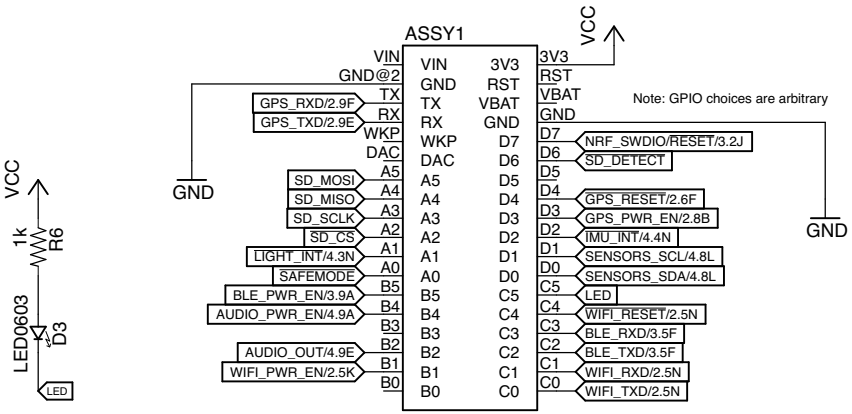
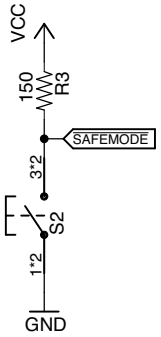
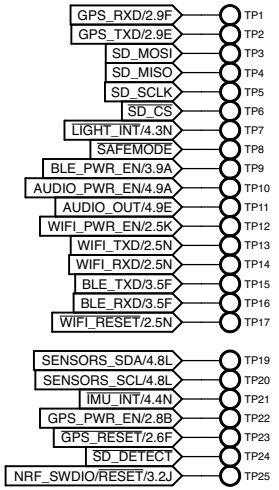
Headers

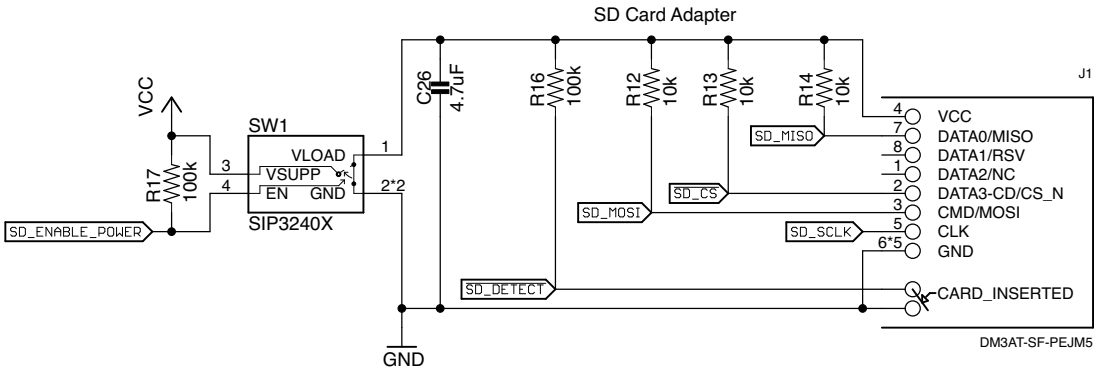
Electron headers







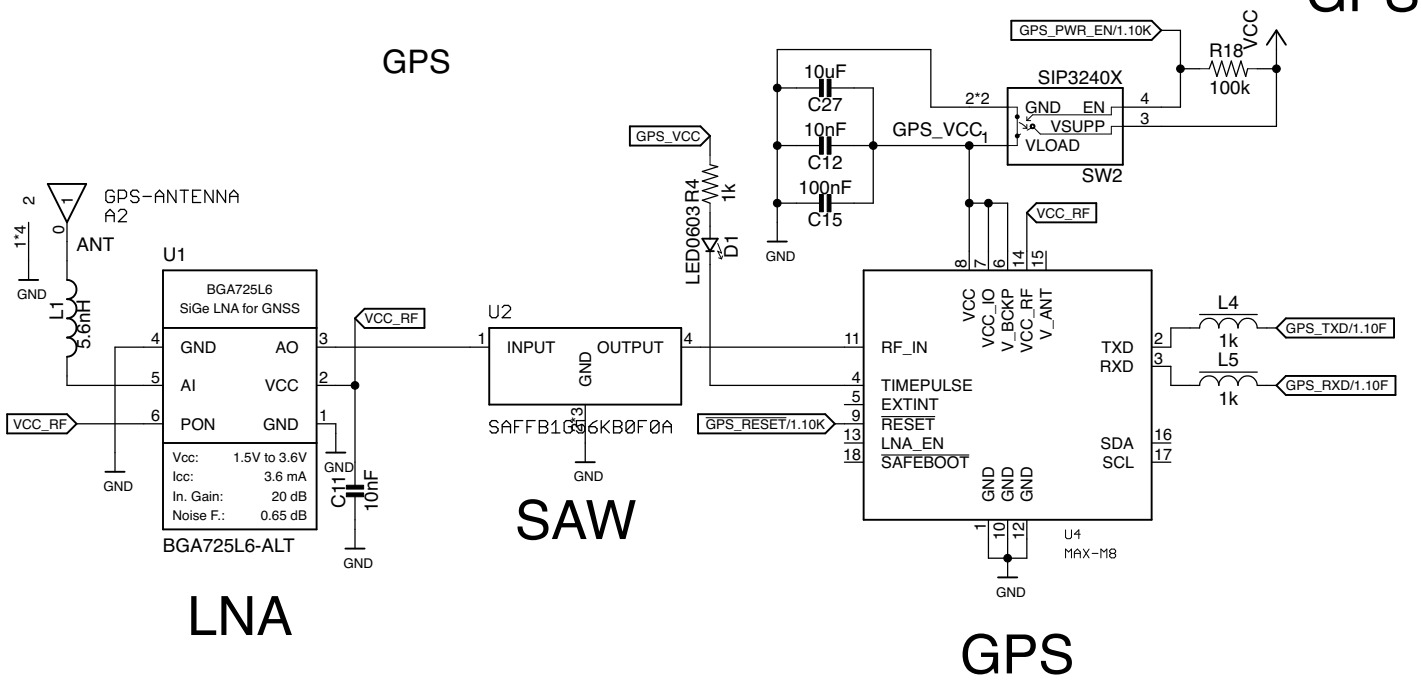
SD Card Adapter



PlugWatch		REV: B
Author: Noah Klugman		
Date: 1/22/18 11:46 PM	Sheet: 1/4	

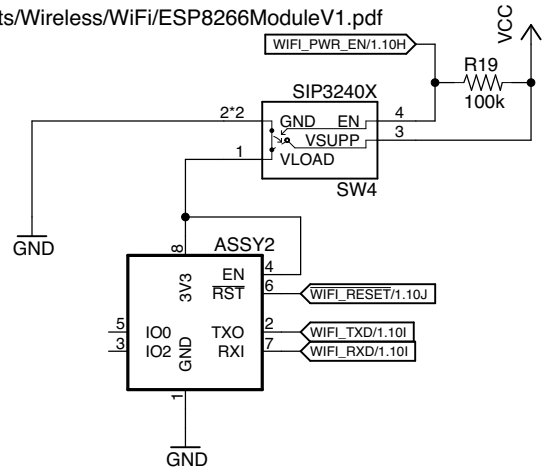
https://www.u-blox.com/sites/default/files/MAX-8-M8-FW3_HardwareIntegrationManual_%28UBX-15030059%29.pdf

