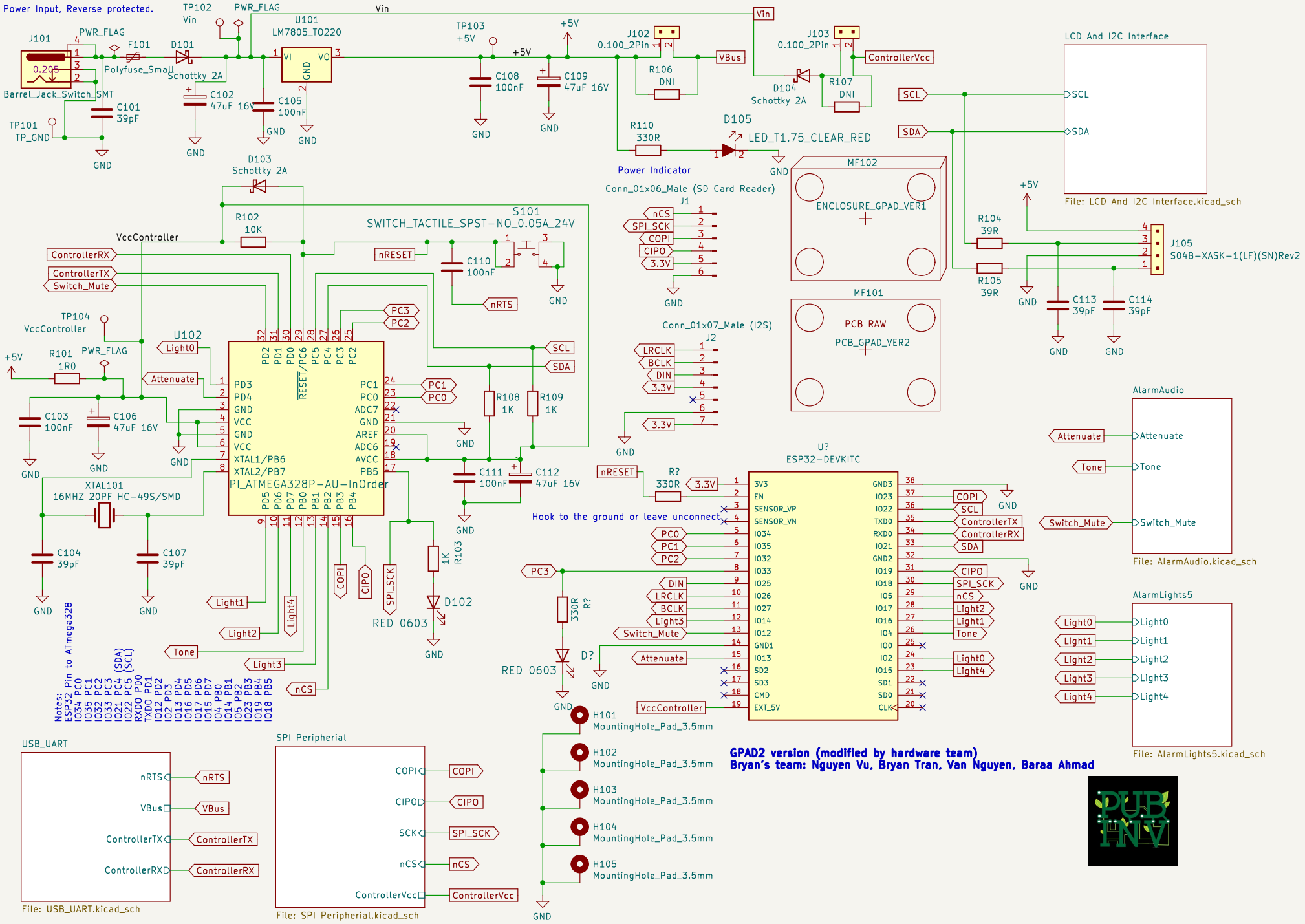
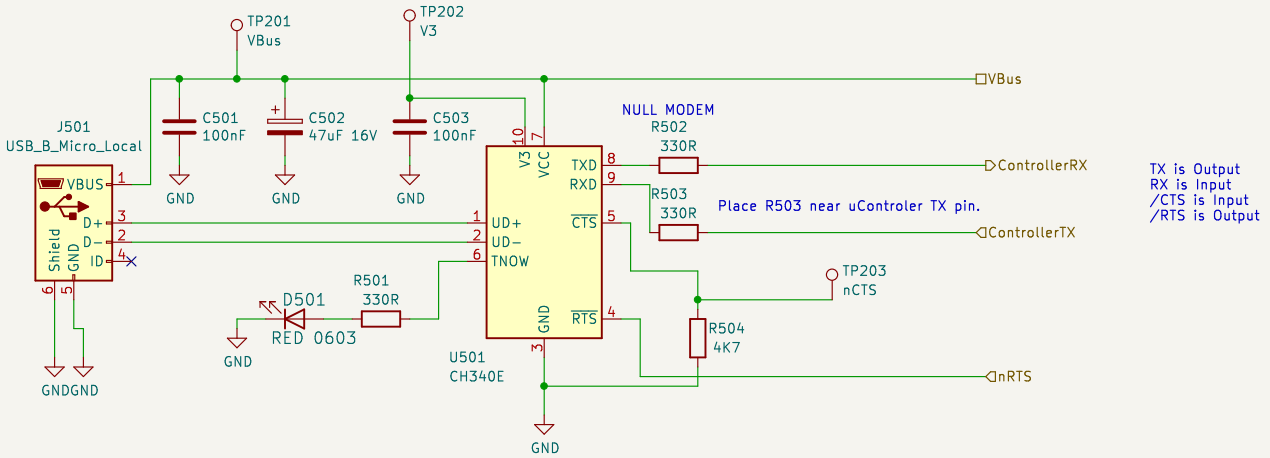
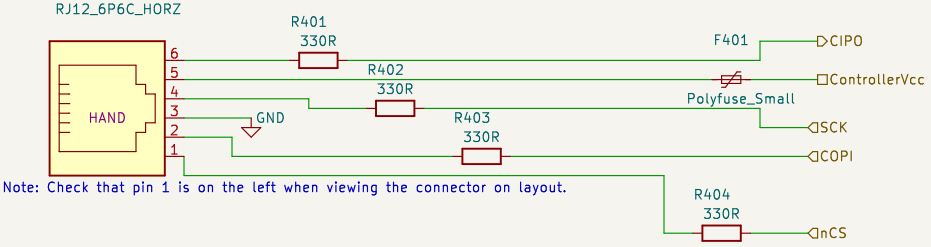

