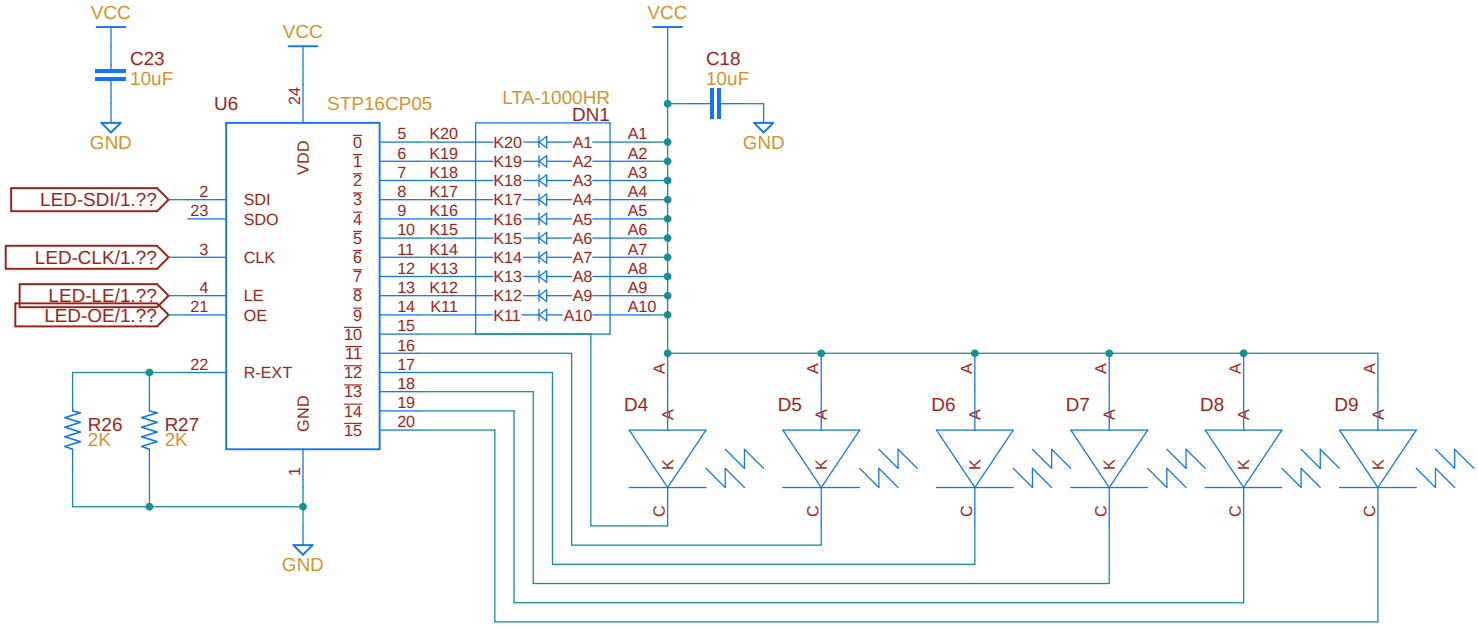

VDD
C13
10uF
C14
47uF
C15
100uF
GND

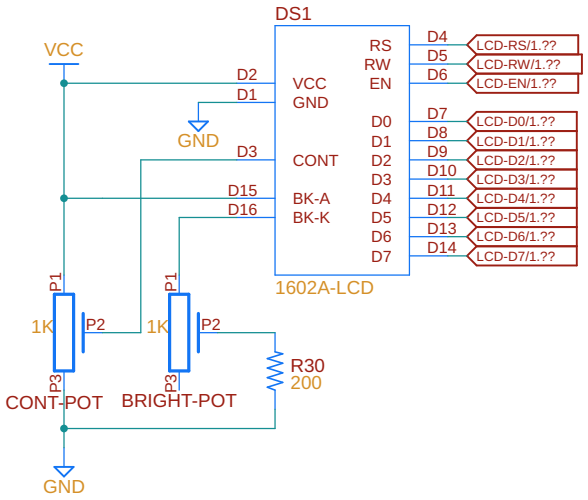

VDD
F2
5A
R6
100m
LED1-CURR-NEG/4.??
LED1-CURR-POS
F3
5A
R7
100m
LED2-CURR-NEG/4.??
LED2-CURR-POS
F4
5A
R8
100m
LED3-CURR-NEG/4.??
LED3-CURR-POS
F5
5A
R9
100m
LED4-CURR-NEG/4.??
LED4-CURR-POS
F6
5A
R10
100m
LED5-CURR-NEG/4.??
LED5-CURR-POS
F7
5A
R11
100m
LED6-CURR-NEG/4.??
LED6-CURR-POS
F8
5A
R12
100m
LED7-CURR-NEG/4.??
LED7-CURR-POS
F9
5A
R13
100m
LED8-CURR-NEG/4.??
LED8-CURR-POS
VCC
C19
0.1uF
C20
1uF
GND
VCC
C21
0.1uF
C22
1uF
GND
INA4180A4IPWRHS-TSSOP-14
U4
VCC
LED1-CURR-OUT/1.??
LED1-CURR-NEG/4.??
LED1-CURR-POS
LED5-CURR-POS
LED5-CURR-NEG/4.??
LED5-CURR-OUT/1.??
1
2
3
4
5
6
7
OUT1
IN1-
IN1+
VCC
IN2+
IN2-
OUT2
OUT4
IN4-
IN4+
GND
IN3+
IN3-
OUT3
14
13
12
11
10
9
8
LED6-CURR-OUT/1.??
LED6-CURR-NEG/4.??
LED6-CURR-POS
LED2-CURR-POS
LED2-CURR-NEG/4.??
LED2-CURR-OUT/1.??
GND
INA4180A4IPWRHS-TSSOP-14
U5
VCC
LED3-CURR-OUT/1.??
LED3-CURR-NEG/4.??
LED3-CURR-POS
LED7-CURR-POS
LED7-CURR-NEG/4.??
LED7-CURR-OUT/1.??
1
2
3
4
5
6
7
OUT1
IN1-
IN1+
VCC
IN2+
IN2-
OUT2
OUT4
IN4-
IN4+
GND
IN3+
IN3-
OUT3
14
13
12
11
10
9
8
LED8-CURR-OUT/1.??
LED8-CURR-NEG/4.??
LED8-CURR-POS
LED4-CURR-POS
LED4-CURR-NEG/4.??
LED4-CURR-OUT/1.??
GND

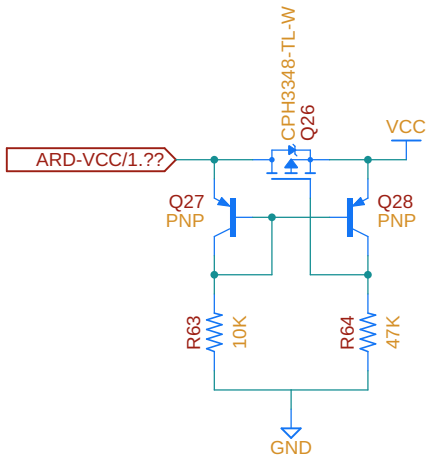

J4
P1
P4
P3
P6
P2
R20
240
R21
240
R22
240
R23
10K