GPS and WiFi Radios



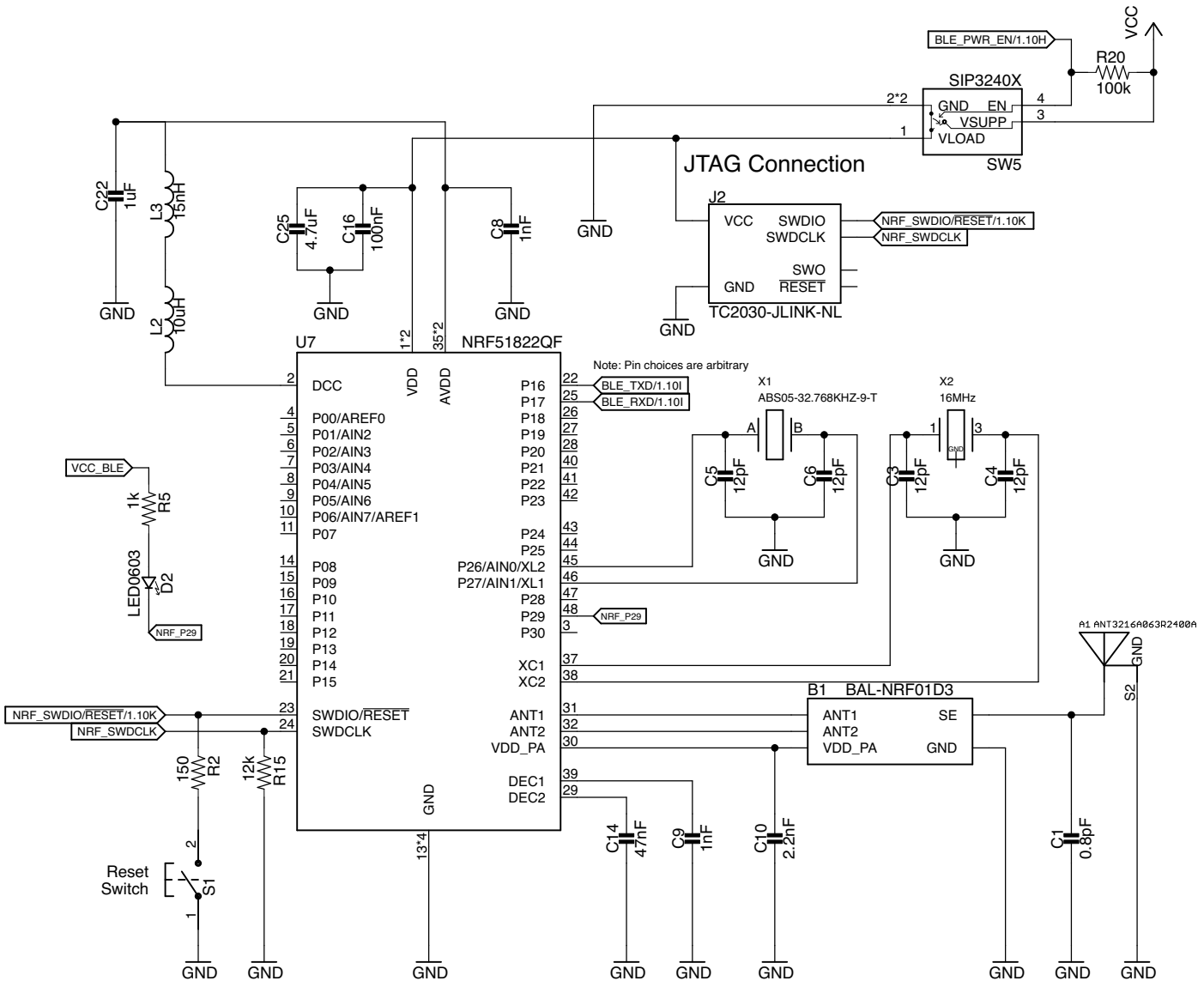
WiFi

https://cdn.sparkfun.com/datasheets/Wireless/WiFi/ESP8266ModuleV1.pdf



PlugWatch	REV: B
Author: Noah Klugman	
Date: 1/22/18 11:46 PM	Sheet: 2/4

BLE Radio



BLE Radio

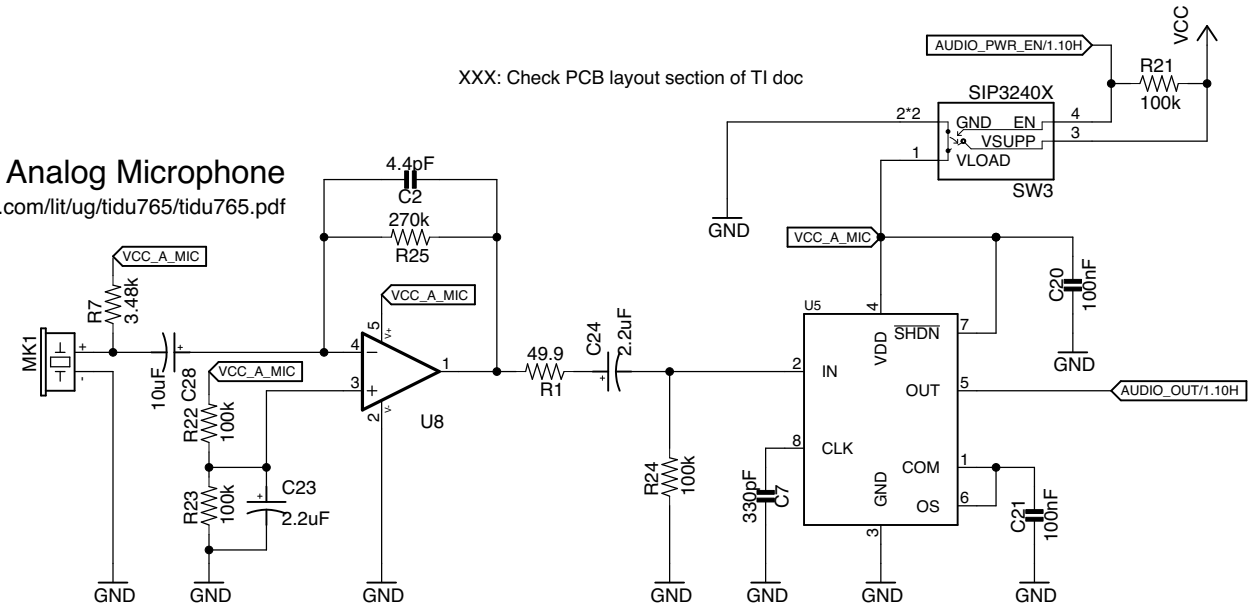
PlugWatch	REV: B
Author: Noah Klugman	
Date: 1/22/18 11:46 PM	Sheet: 3/4

