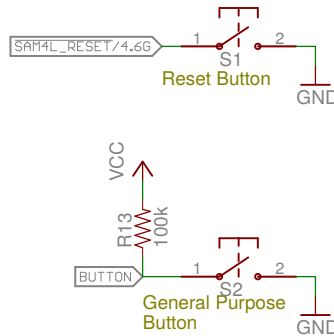
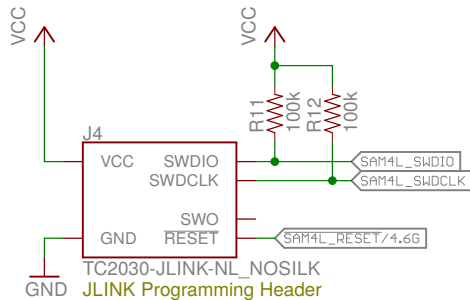
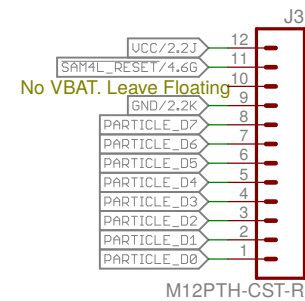
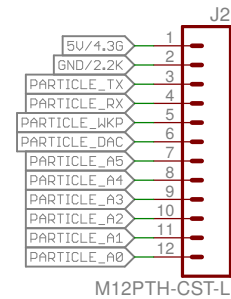
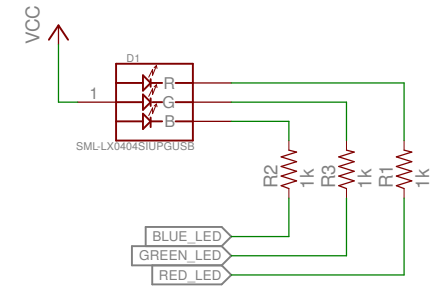
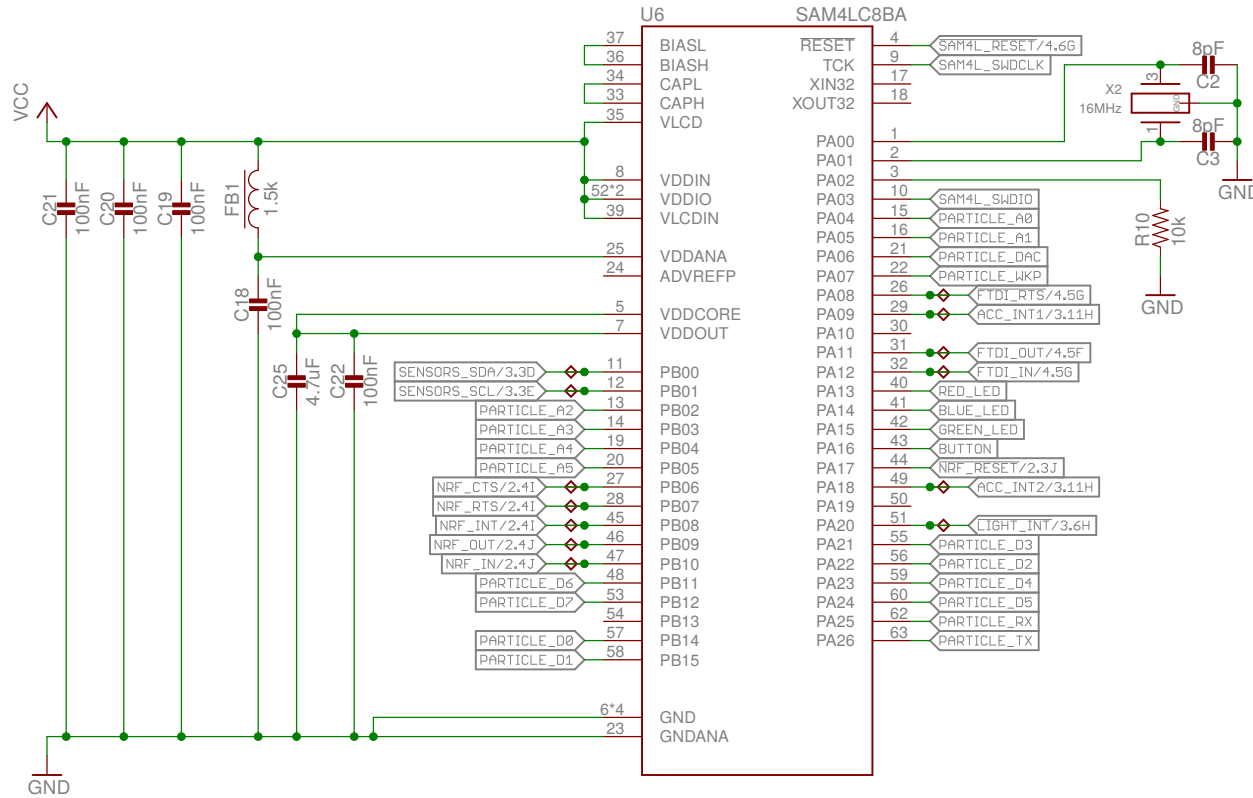


