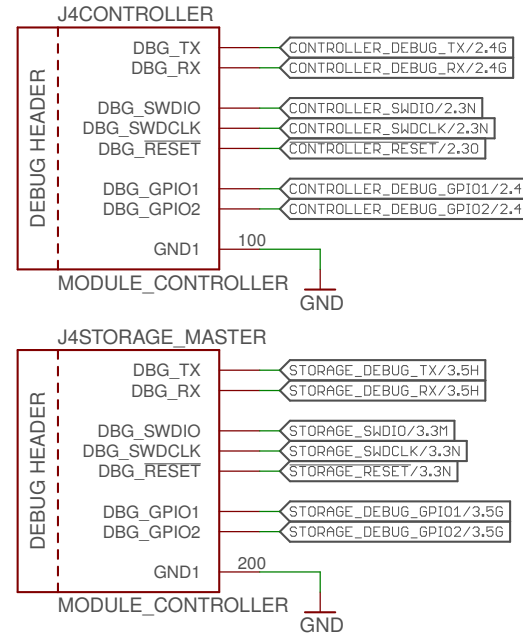
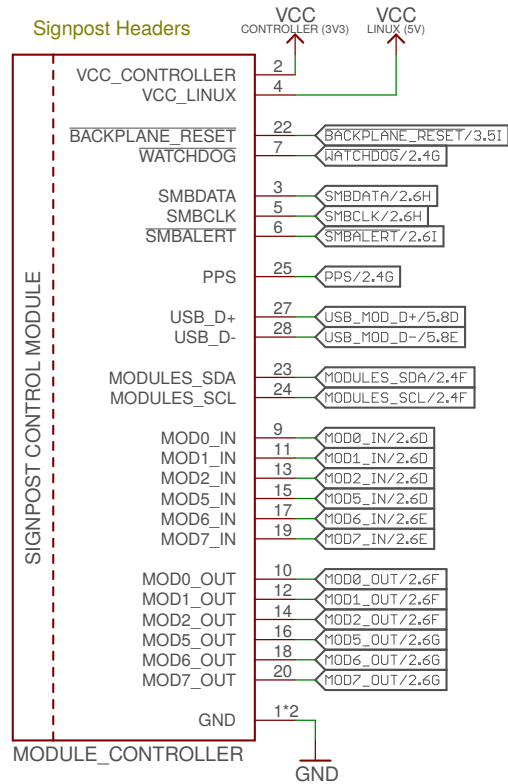
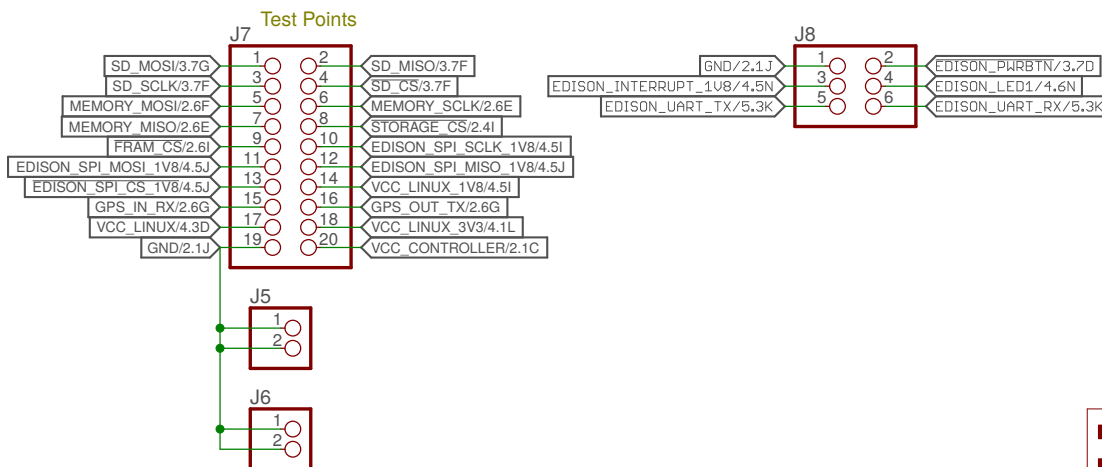
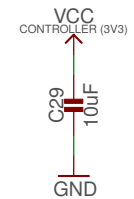