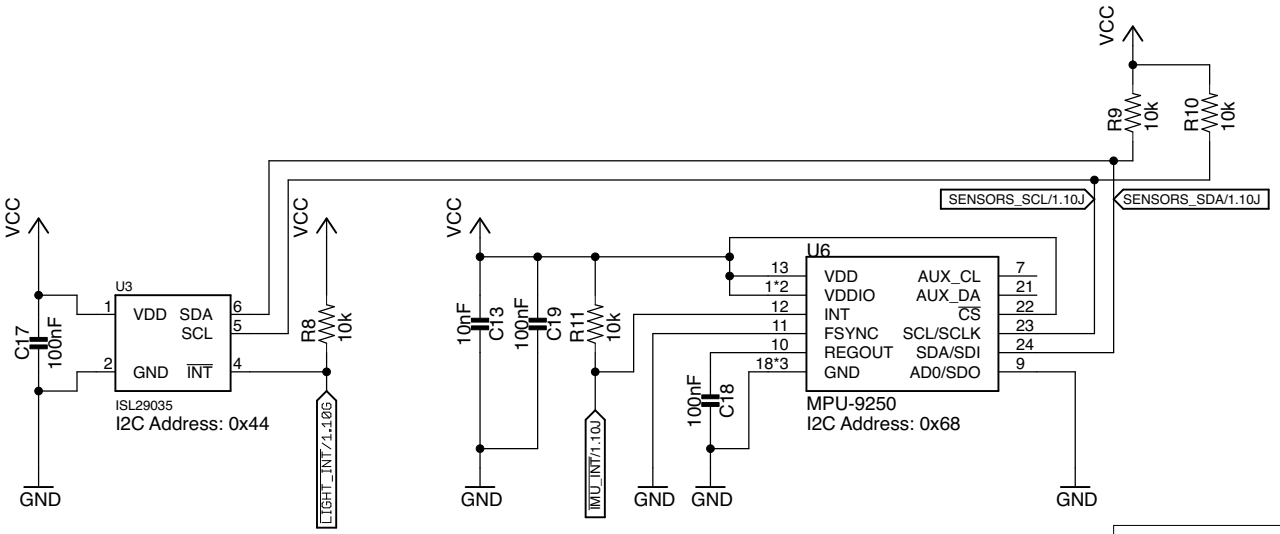
Sensors

Analog Microphone

http://www.ti.com/lit/ug/tidu765/tidu765.pdf

XXX: Check PCB layout section of TI doc



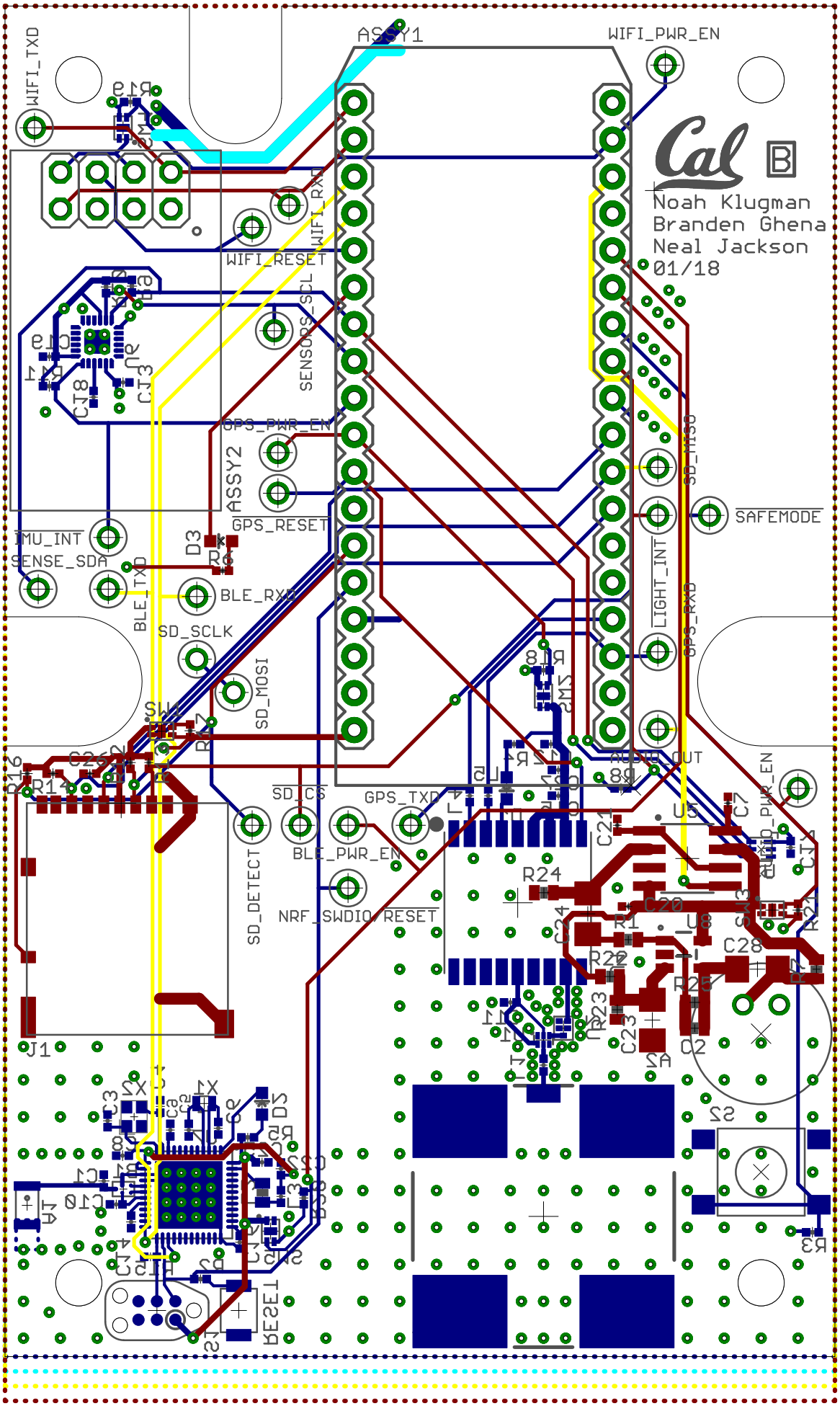


Light Sensor

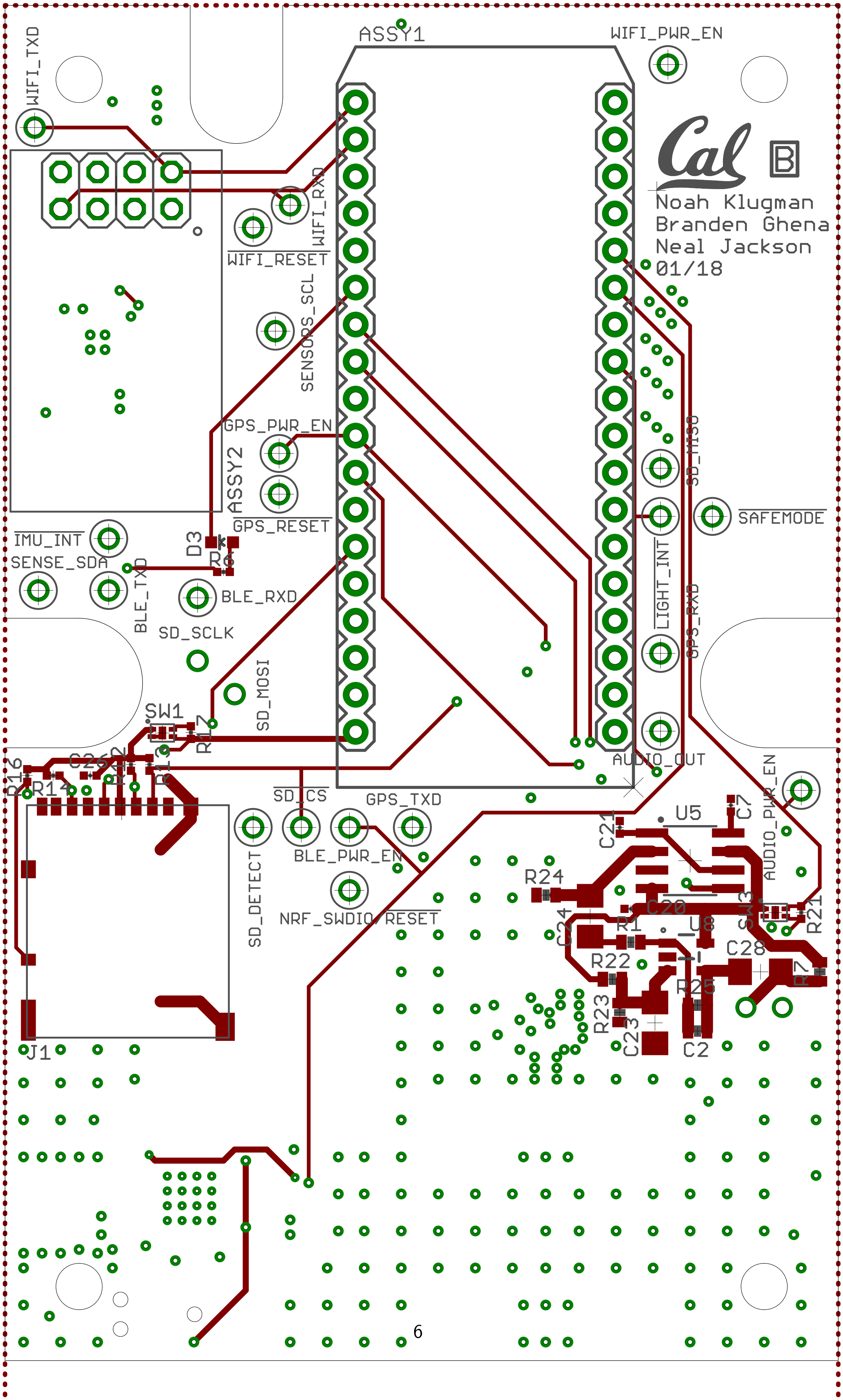
Accelerometer/Magnetometer