Microcontroller



M Hail

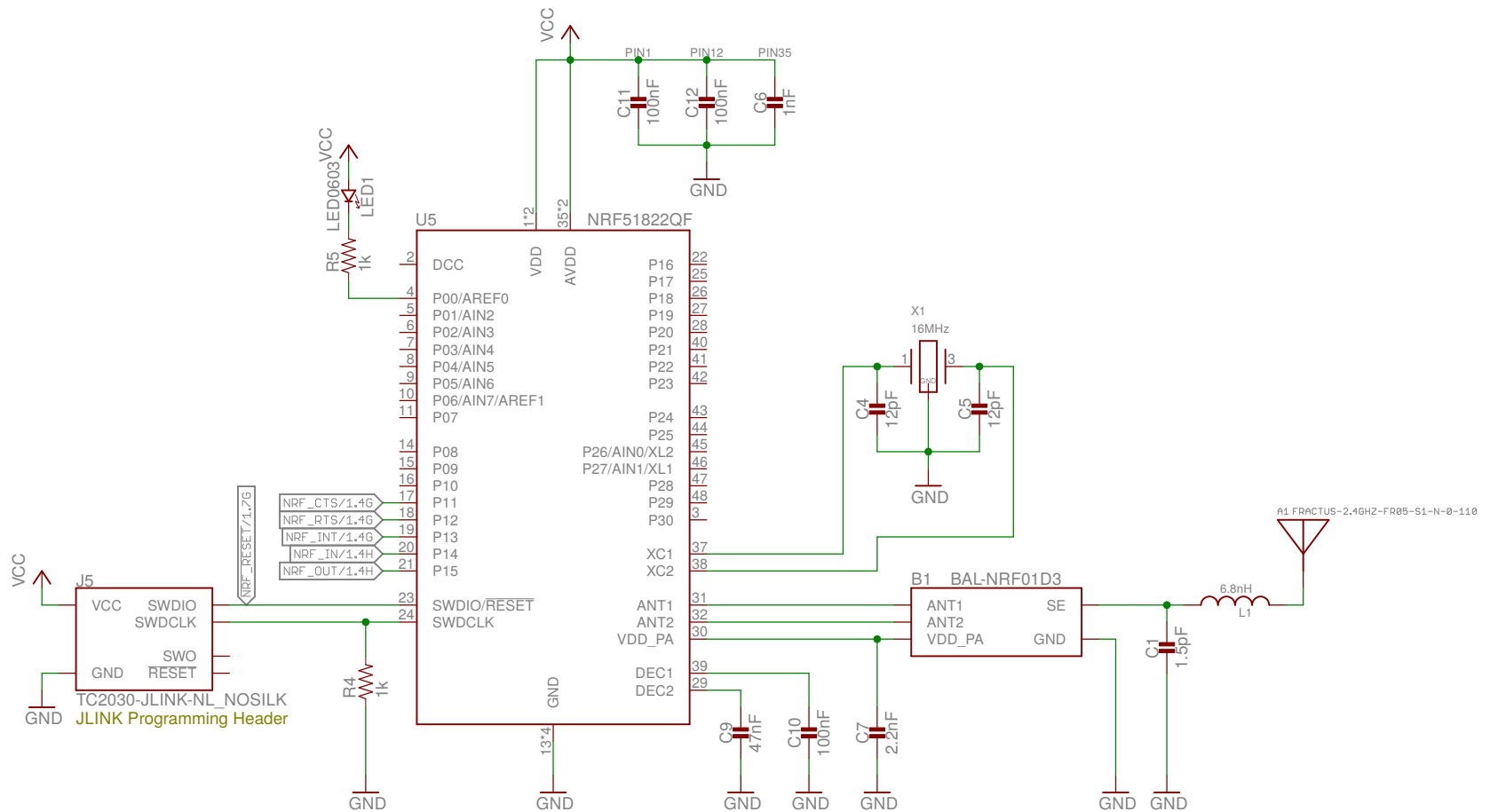
REV:
B

Author: Branden Ghena

Date: 3/13/17 6:57 PM

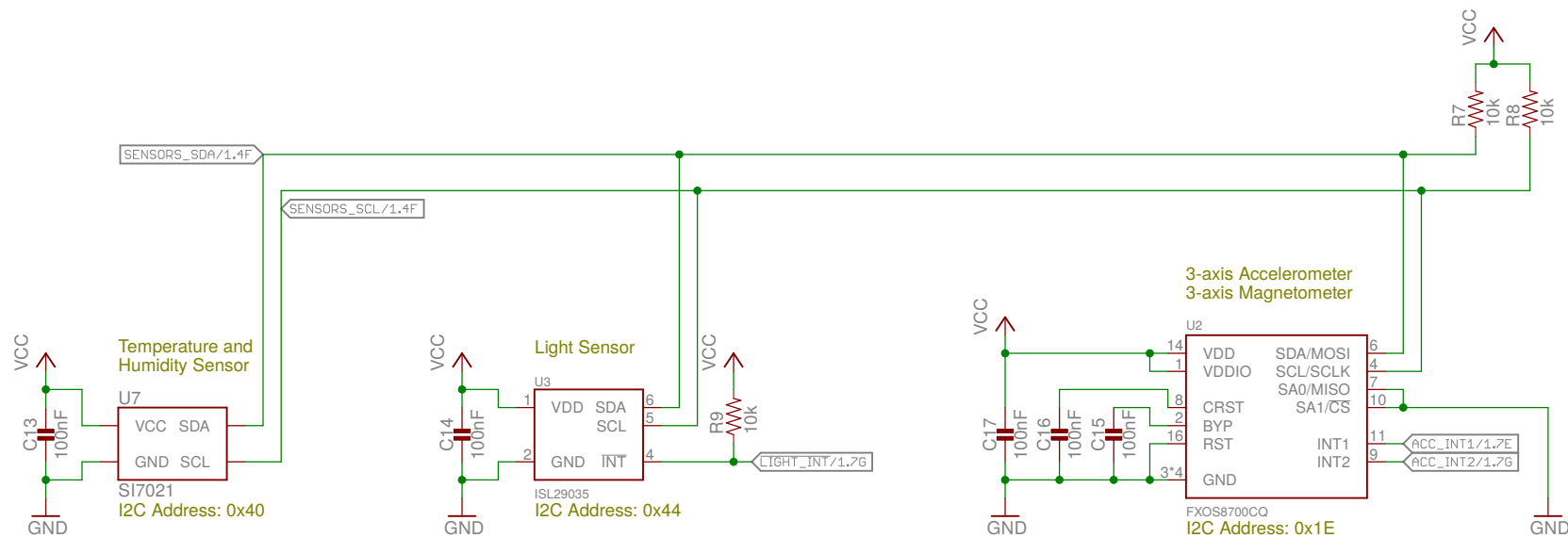
Sheet: 1/4

BLE Radio



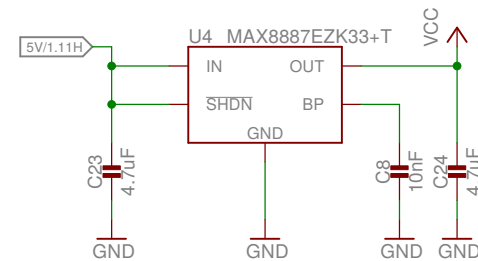
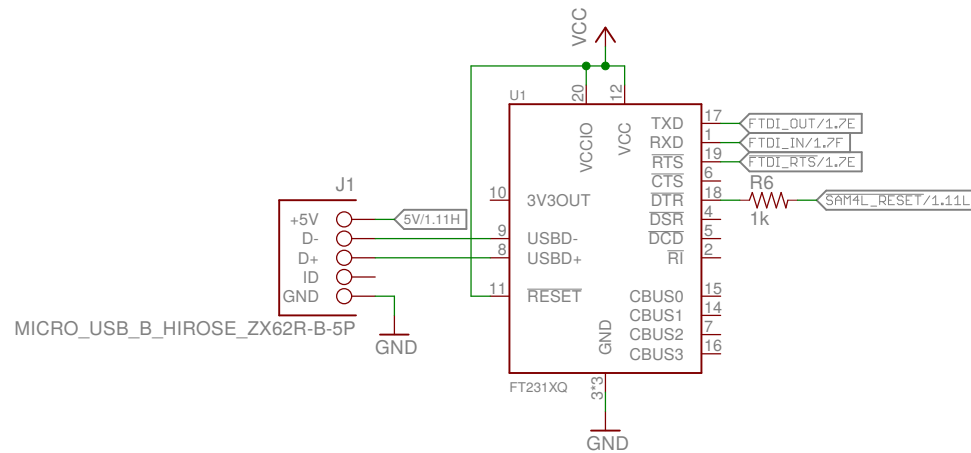
M Hail	REV: B
Author: Branden Ghena	
Date: 3/13/17 6:57 PM	Sheet: 2/4