Power Input, Reverse protected.
Barrel_Jack_Switch_SMT
Polyfuse_Small
Schottky 2A
LM7805_TO220
Vin
+5V
0.100_2Pin
VBus
ControllerVcc
LCD And I2C Interface
File: LCD And I2C Interface.kicad_sch
LED_T1.75_CLEAR_RED
Power Indicator
Conn_01x06_Male (SD Card Reader)
ENCLOSURE_GPAD_VER1
PCB RAW
PCB_GPAD_VER2
Conn_01x07_Male (I2S)
S04B-XASK-1(LF)(SN)Rev2
SWITCH_TACTILE_SPST-NO_0.05A_24V
VccController
ControllerRX
ControllerTX
Switch_Mute
nRESET
nRTS
PI_ATMEGA328P-AU-InOrder
XTAL101
16MHZ 20PF HC-49S/SMD
Hook to the ground or leave unconnect
ESP32-DEVKITC
AlarmAudio
File: AlarmAudio.kicad_sch
AlarmLights5
File: AlarmLights5.kicad_sch
RED 0603
MountingHole_Pad_3.5mm
Notes:
ESP32 Pin to ATmega328
USB_UART
File: USB_UART.kicad_sch
SPI Peripherial
File: SPI Peripherial.kicad_sch
GPAD2 version (modified by hardware team)
Bryan's team: Nguyen Vu, Bryan Tran, Van Nguyen, Baraa Ahmad

