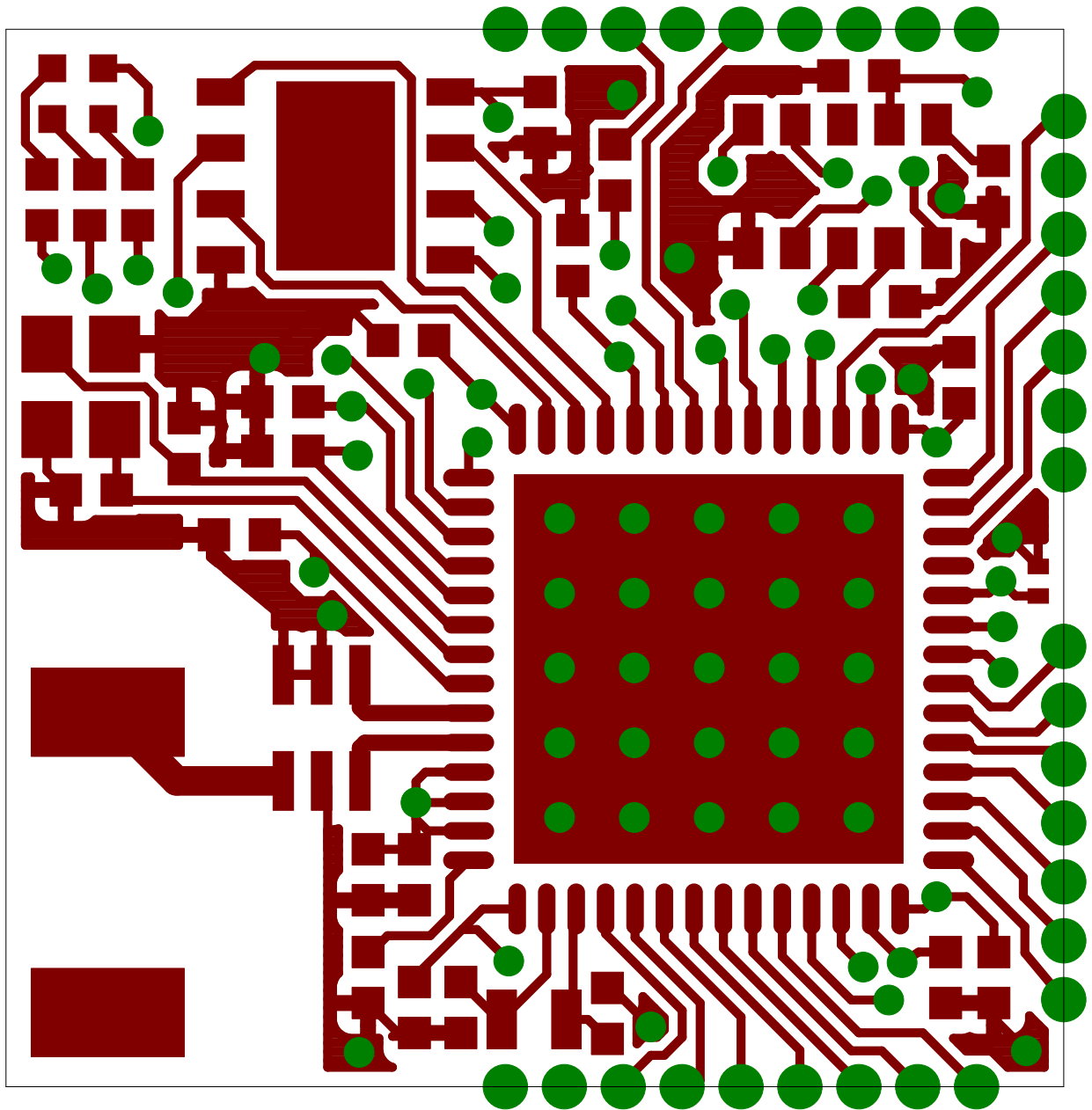