Sensors



M Hail	REV: B
Author: Branden Ghena	
Date: 3/13/17 6:57 PM	Sheet: 3/4

Power and USB



M Hail

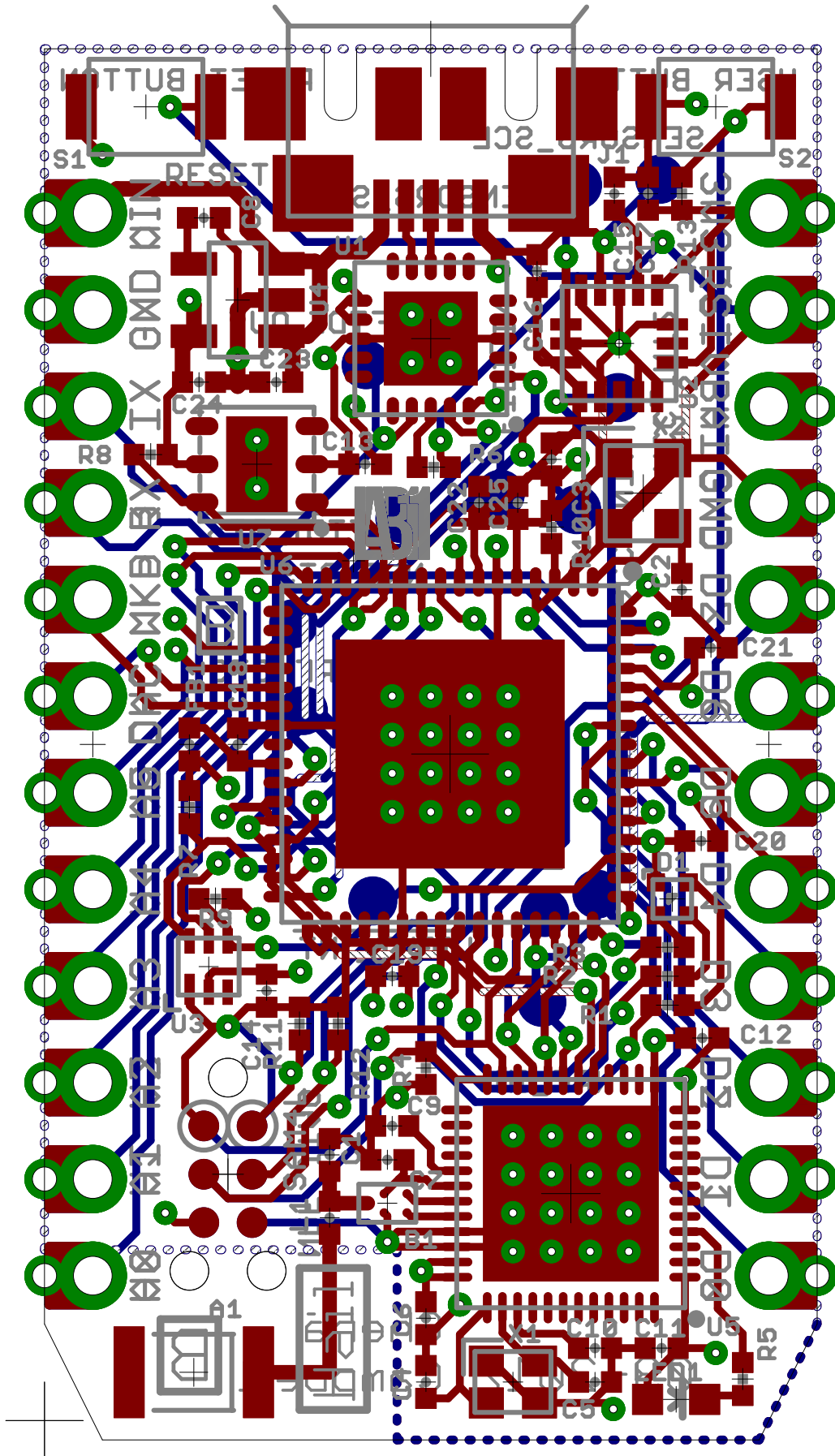
REV:
B