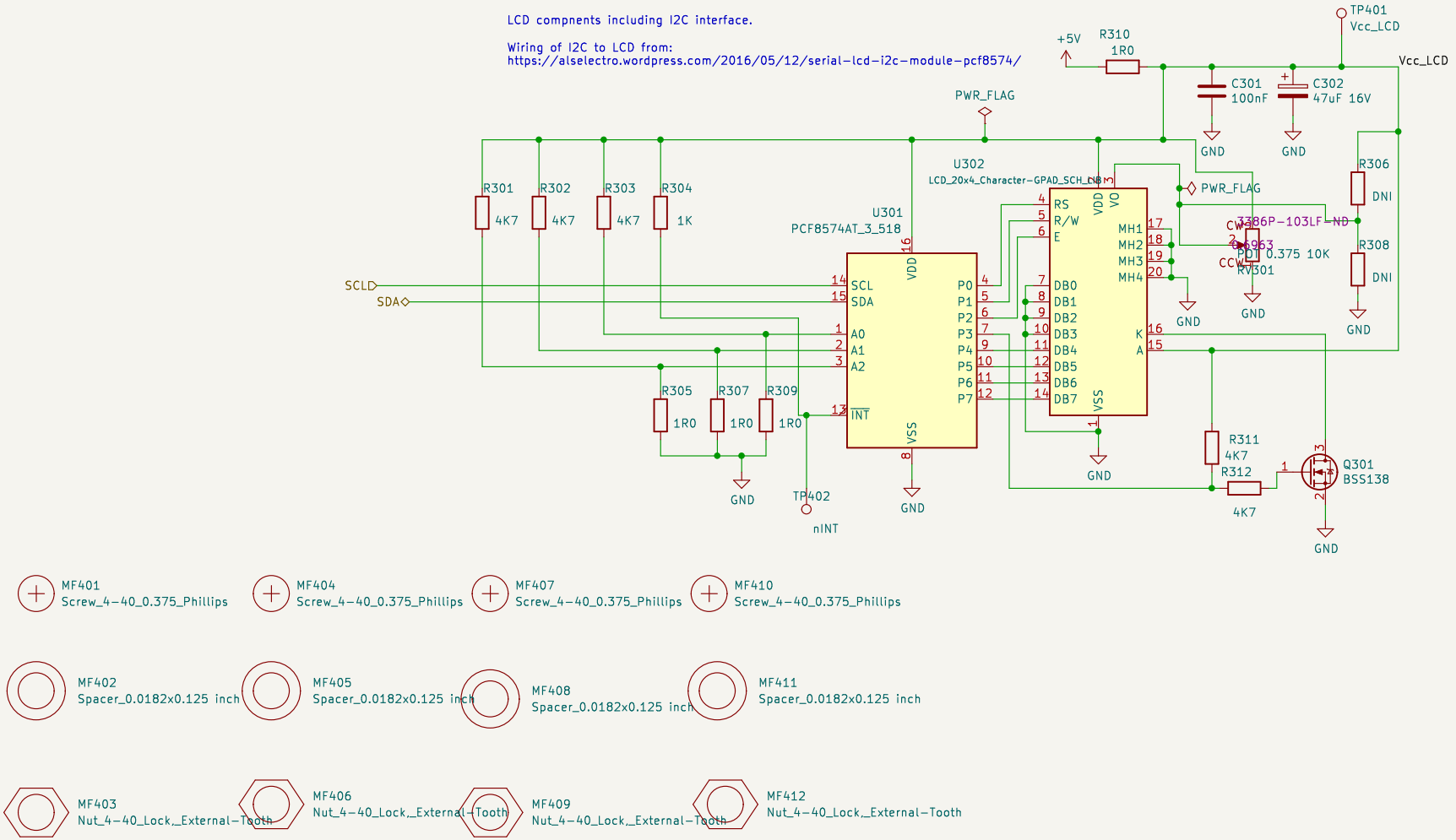

TP201
VBus
TP202
V3
VBus
J501
USB_B_Micro_Local
VBUS
D+
D-
ID
Shield
GND
C501
100nF
C502
47uF 16V
C503
100nF
GND
GNDGND
NULL MODEM
R502
330R
ControllerRX
R503
330R
Place R503 near uControler TX pin.
ControllerTX
TX is Output
RX is Input
/CTS is Input
/RTS is Output
TP203
nCTS
R504
4K7
nRTS
D501
RED 0603
R501
330R
U501
CH340E
V3
VCC
UD+
UD-
TNOW
TXD
RXD
CTS
RTS
GND

SPI Peripherial Interface

```
/* Hardware Notes Peripheral
   SPI Line Pin in Arduino, IO setup
  MOSI 11 or ICSP-4  Input,  ATmegaPin BP3, 17
  MISO 12 or ICSP-1 Output, ATmegaPin BP4, 18
  SCK 13 or ICSP-3  Input, ATmegaPin BP5, 19
  SS 10 Input, ATmegaPin BP2, 16
*/     J401
 RJ12_6P6C_HORZ
```



Note: Check that pin 1 is on the left when viewing the connector on layout.