Headers



Main Decoupling Capacitor

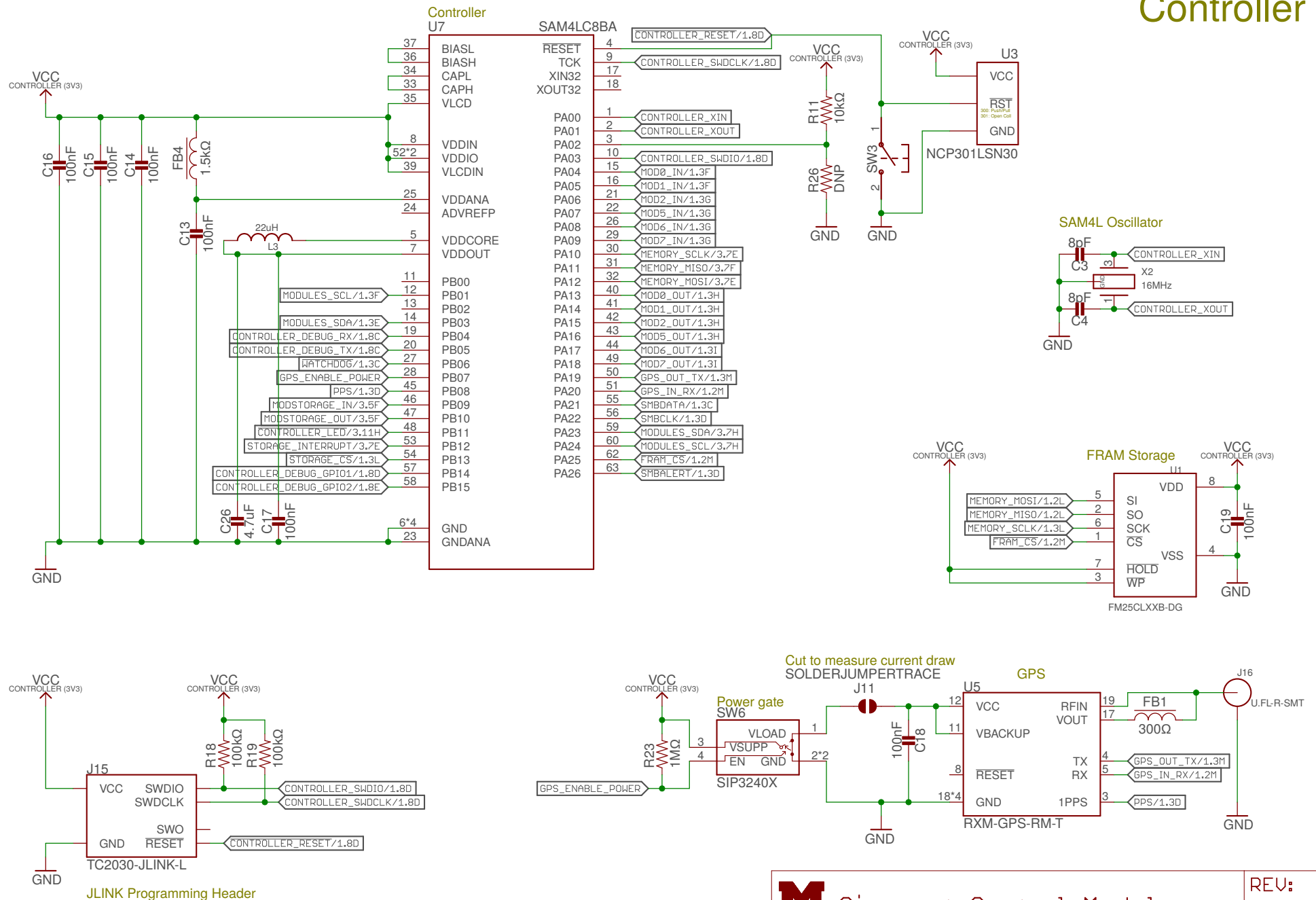


Backplane Reset Button



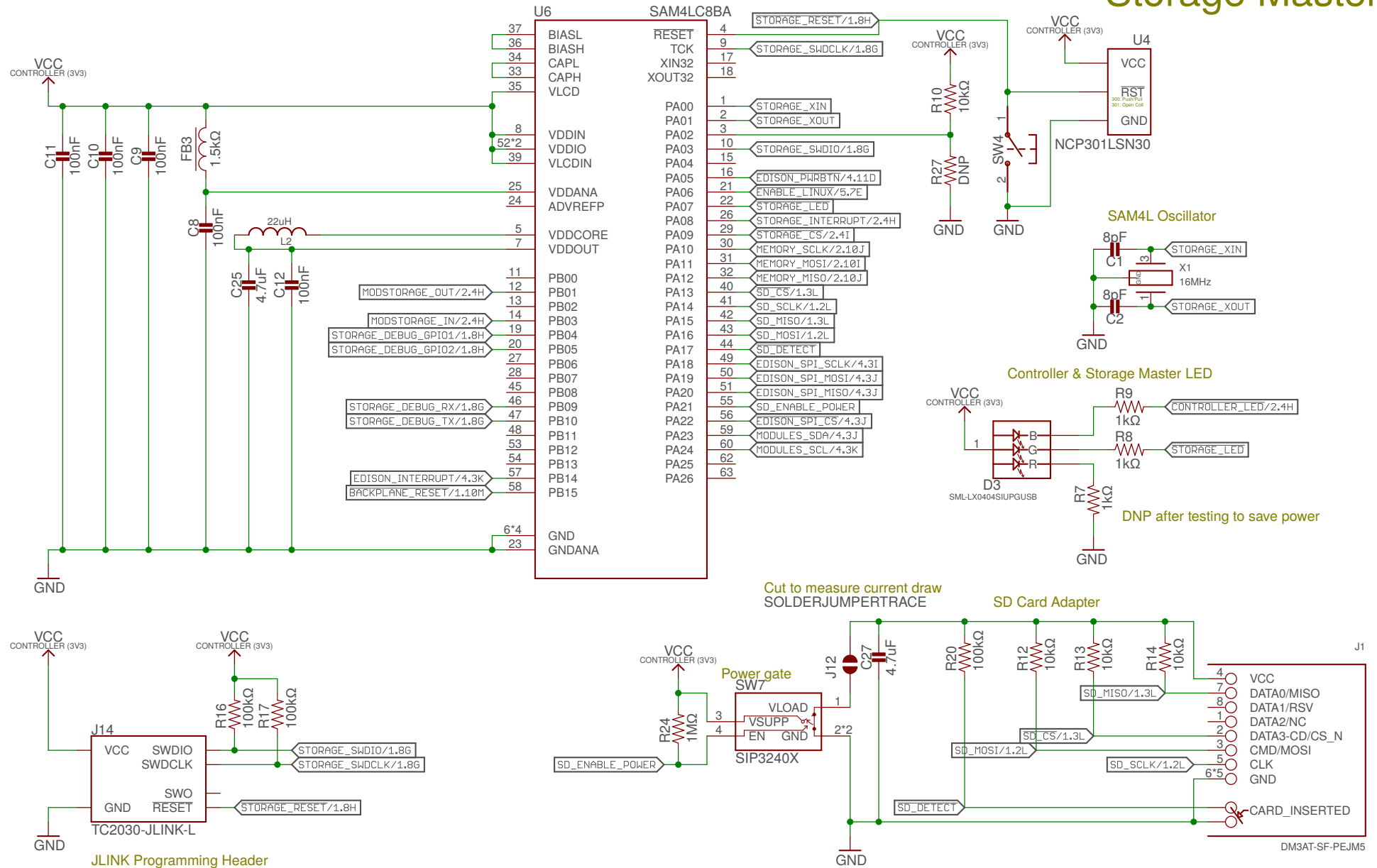
M Signpost Control Module	REV: C
Author: Branden Ghena	
Date: 5/10/17 4:31 PM	Sheet: 1/5