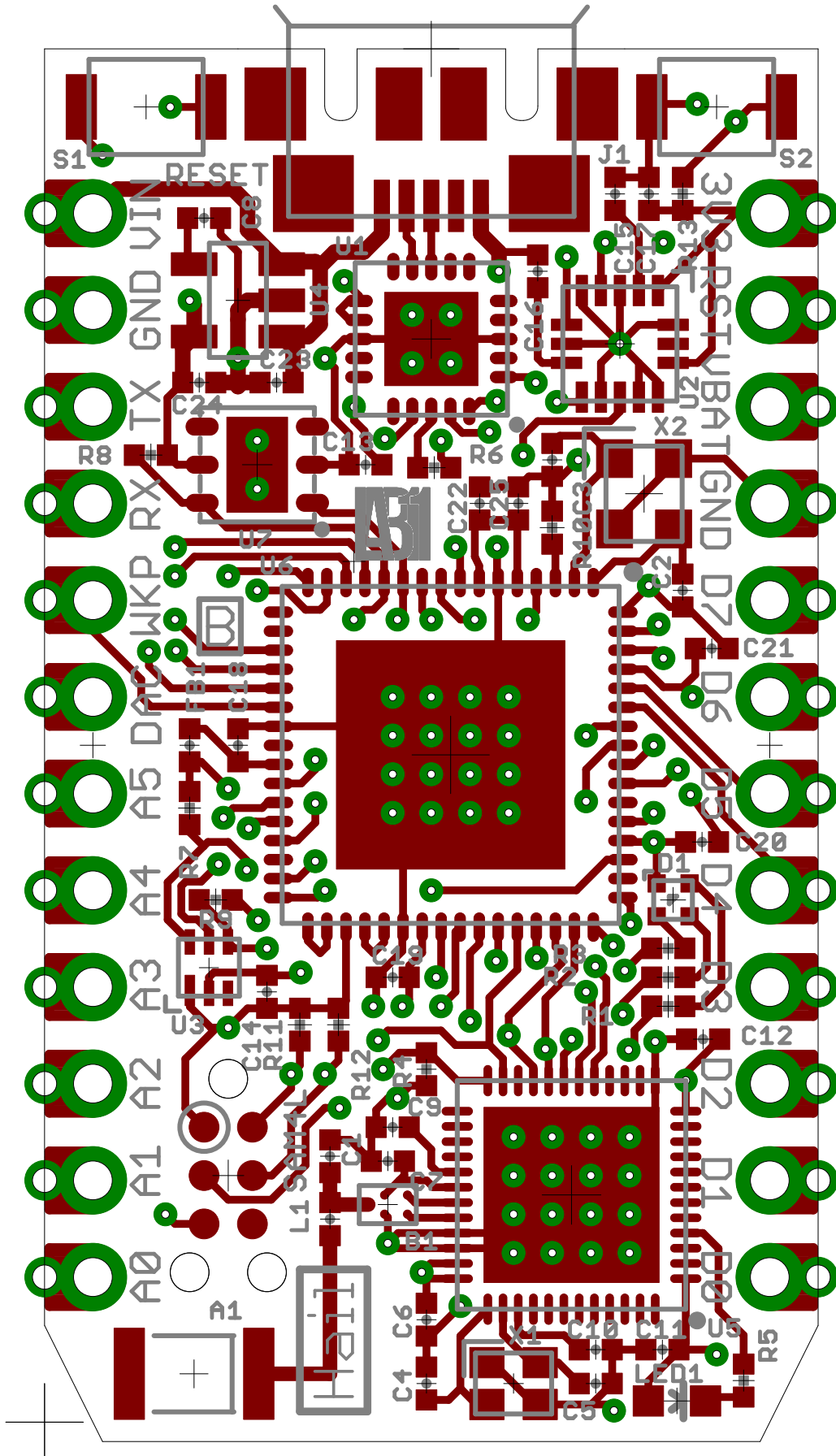
Author: Branden Ghena

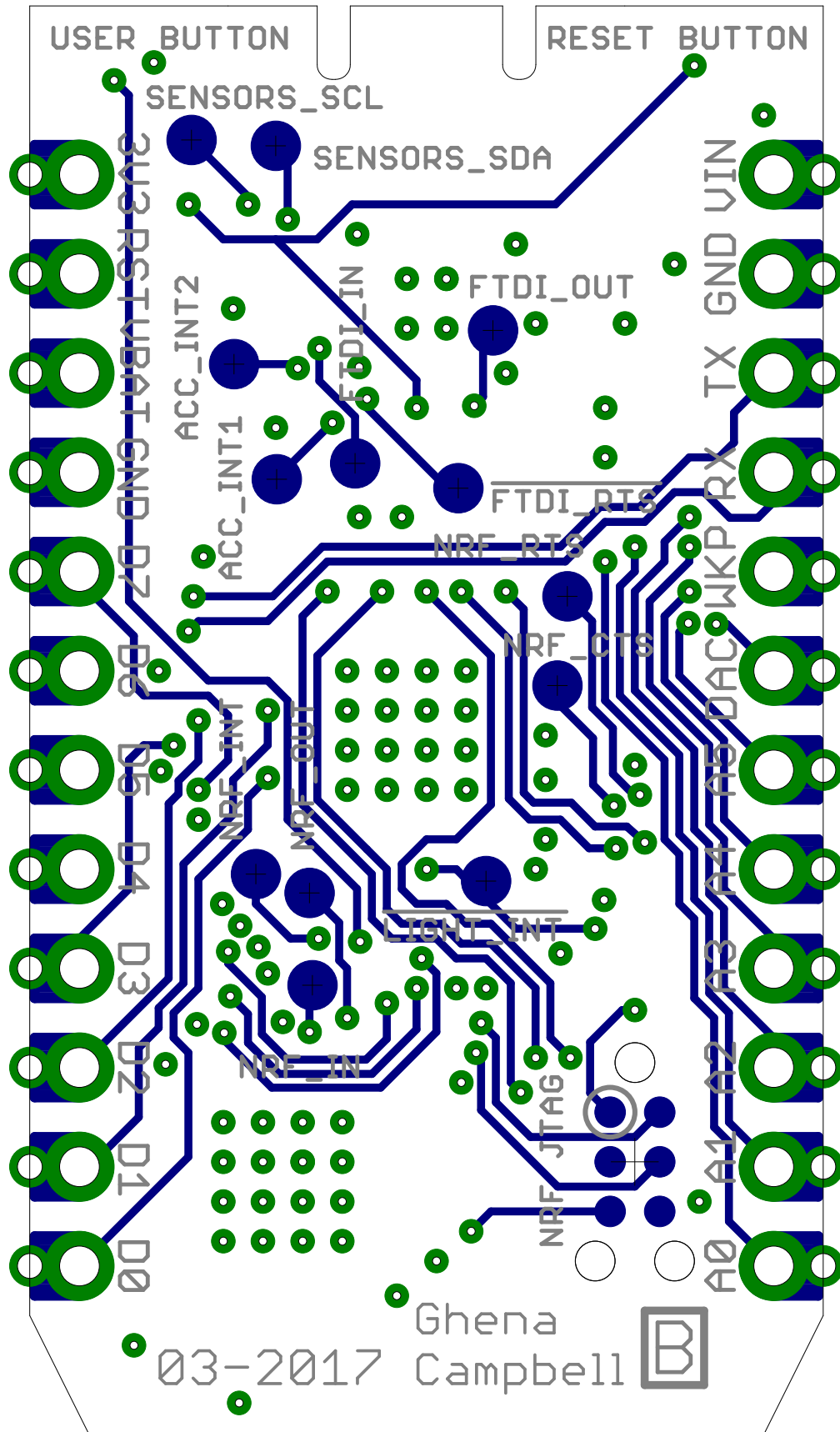
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