PlugWatch	REV: B
Author: Noah Klugman	
Date: 1/22/18 11:46 PM	Sheet: 4/4

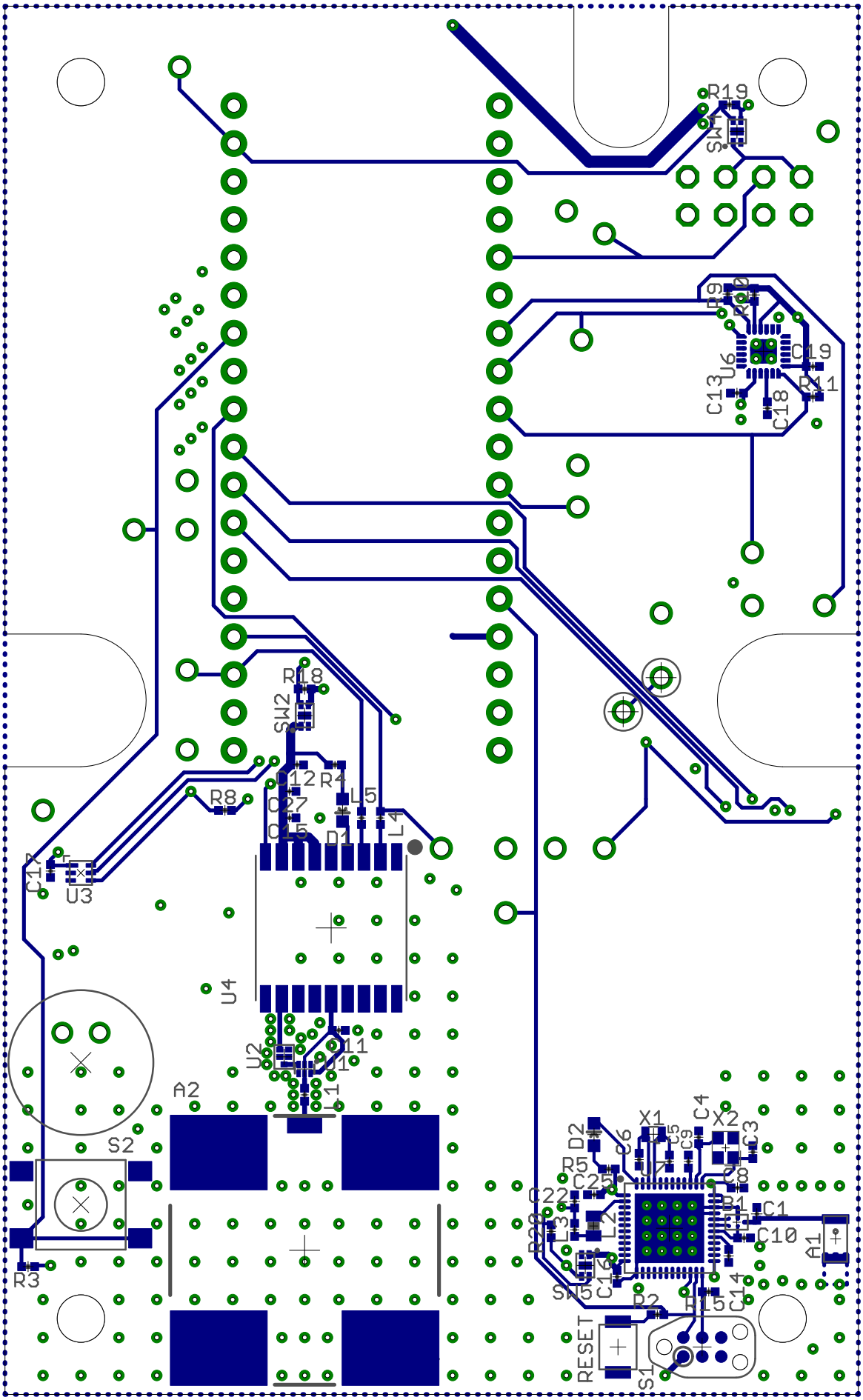
Top and Bottom Layers



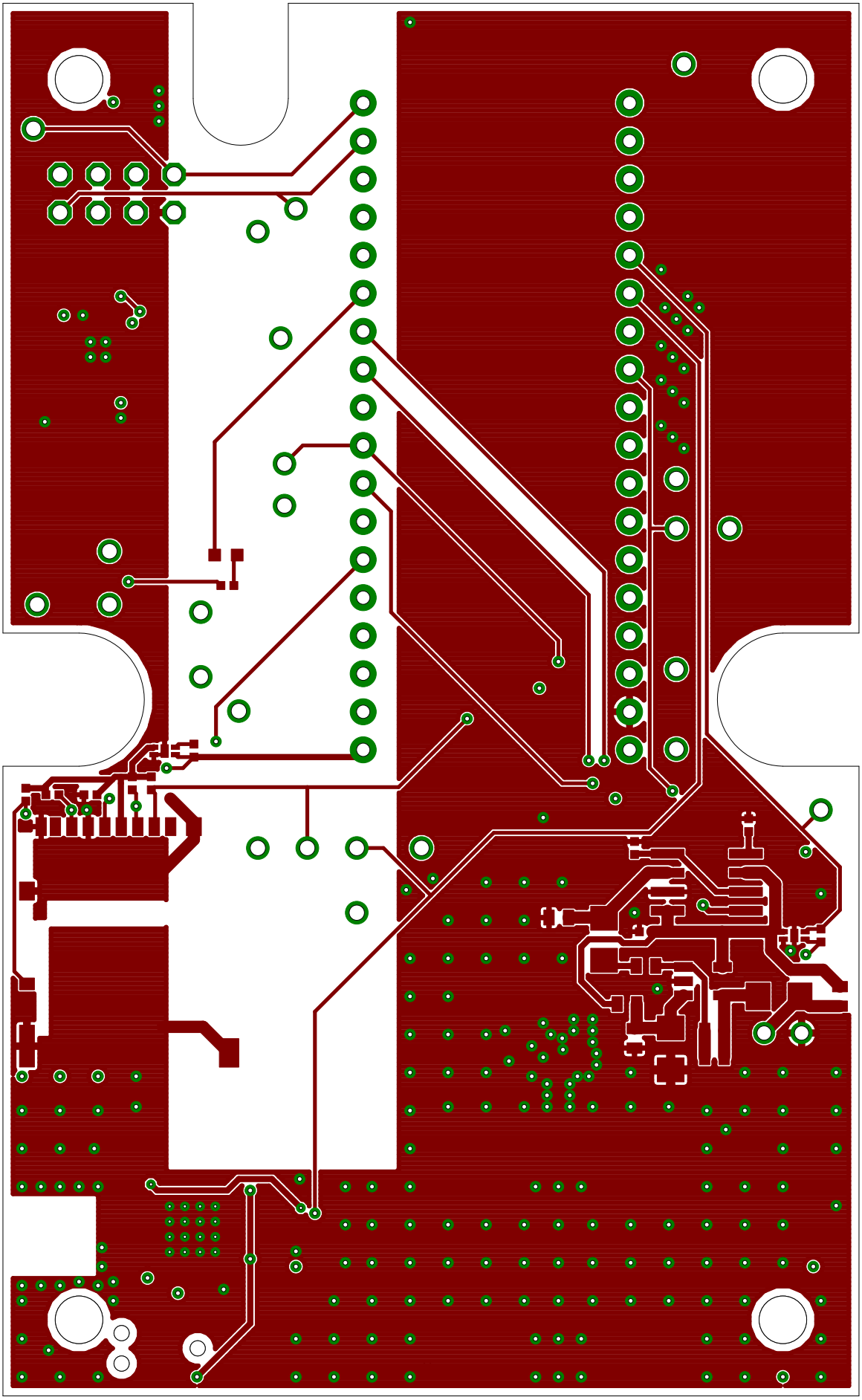
Top Layer


ASSY1
WIFI_PWR_EN
WIFI_TXD
WIFI_RXD
WIFI_RESET
SENSORS_SCL
GPS_PWR_EN
ASSY2
GPS_RESET
Noah Klugman
Branden Ghena
Neal Jackson
01/18
IMU_INT
SENSE_SDA
BLE_TXD
D3
R6
BLE_RXD
SD_SCLK
SD_MOSI
SW1
R17
R13
C26
R12
R16
R14
J1
SD_MISO
SAFEMODE
LIGHT_INT
GPS_RXD
AUDIO_OUT
AUDIO_PWR_EN
SD_CS
GPS_TXD
BLE_PWR_EN
SD_DETECT
NRF_SWDIO/RESET
U5
C7
C21
R24
C20
R1
U8
SW3
R21
C24
C28
R22
R7
R25
R23
C23
C2