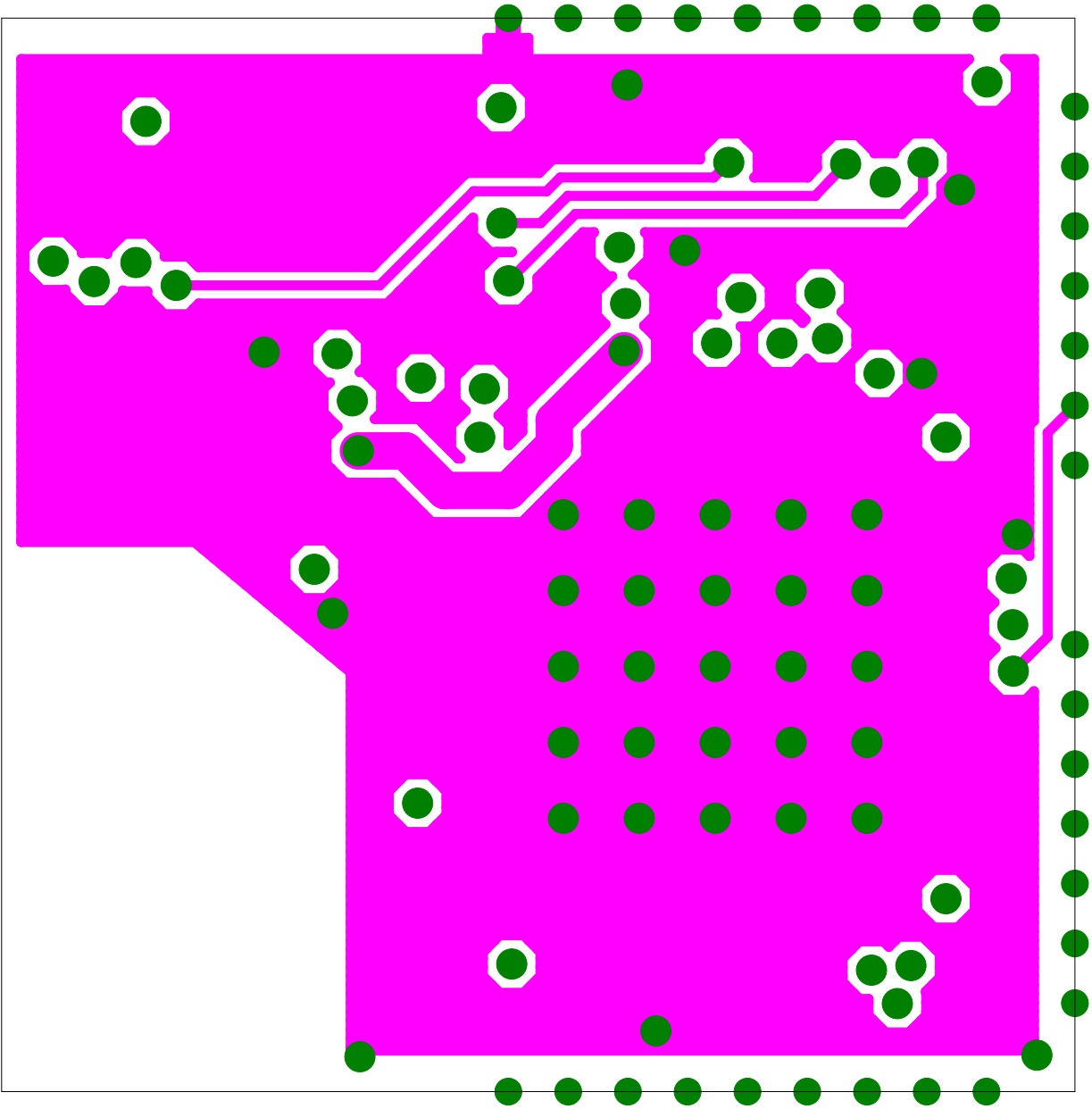