Controller



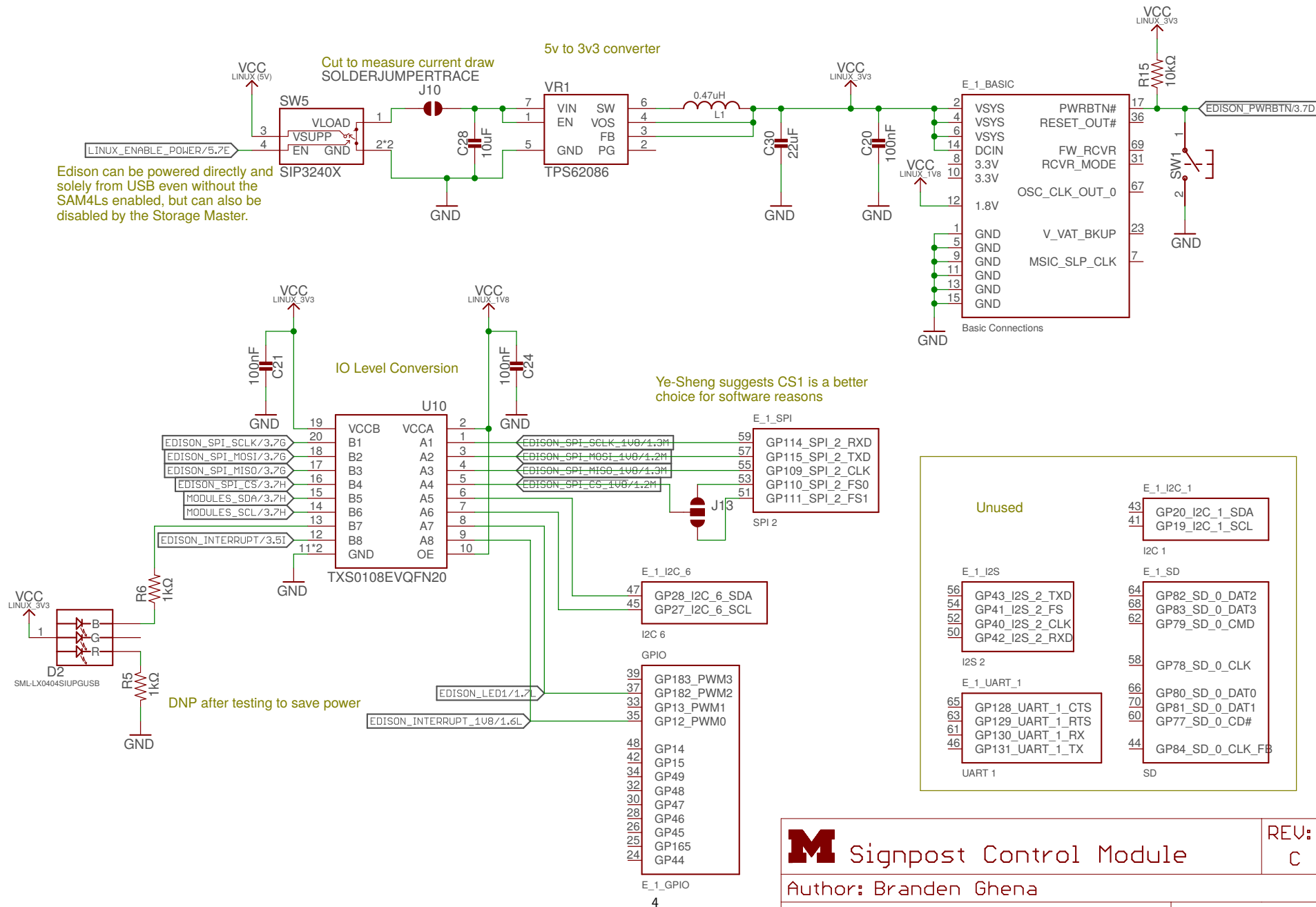
Storage Master

Storage Master

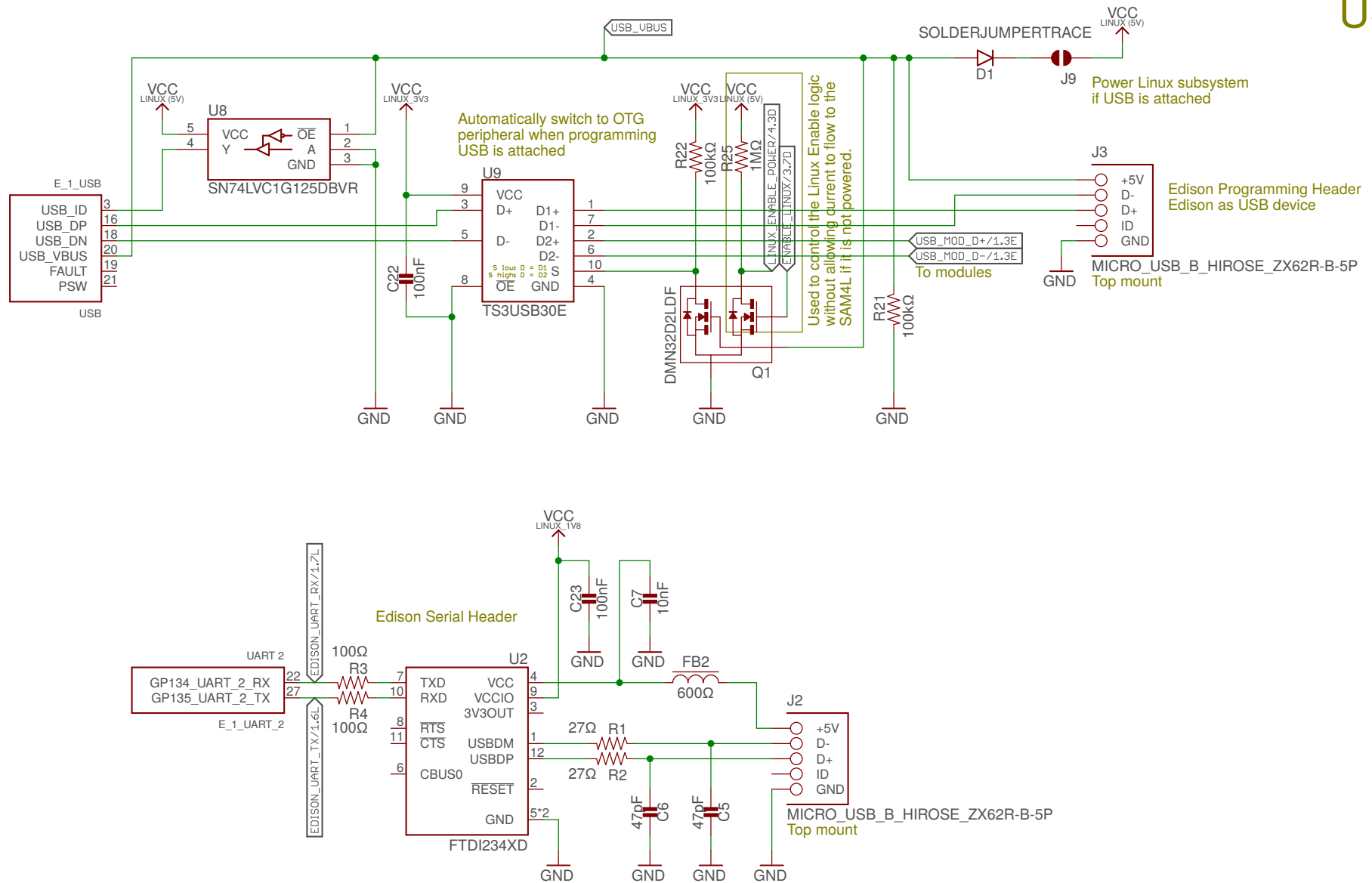


M Signpost Control Module	REV: C
Author: Branden Ghena	
Date: 5/10/17 4:31 PM	Sheet: 3/5