Bottom Layer

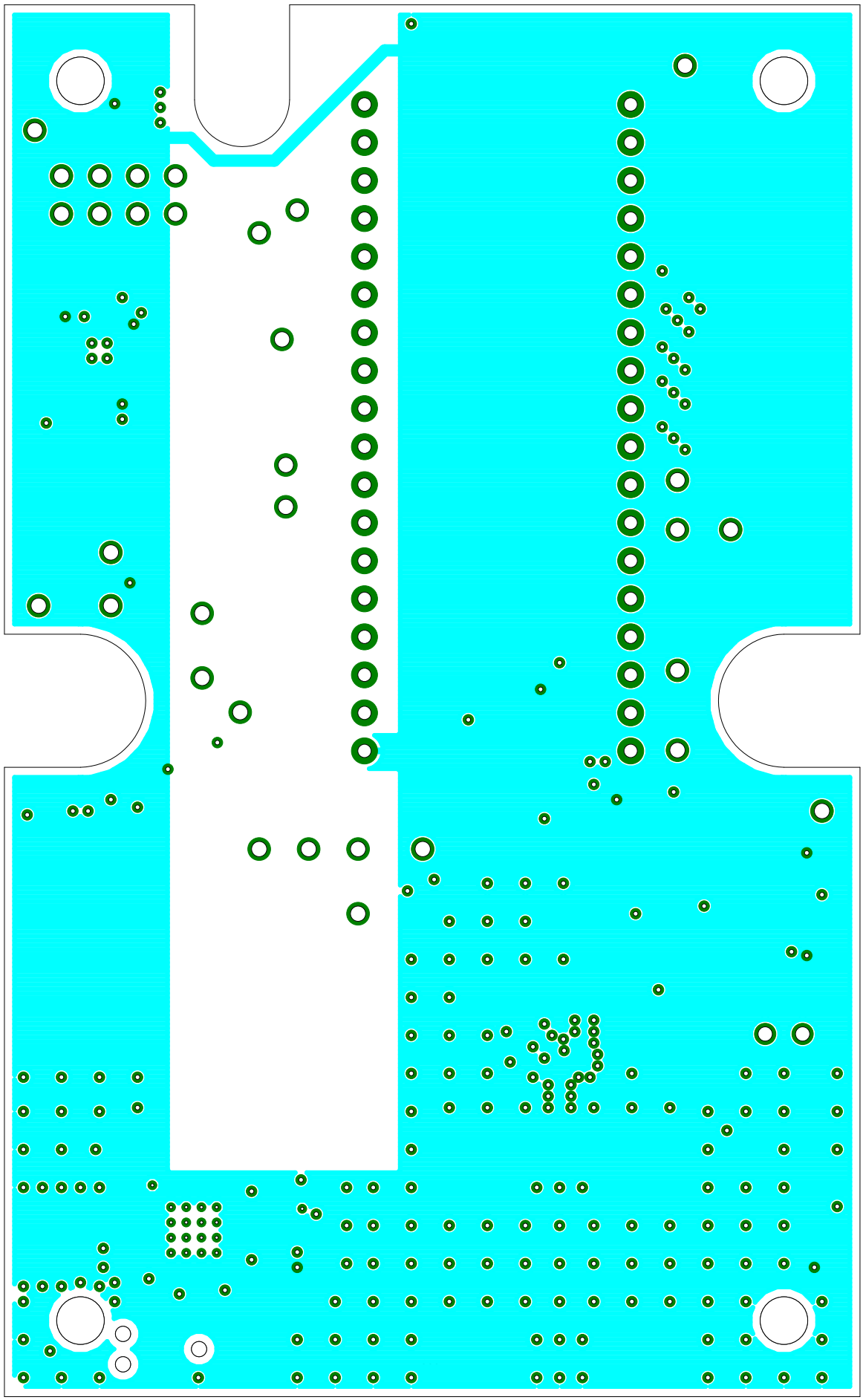


Top Copper Layer

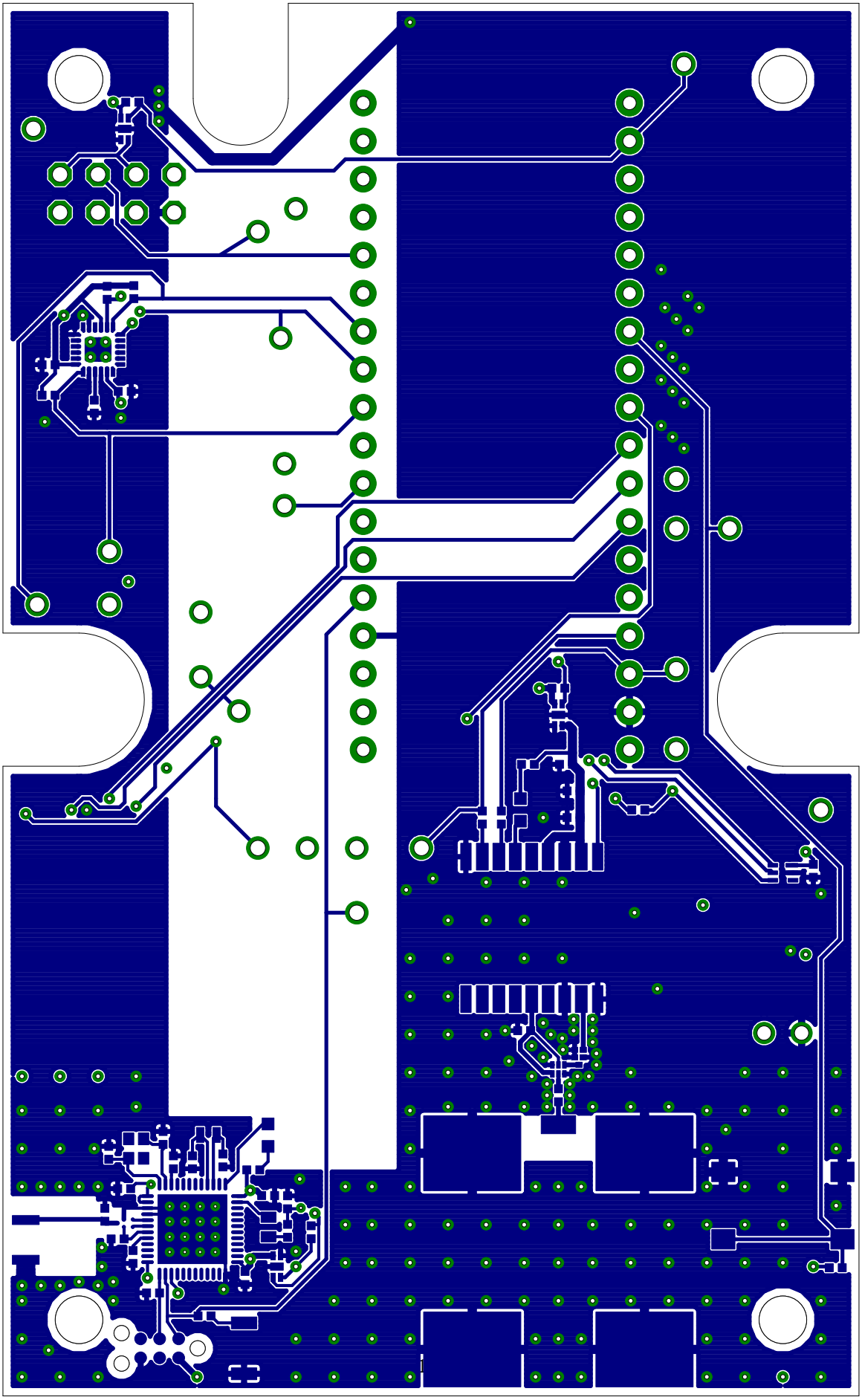


Layer 2 Copper

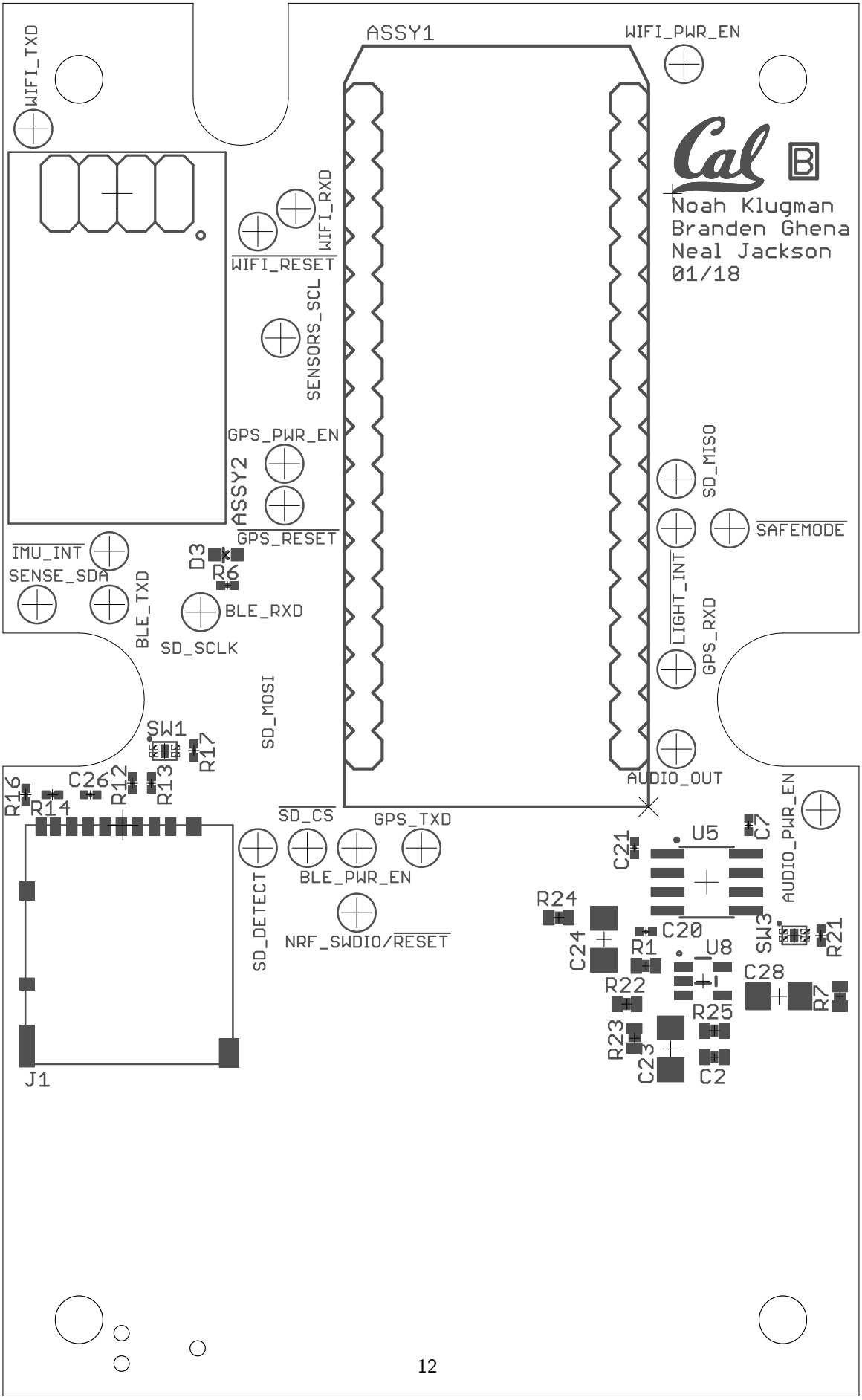
Layer 3 Copper