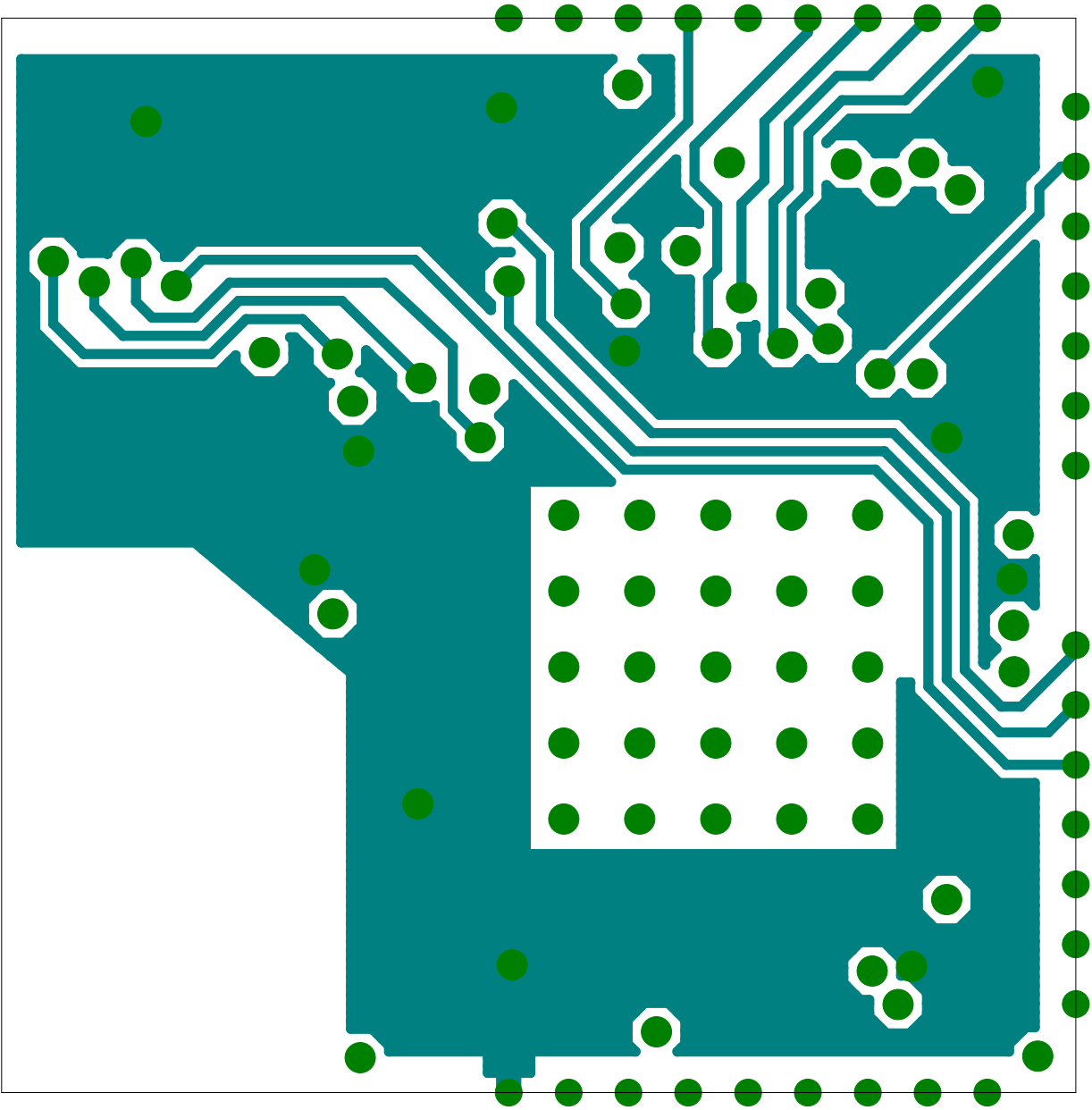