Edison



USB



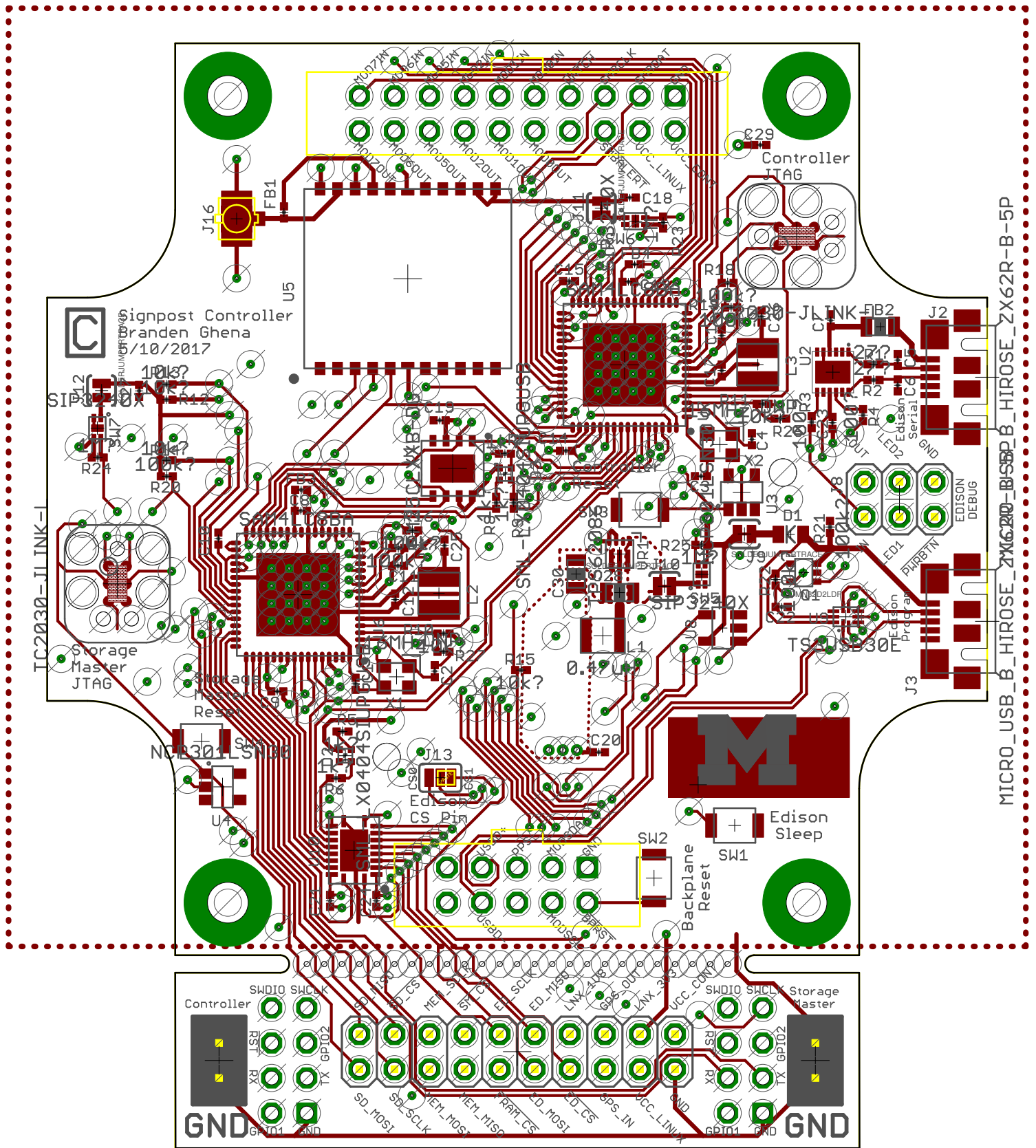
M Signpost Control Module

REV:
C

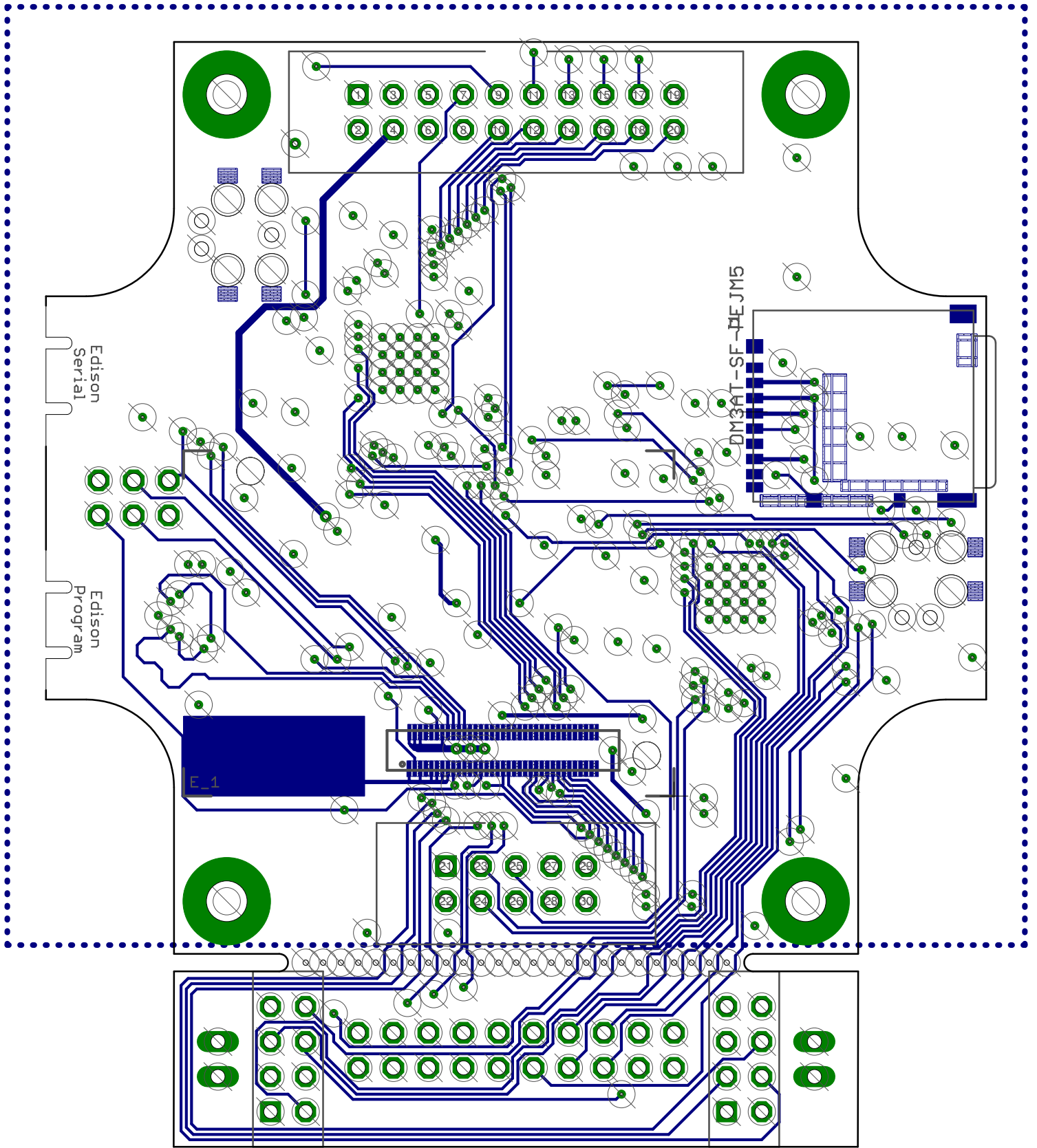
Author: Branden Ghena

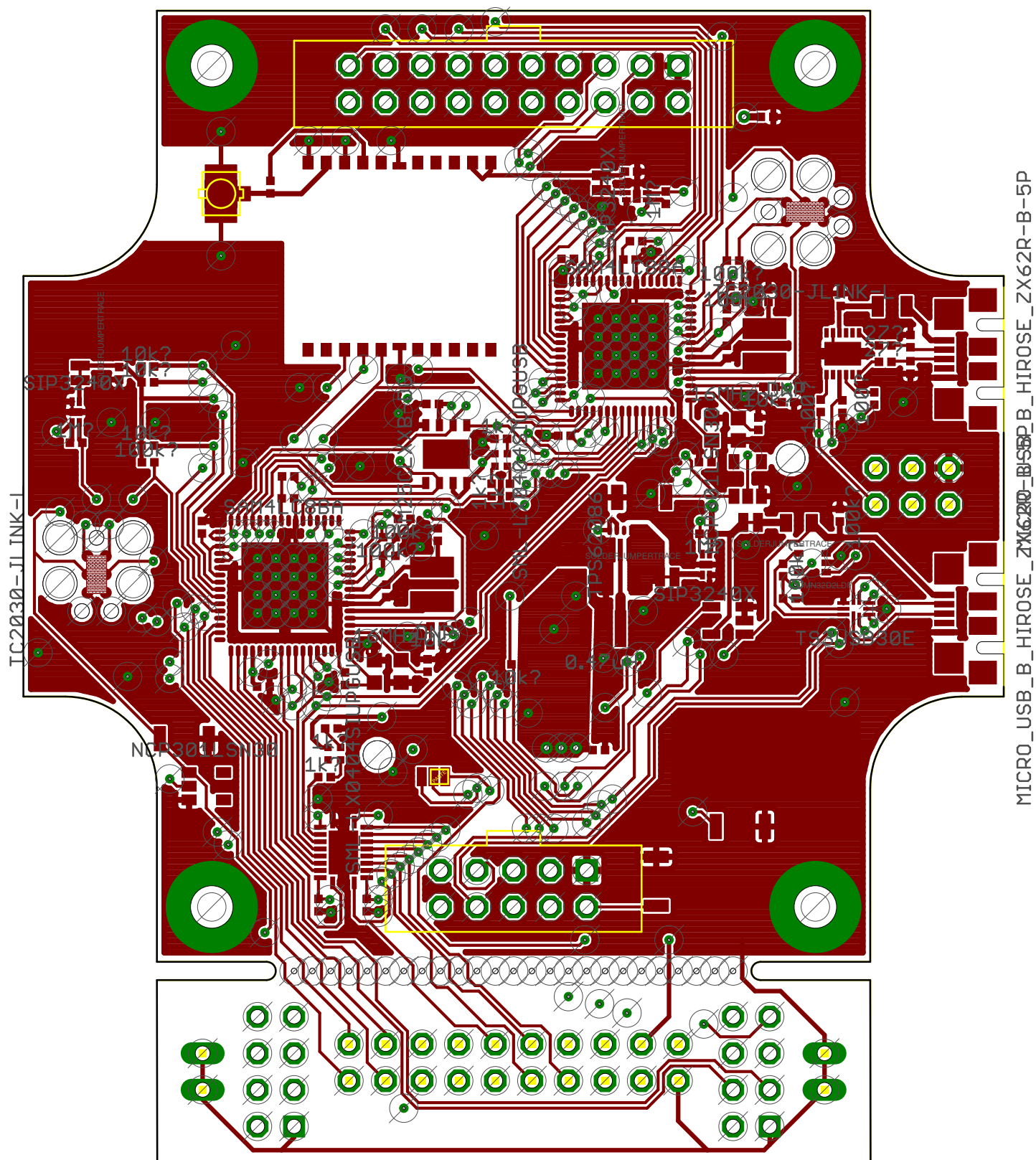
Date: 5/10/17 4:31 PM

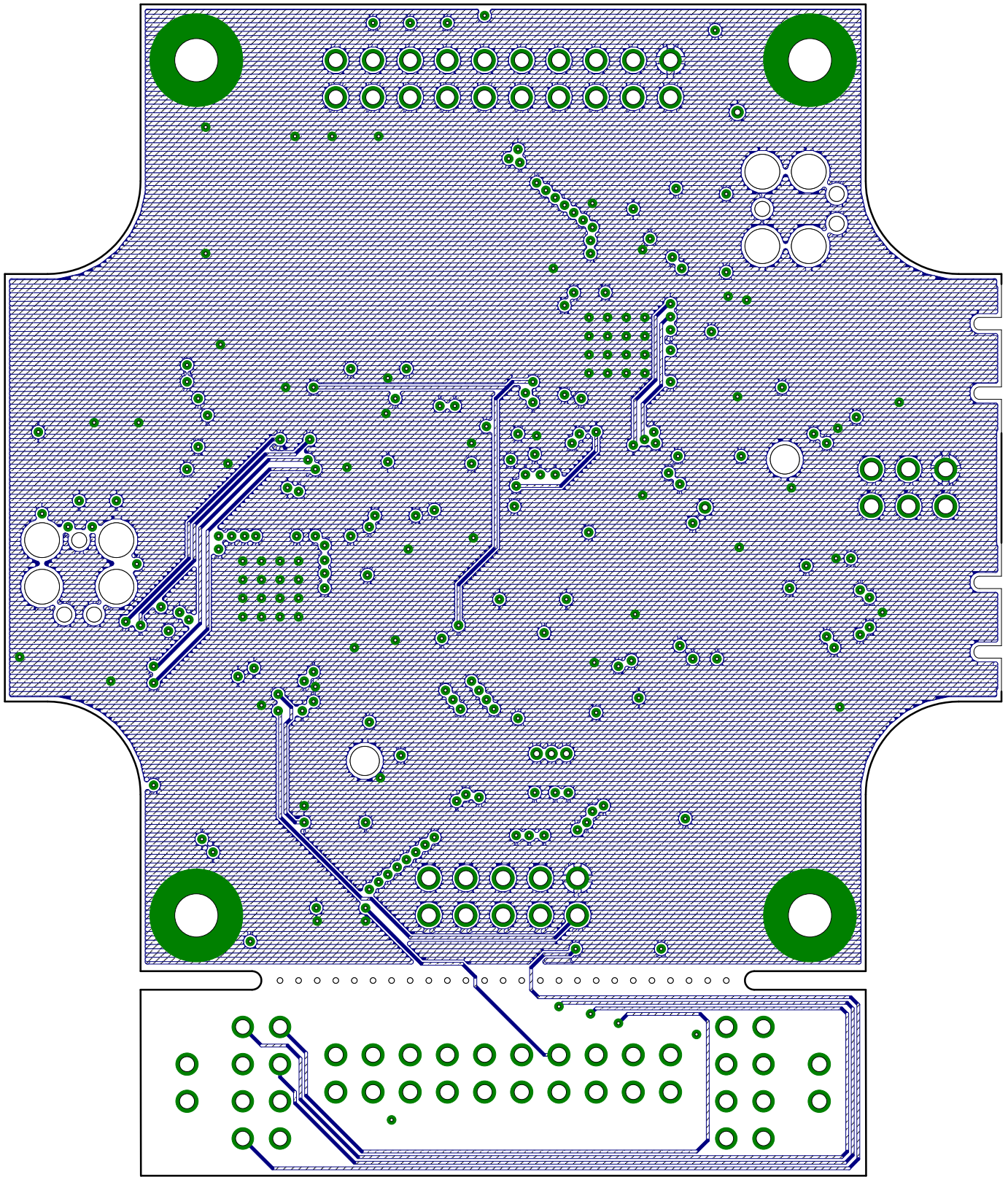
Sheet: 5/5

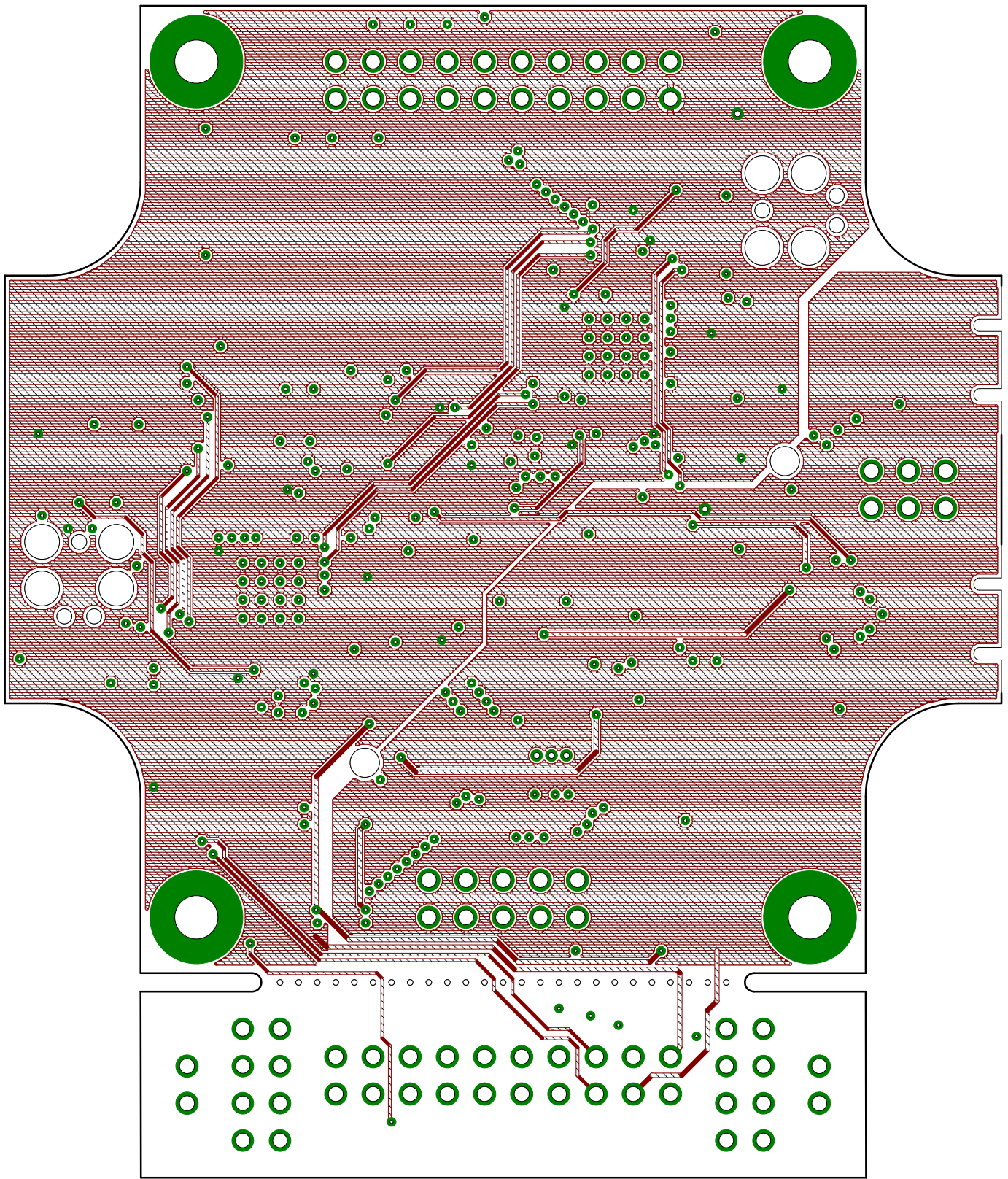


Bottom Layer

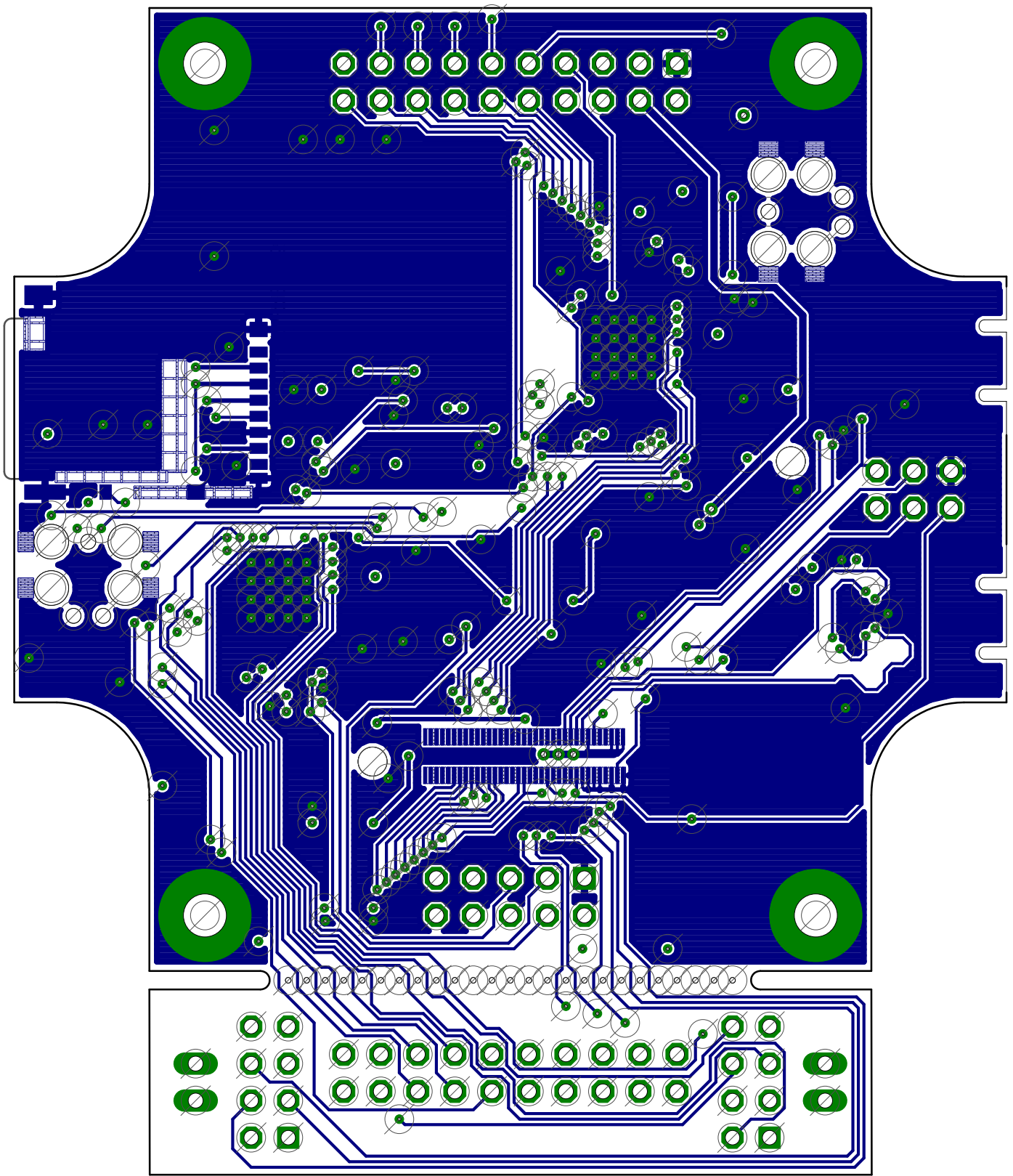




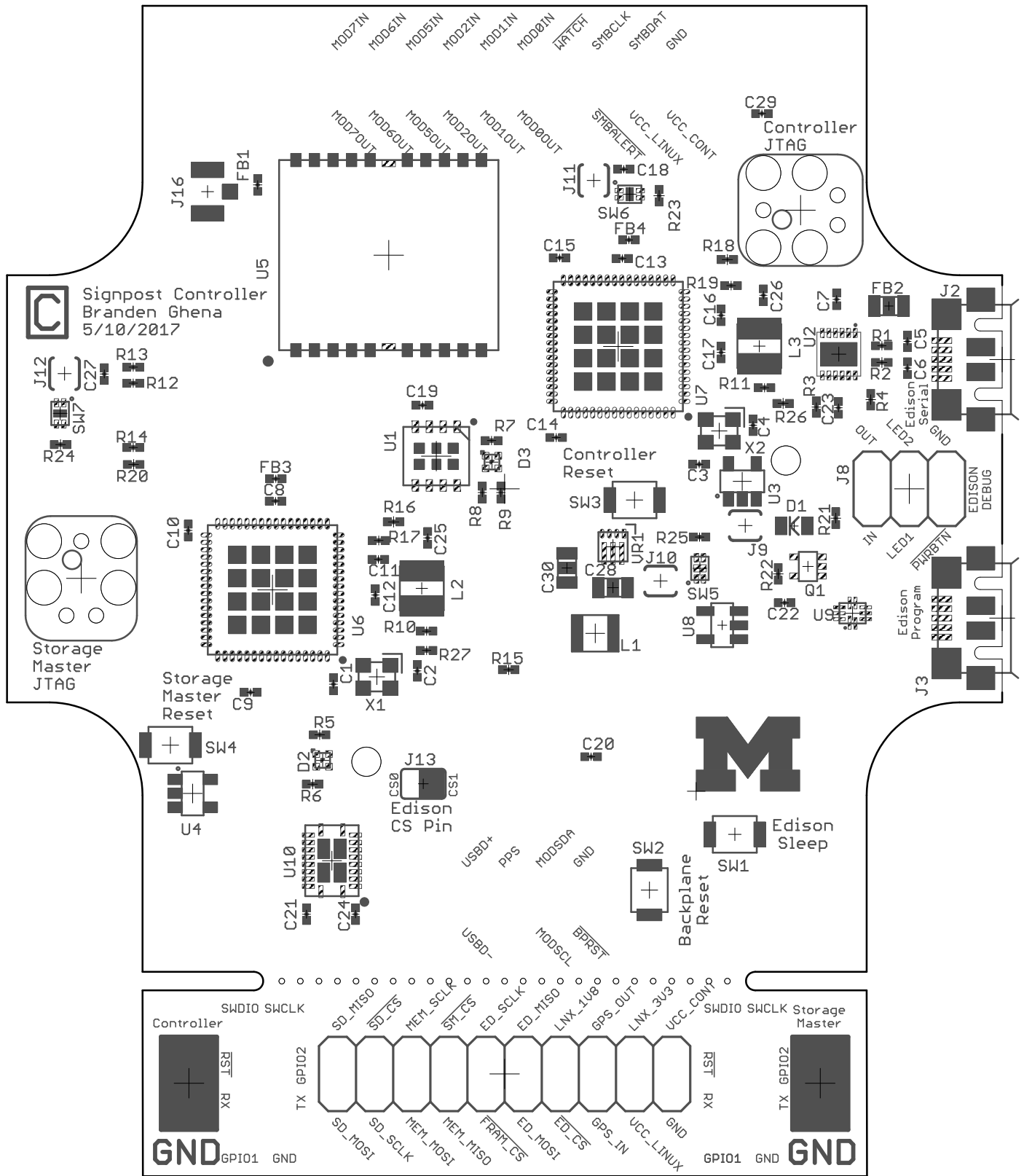


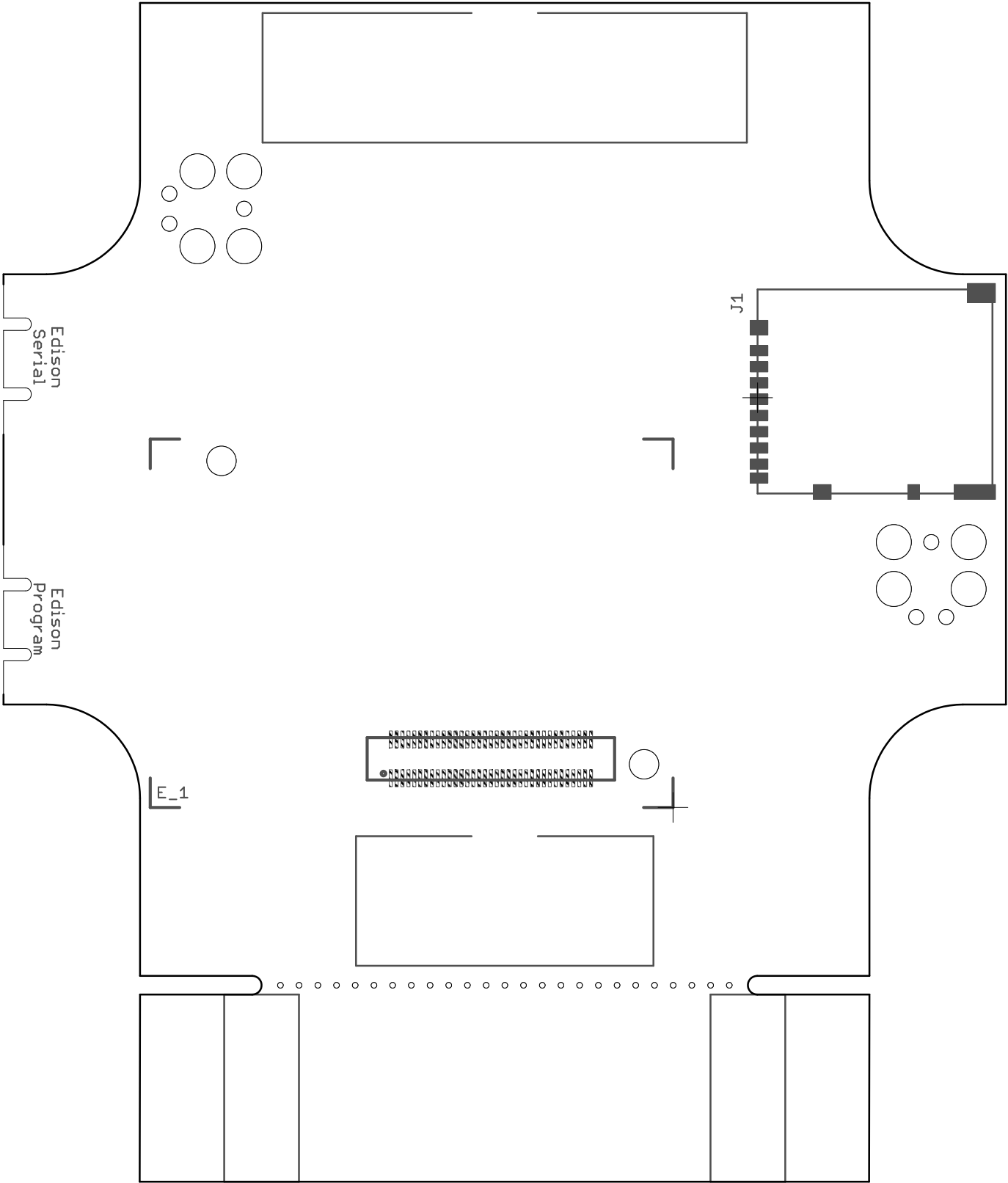


Bottom Copper Layer

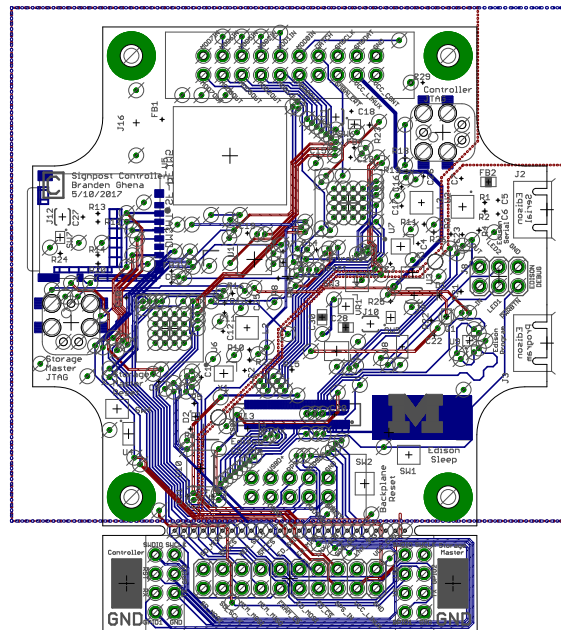


Top Paste Layer with Silkscreen

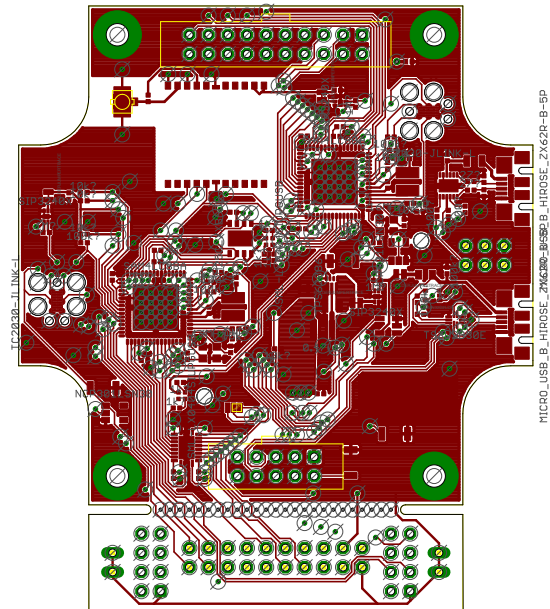


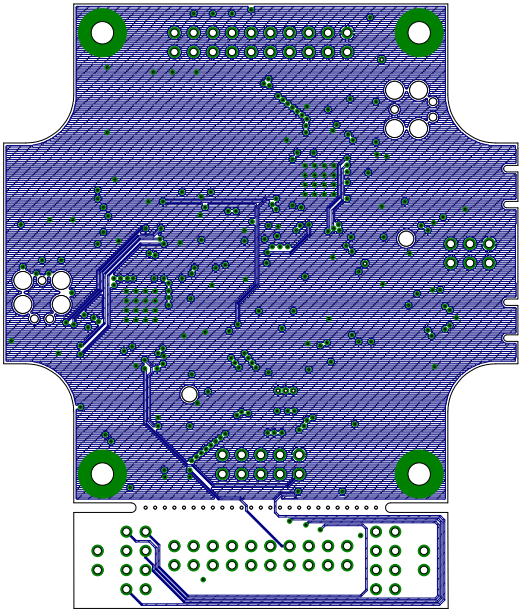


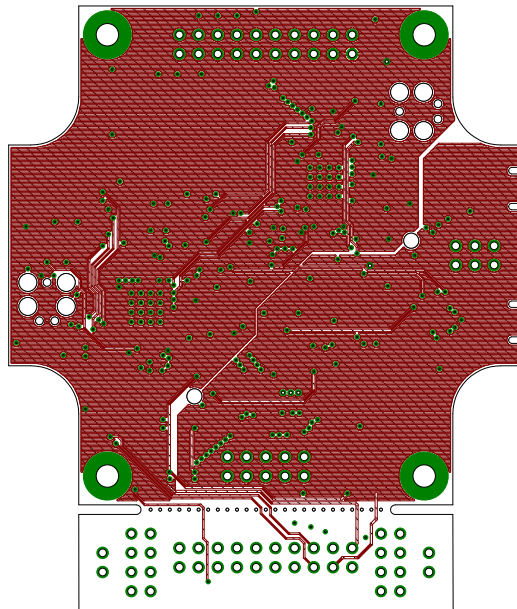
Top and Bottom Layers 1:1 Scale



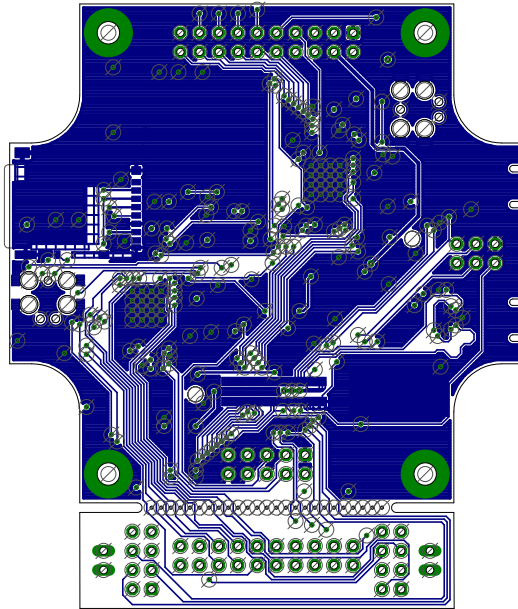
Top Layer 1:1 Scale







Bottom Copper Layer 1:1 Scale



controller_bom

Qty	Value	Device
4	8pF	CAPACITOR0402_CAP
2	47pF	CAPACITOR0402_CAP
1	10nF	CAPACITOR0402_CAP
17	100nF	CAPACITOR0402_CAP
3	4.7uF	CAPACITOR0402_CAP
1	10uF	CAPACITOR0805_CAP
1	10uF	CAPACITOR0402_CAP