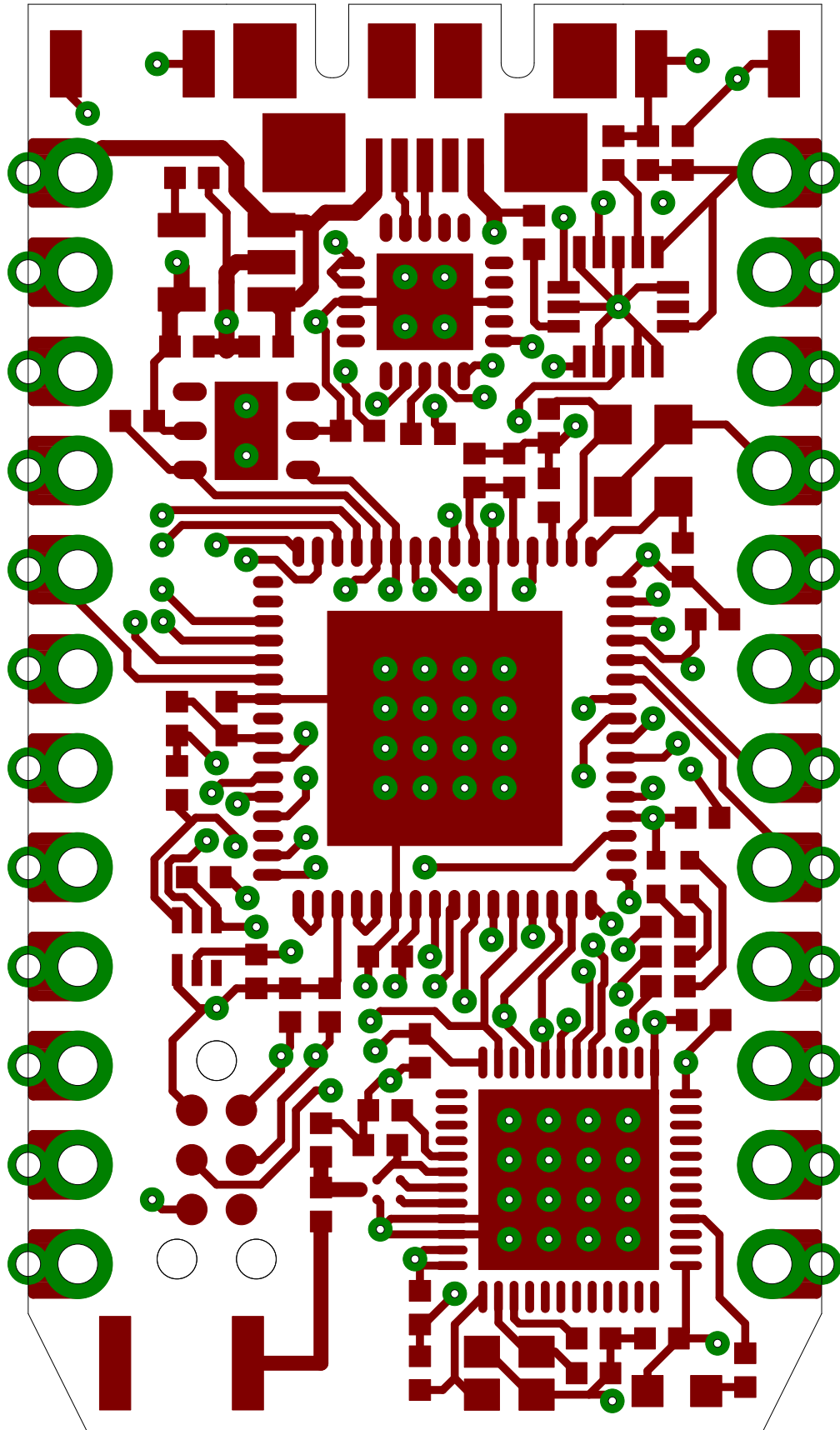
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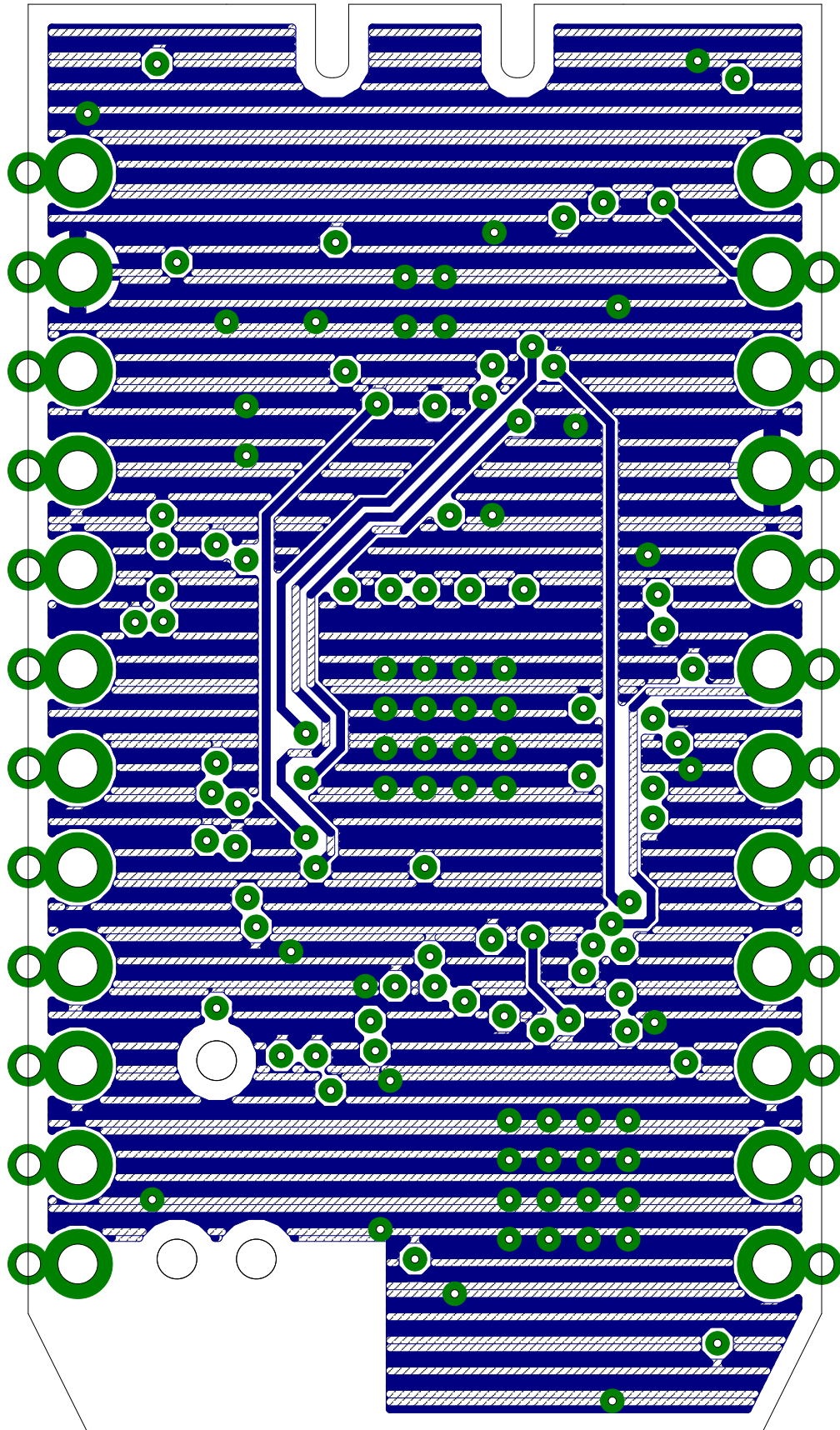
Top and Bottom Layers