MF401 Screw_4-40_0.375_Phillips

MF404 Screw_4-40_0.375_Phillips

MF407 Screw_4-40_0.375_Phillips

MF410 Screw_4-40_0.375_Phillips

MF402 Spacer_0.0182x0.125 inch

MF405 Spacer_0.0182x0.125 inch

MF408 Spacer_0.0182x0.125 inch

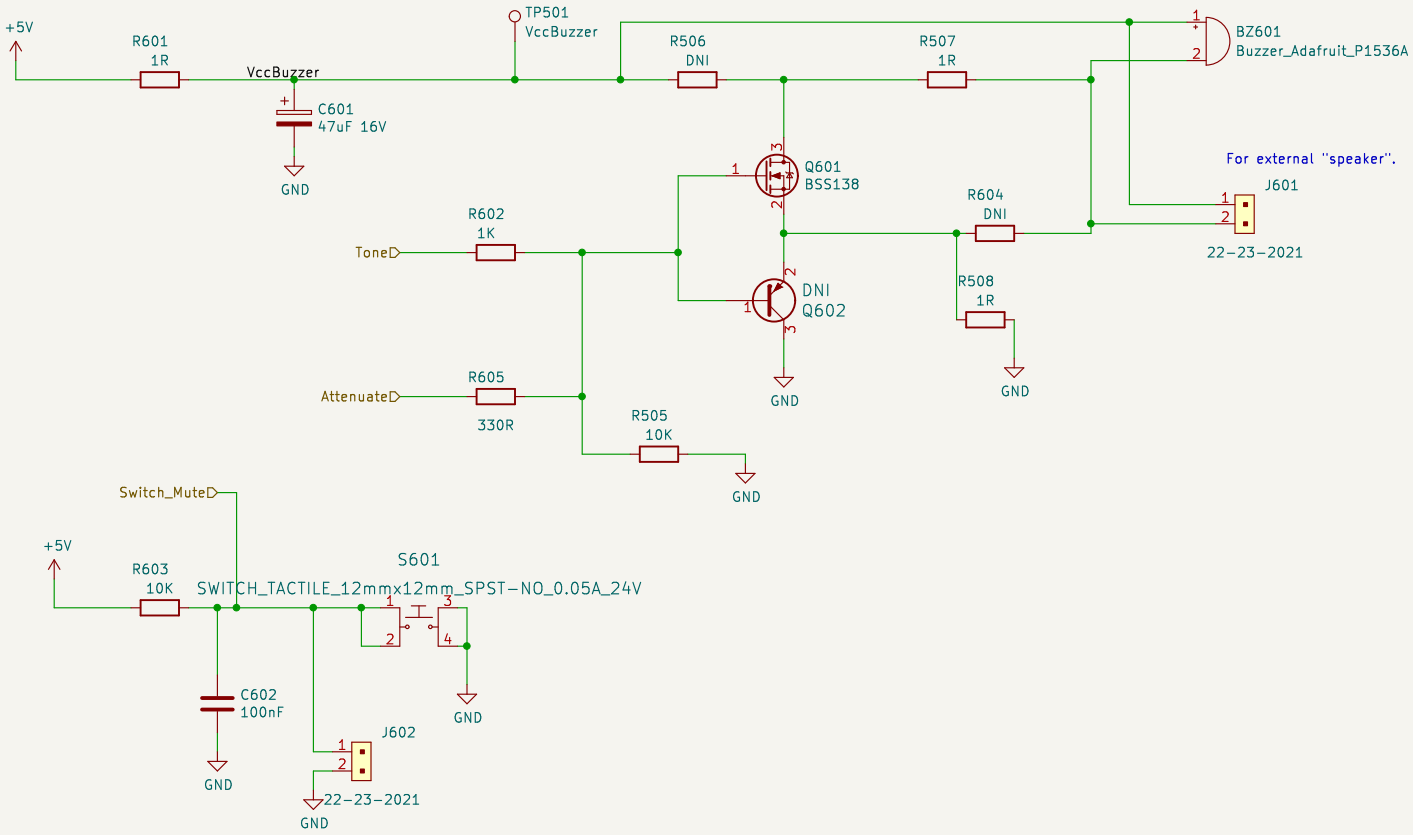
MF411 Spacer_0.0182x0.125 inch

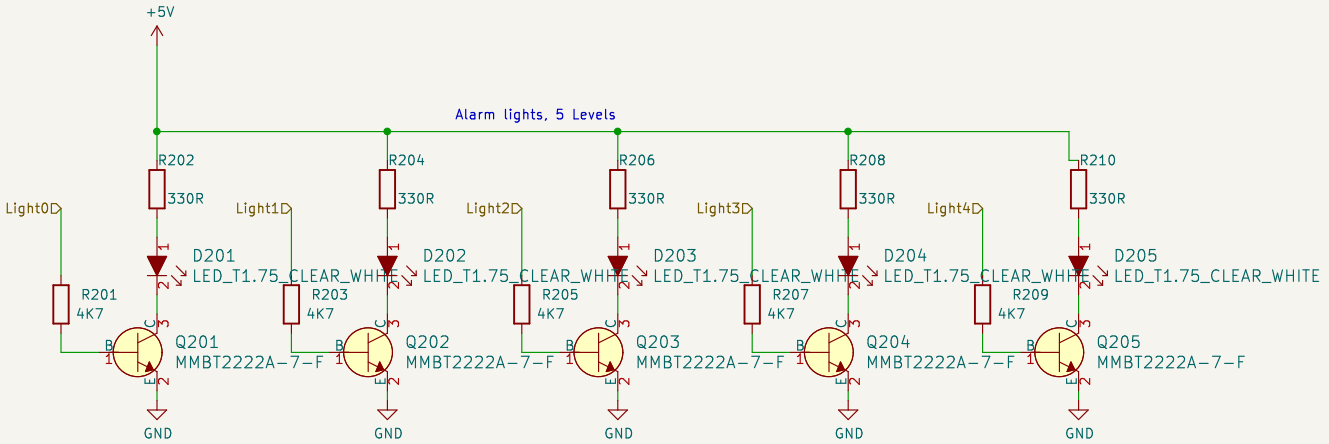
MF403 Nut_4-40_Lock,_External-Tooth

MF406 Nut_4-40_Lock,_External-Tooth

MF409 Nut_4-40_Lock,_External-Tooth

MF412 Nut_4-40_Lock,_External-Tooth


+5V
R601
1R
VccBuzzer
C601
47uF 16V
GND
TP501
VccBuzzer
R506
DNI
R507
1R
BZ601
Buzzer_Adafruit_P1536A
Q601
BSS138
For external "speaker".
J601
22-23-2021
R604
DNI
R602
1K
Tone
DNI
Q602
R508
1R
GND
GND
R605
330R
Attenuate
R505
10K
GND
Switch_Mute
+5V
R603
10K
S601
SWITCH_TACTILE_12mmx12mm_SPST-NO_0.05A_24V
C602
100nF
GND
J602
22-23-2021
GND
GND


+5V
Alarm lights, 5 Levels
R202
330R
R204
330R
R206
330R
R208
330R
R210
330R
Light0D
Light1D
Light2D
Light3D
Light4D
D201
LED_T1.75_CLEAR_WHITE
D202
LED_T1.75_CLEAR_WHITE
D203
LED_T1.75_CLEAR_WHITE
D204
LED_T1.75_CLEAR_WHITE
D205
LED_T1.75_CLEAR_WHITE
R201
4K7
R203
4K7
R205
4K7
R207
4K7
R209
4K7
Q201
MMBT2222A-7-F
Q202
MMBT2222A-7-F
Q203
MMBT2222A-7-F
Q204
MMBT2222A-7-F
Q205
MMBT2222A-7-F
GND
GND
GND
GND
GND