1	22uF	CAPACITOR0805_CAP
1	DIODE	DIODE
2	SML-LX0404SIUPGUSB	SML-LX0404SIUPGUSB
1	EDISON_CONNECTOR_SEGMENTED	EDISON_CONNECTOR_SEGMENTED
1	300Ohm	FERRITE_BEAD0402
1	600Ohm	FERRITE_BEAD0805
2	1.5kOhm	FERRITE_BEAD0402
1	DM3AT-SF-PEJM5	DM3AT-SF-PEJM5
2	MICRO_USB_B_HIROSE_ZX62R-B-5P	MICRO_USB_B_HIROSE_ZX62R-B-5P
1	MODULE_CONTROLLER	MODULE_CONTROLLER
2		PINHD-1X2
1		PINHD-2X10
1		PINHD-2X3
4	SOLDERJUMPERTRACE	SOLDERJUMPERTRACE
1		SOLDERJUMPER_2WAYPASTE2&3
2	TC2030-JLINK-L	TC2030-JLINK-L
1	U.FL-R-SMT	U.FL-R-SMT
1	0.47uH	INDUCTORDFE322512C
2	22uH	LHQ3NP
1	UMICH_SOLID_MEDIUM	UMICH_SOLID_MEDIUM
1	DMN32D2LDF	DMN32D2LDF
2	27Ohm	RESISTOR0402_RES
2	100Ohm	RESISTOR0402_RES
5	1kOhm	RESISTOR0402_RES
6	10kOhm	RESISTOR0402_RES
7	100kOhm	RESISTOR0402_RES
3	1MOhm	RESISTOR0402_RES
2	DNP	RESISTOR0402_RES
4	B3U-1000P	B3U-1000P
3	SIP3240X	SIP3240X
1	FM25CLXXB-DG	FM25CLXXB-DG
1	FTDI234XD	FTDI234XD
2	NCP301LSN30	NCP301LSN30
1	RXM-GPS-RM-T	RXM-GPS-RM-T
2	SAM4LC8BA	SAM4LC8BA
1	SN74LVC1G125DBVR	SN74LVC1G125DBVR
1	TS3USB30E	TS3USB30E