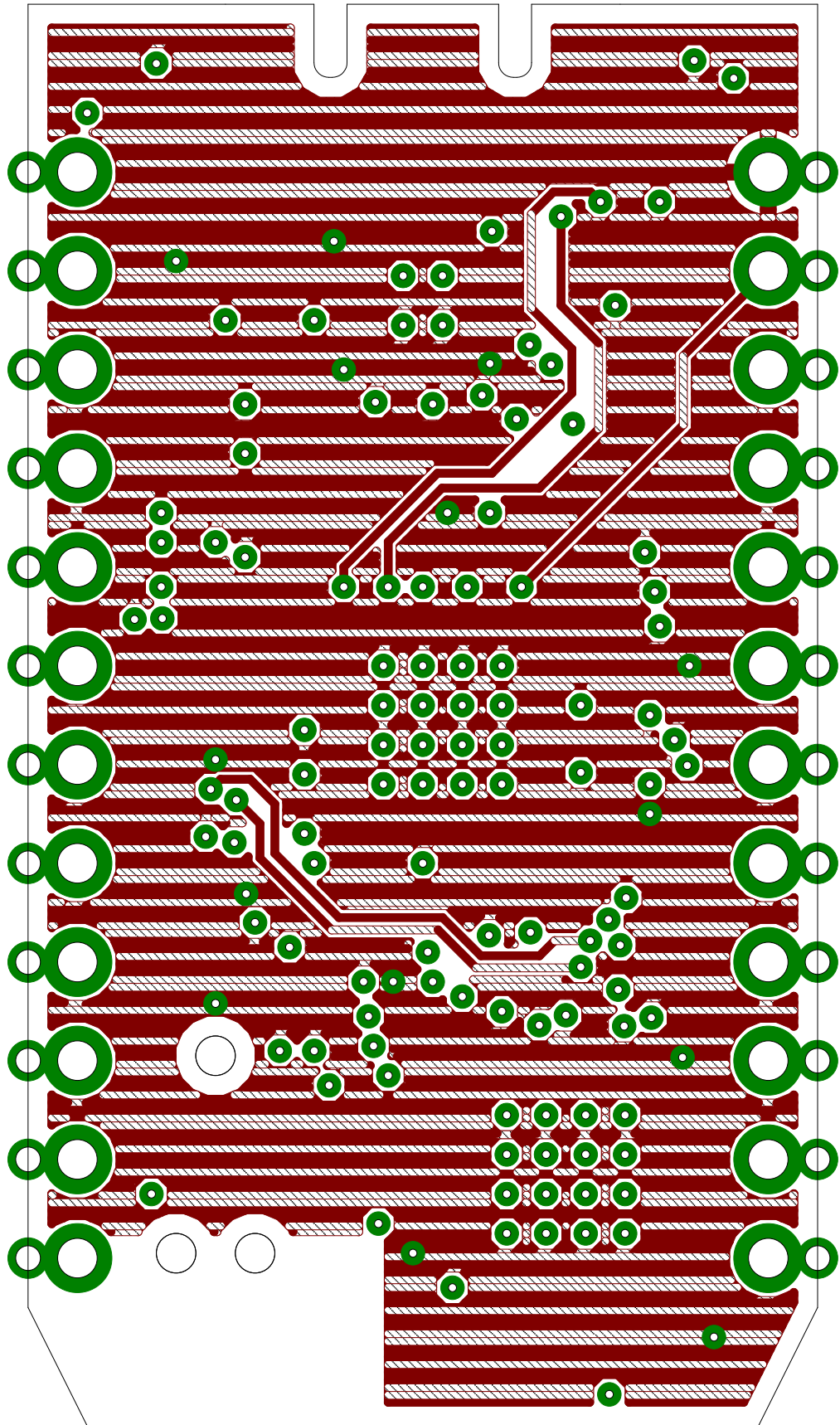




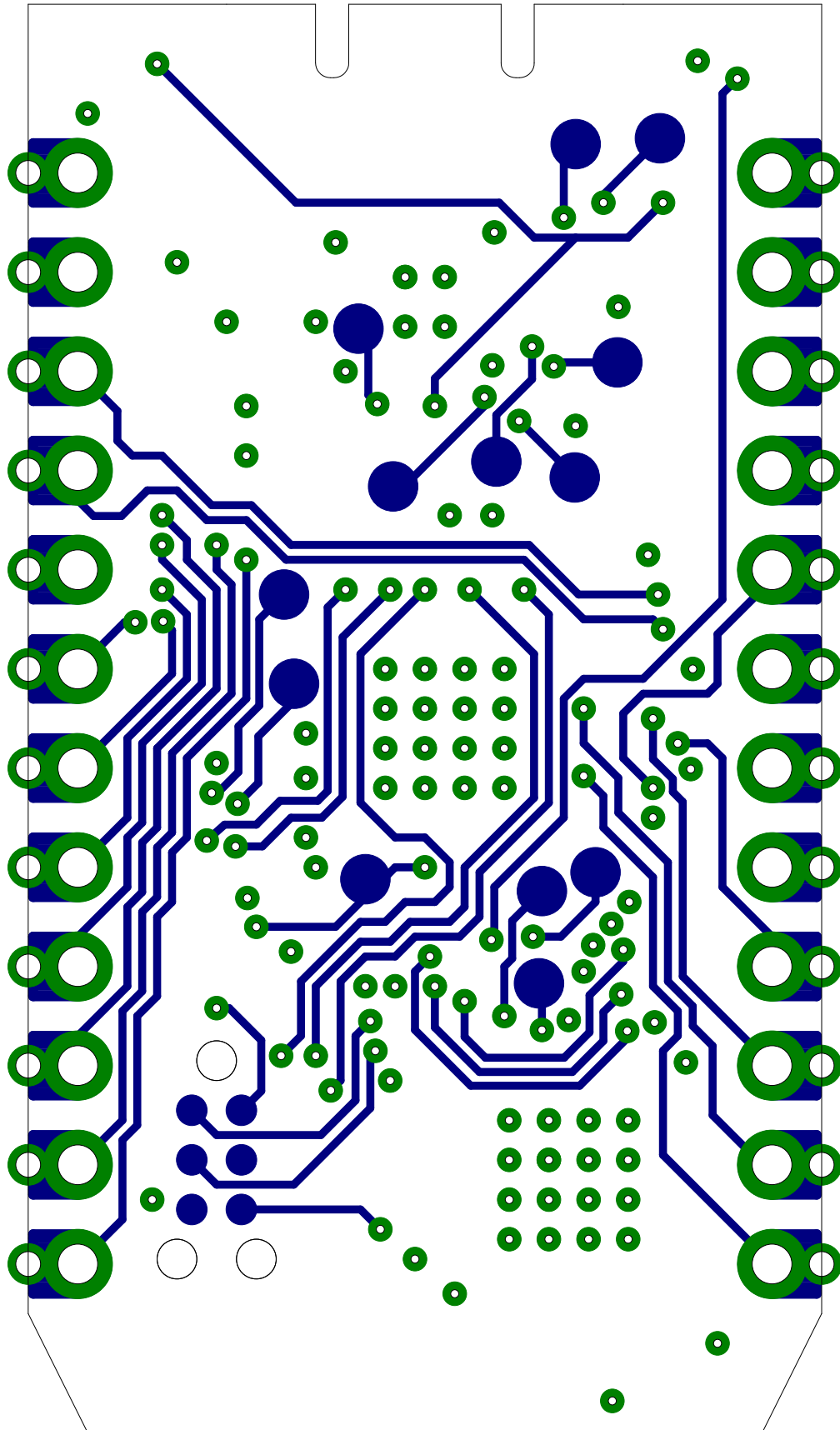


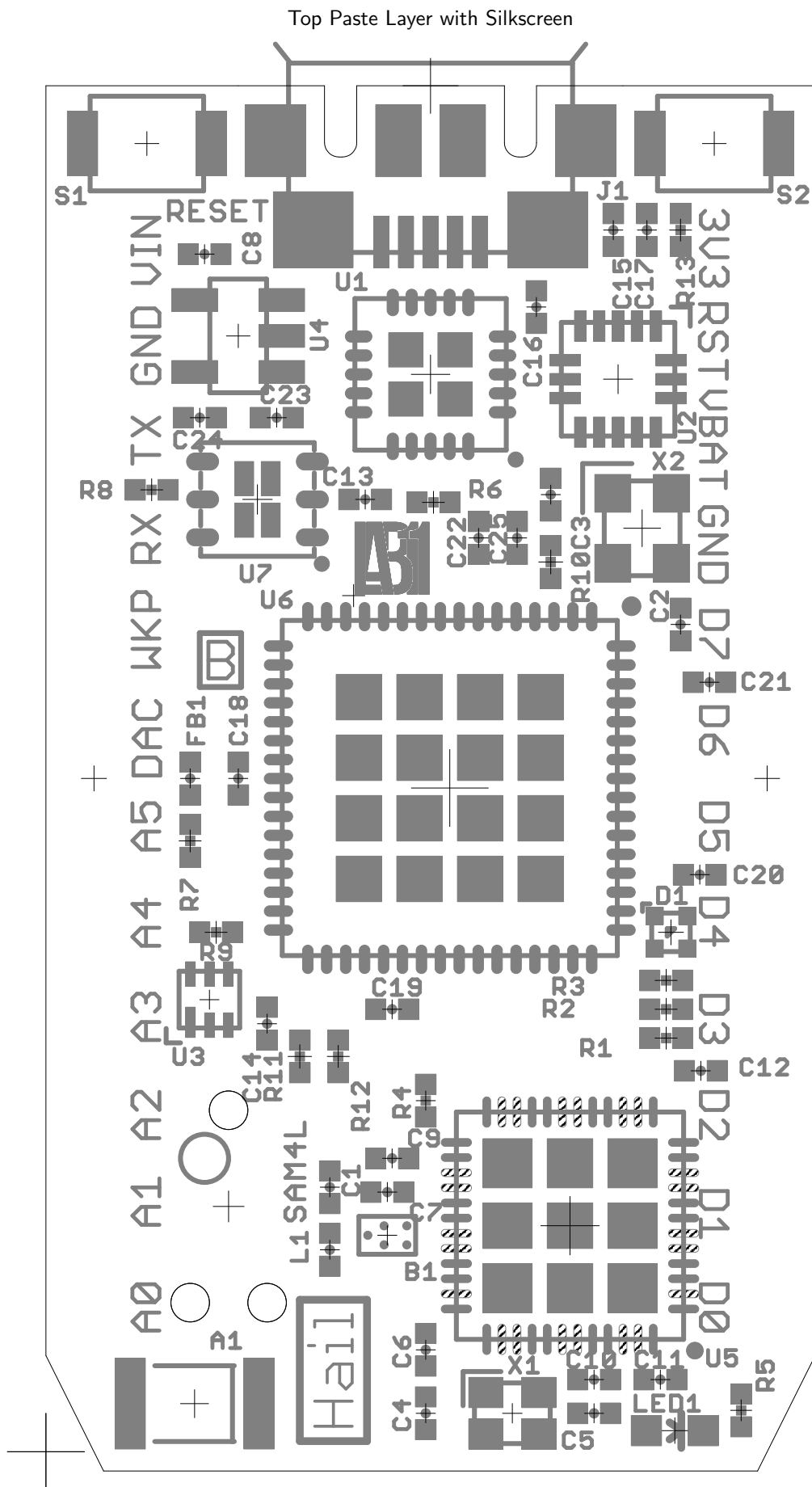


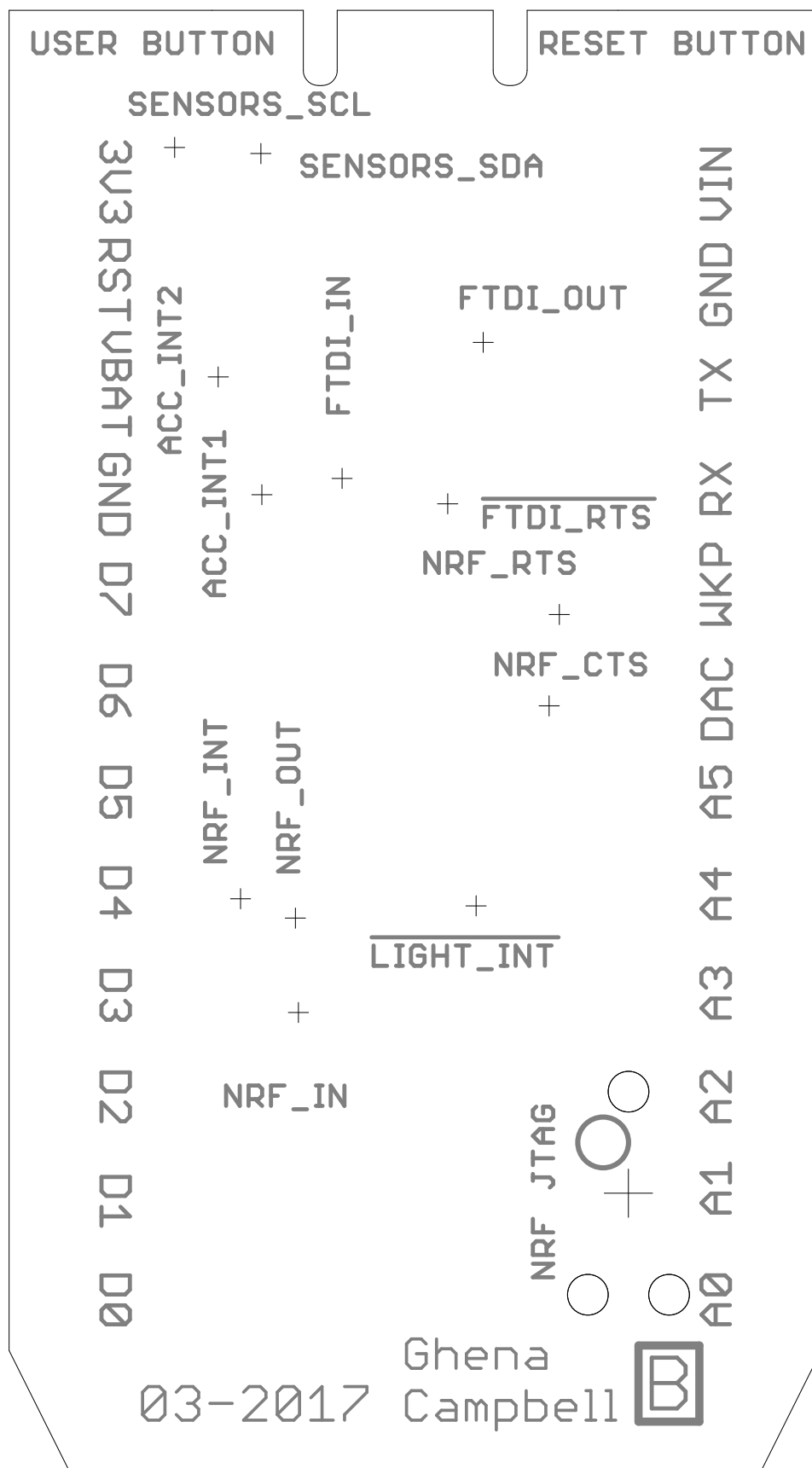




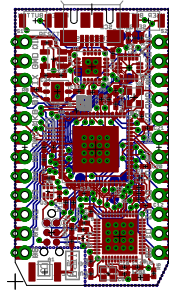
Bottom Copper Layer



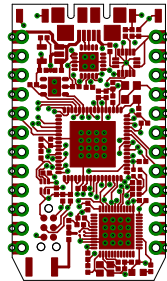


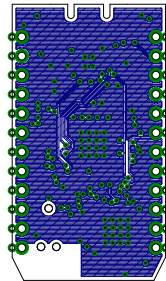


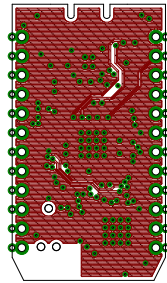
Top and Bottom Layers 1:1 Scale



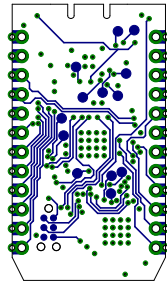
Top Layer 1:1 Scale







Bottom Copper Layer 1:1 Scale



#

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Package
FRACTUS-ANTENNA-FR05-S1-N-0-110
BAL-NRF01D3
0402_CAP
0402_CAP
0402_CAP
0402_CAP
0402_CAP
0402_CAP
0402_CAP
0402_CAP
0402_CAP
1MM_SQ_4PAD
0402_CAP
USB_MICRO_B-HIROSE-ZX62R-B-5P
1X12-CASTELLATED
1X12-CASTELLATED
TC2030-IDC-NL_NOSILK
0402_CAP
LED-0603
0402_RES
0402_RES
0402_RES
B3U-1000P
B1,27
QFN-20-4MM
QFN-16-3MM
ODFN-6-1.5MMX1.6MM
SOT-23-5