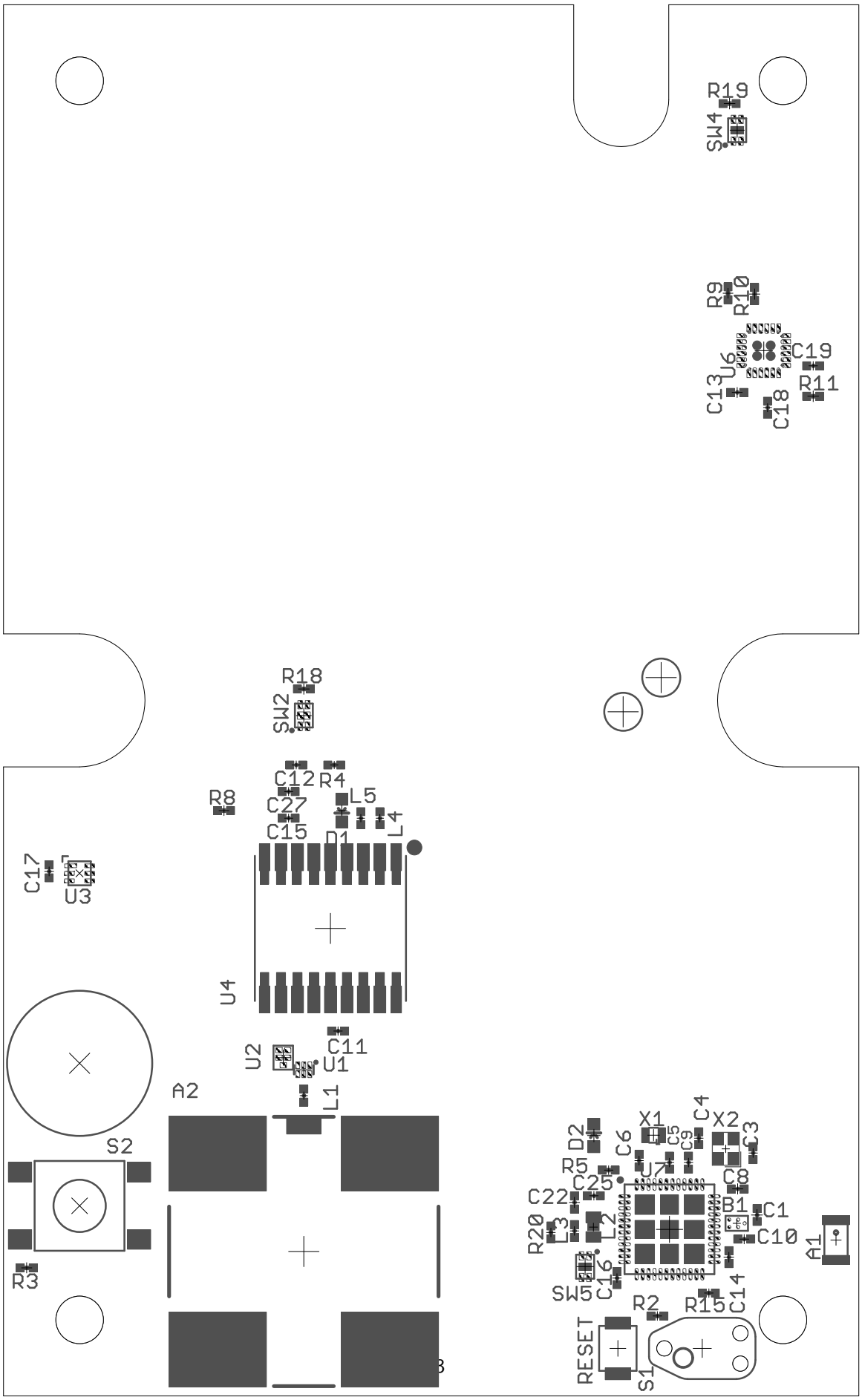
Bottom Copper Layer



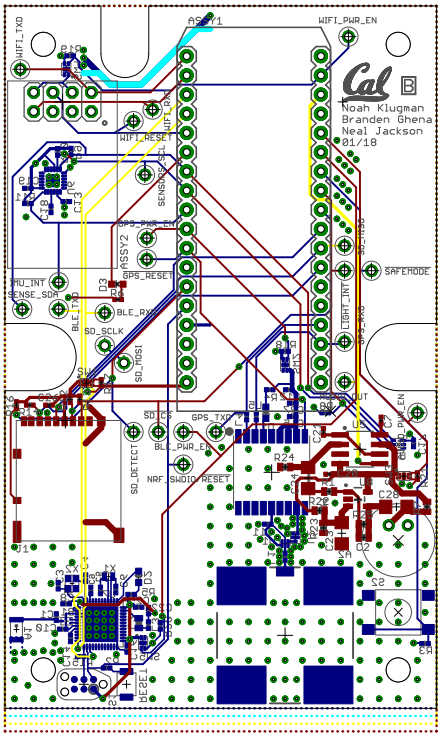
Top Paste Layer with Silkscreen



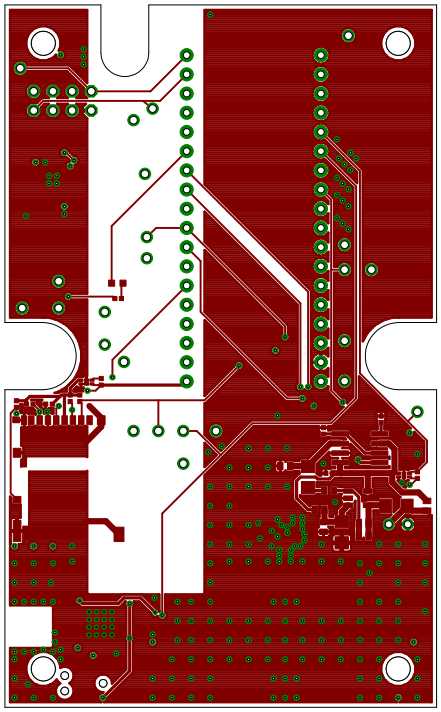
Bottom Paste Layer with Silkscreen