RAW-R/7.??
RAW-L/7.??
HP-SW/1.??
GND
K1
P$1
P$2
P$3
P$4
P$5
GND
G1*2
R18
240
D3
1N4448WS
OP1
PC817
A C
K E
VCC
R19
10K
MIDI/1.??
K2
R17
10K
R15
10K
R14
10K
R16
10K
U7
VCC
GND
VOUT
XLR-IN
TLV9351-OPAMP
NEED TO FIX OPAMP FOOTPRINT


Raw Filter
RAW-L/6.??
RAW-R/6.??
P$1
P$2
P$3
PAN-POT
R24
240
C17
1uF
C16
200uF
R25
1K
RAW-FILTER
GND


Raw Amp
VCC
RAW-FILTER
P1
GND
P2
P3
M1*2
P1
PTV09A-2020F-A103
U8
LM386SOIC
-IN
+IN
OUT
BYP
G+
G-
GND
C27
10uF
R33
10K
C26
33nF
C24
5nF
C25
220uF
R34
200
R32
10
RAW-OUT/1.??
GND
GND


VCC
C23
10uF
GND
VCC
U6
24
STP16CP05
VDD
SDI
SDO
CLK
LE
OE
R-EXT
GND
1
GND
LED-SDI/1.??
LED-CLK/1.??
LED-LE/1.??
LED-OE/1.??
2
23
3
4
21
22
R26
2K
R27
2K
5 K20
6 K19
7 K18
8 K17
9 K16
10 K15
11 K14
12 K13
13 K12
14 K11
15
16
17
18
19
20
LTA-1000HR
DN1
K20 A1
K19 A2
K18 A3
K17 A4
K16 A5
K15 A6
K14 A7
K13 A8
K12 A9
K11 A10
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
VCC
C18
10uF
GND
D4
D5
D6
D7
D8
D9
A
K
C


DS1
VCC
D2
D1
GND
D3
D15
D16
VCC
GND
CONT
BK-A
BK-K
RS
RW
EN
D0
D1
D2
D3
D4
D5
D6
D7
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
LCD-RS/1.??
LCD-RW/1.??
LCD-EN/1.??
LCD-D0/1.??
LCD-D1/1.??
LCD-D2/1.??
LCD-D3/1.??
LCD-D4/1.??
LCD-D5/1.??
LCD-D6/1.??
LCD-D7/1.??
1602A-LCD
P1
1K
P2
P3
CONT-POT
P1
1K
P2
P3
BRIGHT-POT
R30
200
GND


CPH3348-TL-W
Q26
VCC
ARD-VCC/1.??
Q27
PNP
Q28
PNP
R63
10K
R64
47K
GND