QFN-48-6MM
QFN-64-9MM
DFN-6/3MM
TXC-8Y
FHXXX

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Parts

A1

B1

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

D1

FB1

J1

J2

J3

J4, J5

L1

LED1

R1, R2, R3, R4, R5, R6

R7, R8, R9, R10

R11, R12, R13

S1, S2

TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13

U1

U2

U3

U4

U5

U6

U7

X1

X2

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Description	DIGIKEY
Fractus Micro Reach Xtend	
50 ohm nominal input / conjugate match balun to nRF51422-QFAA,	497-13637-1-ND
0402 Capacitor	490-6212-1-ND
0402 Capacitor	490-8230-1-ND
0402 Capacitor	490-6197-1-ND
0402 Capacitor	490-1303-1-ND
0402 Capacitor	490-5419-1-ND
0402 Capacitor	490-7763-1-ND
0402 Capacitor	445-1264-1-ND
0402 Capacitor	490-10777-1-ND
0402 Capacitor	490-13252-1-ND
1mm^2 RGB LED	67-2125-1-ND
	1276-6395-1-ND
USB Micro B Connector	H125274CT-ND
Header 12	S1011E-12-ND
Header 12	S1011E-12-ND
A very specific inductor	490-6840-1-ND
LED	160-1837-6-ND
Resistor	1276-3430-1-ND
Resistor	1276-3431-1-ND
Resistor	1276-3432-1-ND
Switch	SW1020CT-ND
Test pad	
USB Bridge, USB to UART USB 2.0 UART Interface	768-1128-1-ND
Accelerometer, Magnetometer, 3 Axis Sensor, I2C/SPI	FXOS8700CQR1CT-ND
Optical Sensor Ambient 550nm I2C	ISL29035IROZ-T7CT-ND
IC REG LDO 3.3V 0.3A TSOT23-5	MAX8887EZK33+TCT-NC
Multiprotocol Bluetooth 4.0 low energy/2.4 GHz RF SoC	1490-1049-1-ND
SAM4L Microcontroller. 64QFN Package. 512 Flash.	ATSAM4LC8BA-MURCT-I
IC TEMP SENSOR RH 2% DFN	336-3141-ND
2mmx1.6mm SMD Crystal	887-2003-1-ND
Pericom Type FH 16 MHz 2.5 x 2.0 mm	FH1600015CT-ND

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MOUSER	MPN	NEWARK	RICHARDSON_RFPD	TP_SIGNAL_NAME
511-BAL-NRF01D3			FR05-S1-N-0110B	

FT231XQ-R
FXOS8700CQR1
ISL29035IROZ-T7

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ND