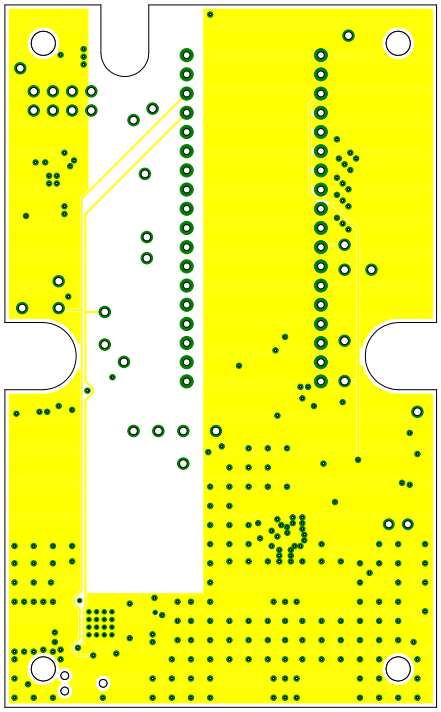
Top and Bottom Layers 1:1 Scale



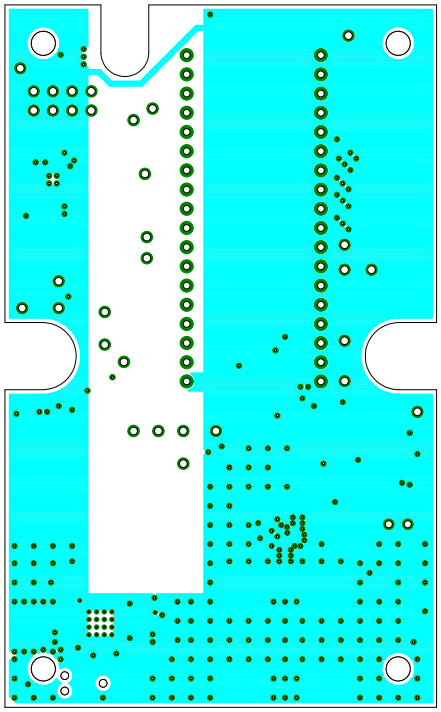
Top Layer 1:1 Scale



Layer 2 Copper 1:1 Scale



Layer 3 Copper 1:1 Scale



Bottom Copper Layer 1:1 Scale