1	TXS0108EVQFN20	TXS0108EVQFN20
1	TPS62086	TPS62086
2	16MHz	FH1600015

controller_bom

Package
0402_CAP
0402_CAP
0402_CAP
0402_CAP
0402_CAP
0805_CAP
0402_CAP
0805_CAP
0805_DIODE
1MM_SQ_4PAD
EDISON_DAUGHTER
0402_CAP
0805_CAP
0402_CAP
DM3AT-SF-PEJM5
USB_MICRO_B-HIROSE-ZX62R-B-5P
MODULE_CONTROLLER
1X02
2X10
2X03
SJ_2S-TRACE
SJ_3_PASTE2&3
TC2030-IDC
U.FL_SMT
DFE322512C
1212
UMICH_SOLID_200MIL
SOT353
0402_RES
0402_RES
0402_RES
0402_RES
0402_RES
0402_RES
0402_RES
B3U-1000P
TDFN4
TDFN-8
DFN-12/3MM
SOT23-5
RXM-GPS-RM-T
QFN-64-9MM
SOT-23-5
UQFN-10
R-PVQFN-N20
RLT0007A
FHXXX

controller_bom

Parts

C1, C2, C3, C4

C5, C6

C7

C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24

C25, C26, C27

C28

C29

C30

D1

D2, D3

E_1

FB1

FB2

FB3, FB4

J1

J2, J3

J4

J5, J6

J7

J8

J9, J10, J11, J12

J13

J14, J15

J16

L1

L2, L3

LOGO1

Q1

R1, R2

R3, R4

R5, R6, R7, R8, R9

R10, R11, R12, R13, R14, R15

R16, R17, R18, R19, R20, R21, R22

R23, R24, R25

R26, R27

SW1, SW2, SW3, SW4

SW5, SW6, SW7

U1

U2

U3, U4

U5

U6, U7

U8

U9

U10

VR1

X1, X2

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Description

0402 Capacitor
0402 Capacitor
0402 Capacitor
0402 Capacitor
0402 Capacitor
0402 Capacitor
0402 Capacitor
0402 Capacitor

1mm^2 RGB LED

CONN MICRO SD R/A PUSH-PUSH SMD

USB Micro B Connector

Controller module for signpost

PIN HEADER

PIN HEADER

PIN HEADER

Solder Jumper

Solder Jumper

U.FL-R-SMT Antenna Connector

A very specific inductor

LHQ3NP Inductor

Common source dual n-channel mosfet

Resistor

Resistor

Resistor

Resistor

Resistor

Resistor

Resistor

Switch

High power (2.4 A) high-side switch

Cypress FRAM

FTDI234XD USB to UART Bridge in 3x3 DFN Package

Power-on-reset. LSN30 -> Fixed 3V (for 90% of 3.3V) detector. Fixed ~100us power_on -> deassert reset. 301 -> Open Collector

The RM Series GPS receiver module is a

SAM4L Microcontroller. 64QFN Package. 512 Flash.

Single Bus Buffer Gate with 3-state output

USB Mux with OE control and ESD

TXS0108E 8-Bit Bi-directional Voltage Translator

Buck Switching Regulator IC Positive Fixed 3.3V 1 Output 3A 7-VFDFN

Pericom Type FH 16 MHz 2.5 x 2.0 mm

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AMAZON	DIGIKEY	MOUSER
	490-8230-1-ND	
	490-6241-1-ND	
	490-6296-1-ND	
	490-10777-1-ND	
	490-13252-1-ND	
	490-8316-1-ND	
	490-13811-1-ND	
	490-1719-1-ND	
	478-7800-1-ND	
	67-2125-1-ND	
B00PTVSS4A		798-DF40HC3070DS4V51
	ACML-0402-301-TCT-ND	
	240-2390-1-ND	
	1276-6395-1-ND	
	HR1964CT-ND	
	H125274CT-ND	
	S9172-ND , S9169-ND , S2221EC-04-ND , S2221EC-04-ND	
	H122041-ND	
	490-10596-1-ND	81-1277AS-H-R47MP2
	490-5350-1-ND	
	DMN32D2LDF-7DICT-ND	
	1276-3907-1-ND	
	1276-3429-1-ND	
	1276-3430-1-ND	
	1276-3431-1-ND	
	1276-3432-1-ND	
	1276-3433-1-ND	
	1276-3431-1-ND	
	SW1020CT-ND	
	SIP32402ADNP-T1GE4CT-ND	
	FM25CL64B-DGRA-ND	
	768-1178-1-ND	895-FT234XD-R
:	NCP301LSN30T1GOSCT-ND	
	RXM-GPS-RM-TCT-ND	
	ATSAM4LC8BA-MURCT-ND	
	296-11603-1-nd	
	296-24684-1-ND	
	296-24806-1-ND	
	296-40831-1-ND	
	FH1600015CT-ND	

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NEWARK

53X3171