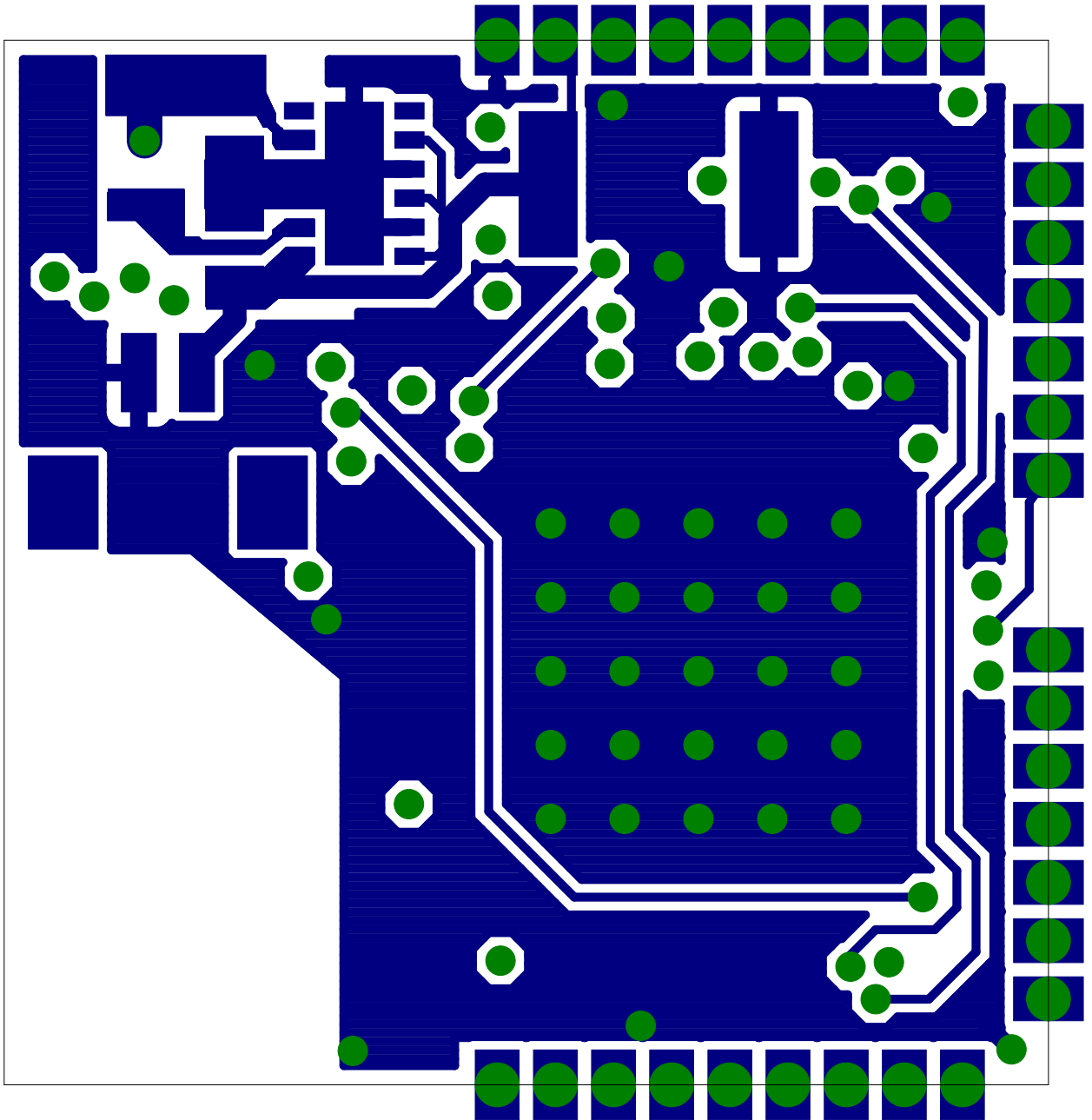
Brad Campbell
2014/08/04

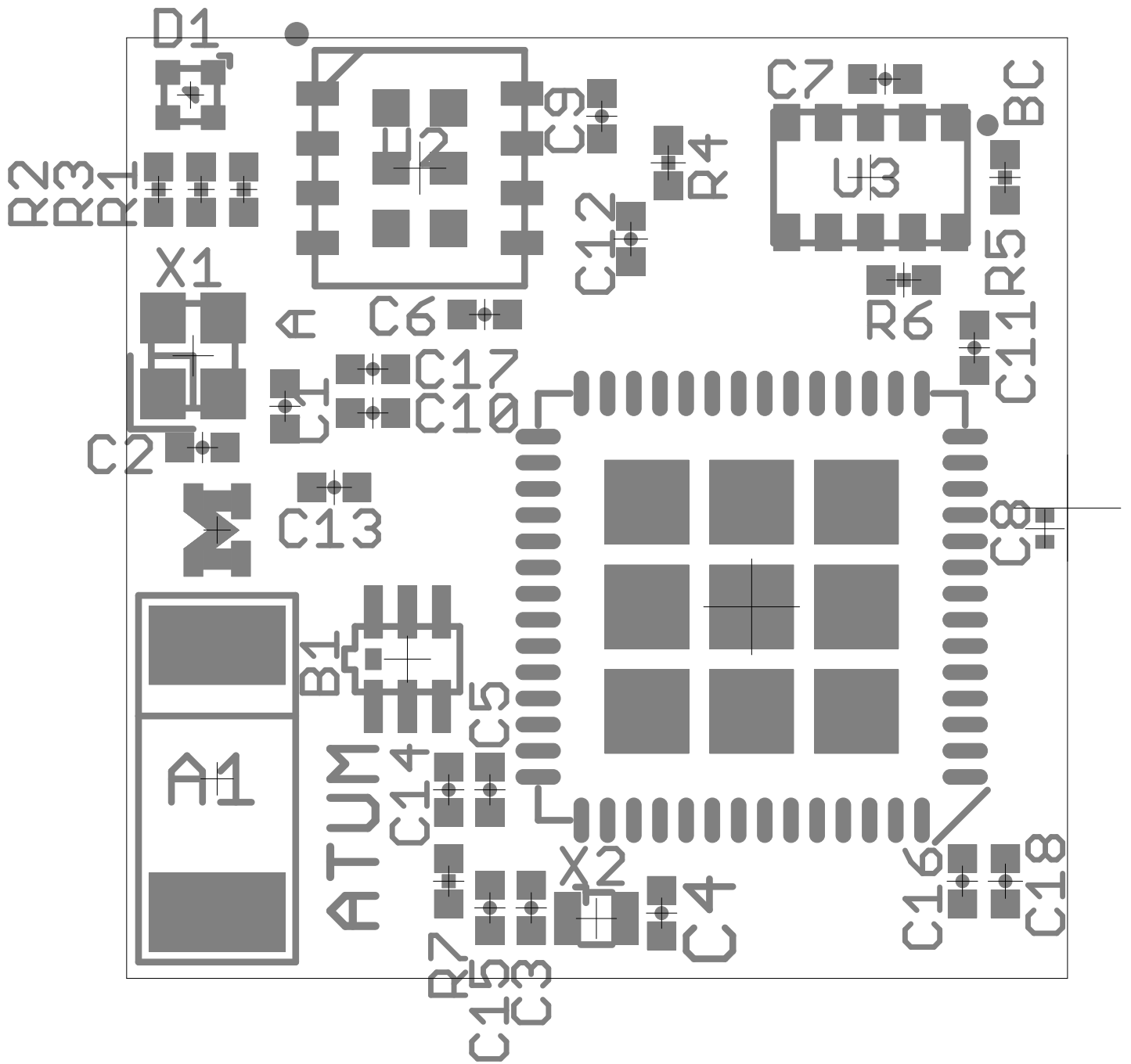


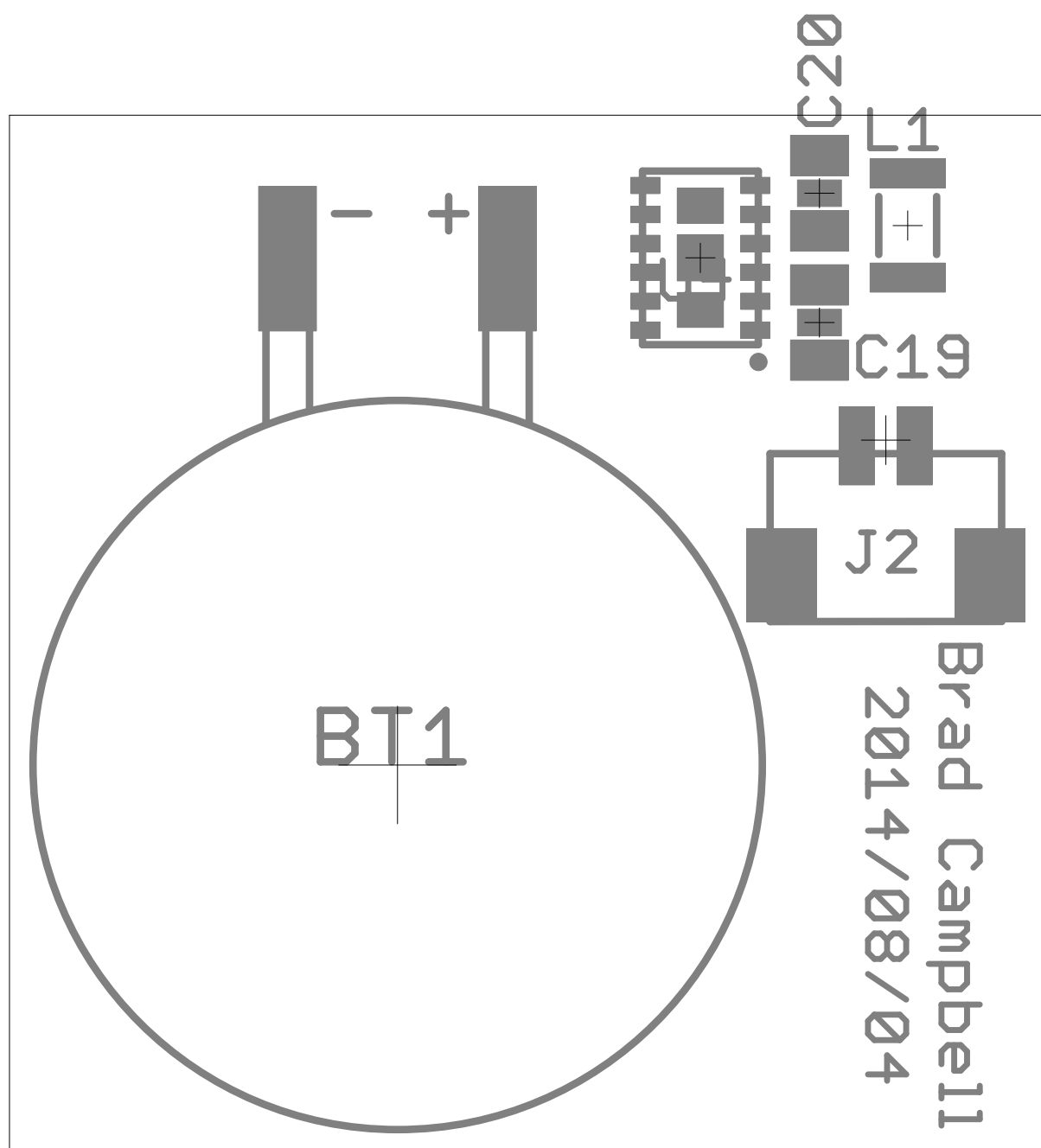




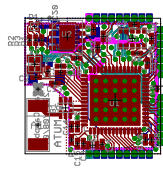
Bottom Copper Layer



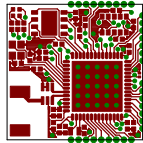




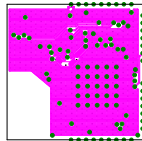
Top and Bottom Layers 1:1 Scale



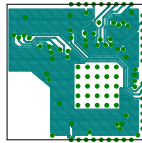
Top Layer 1:1 Scale



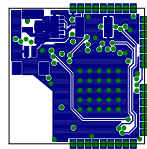
Layer 2 Copper 1:1 Scale



Layer 3 Copper 1:1 Scale



Bottom Copper Layer 1:1 Scale



Sheet1

Qty	Value	Device
1	FRACTUS-2.4GHZ-FR05-S1-N-0-102	FRACTUS-2.4GHZ-FR05-S1-N-0-102
1	2450BM15A0002	2450BM15A0002
1	ML-1220/F1AN	ML-1220/F1AN
2	12pF	CAPACITOR
2	22pF	CAPACITOR
1	220pF	CAPACITOR
1	1nF	CAPACITOR
1	10nF	CAPACITOR
1	0.1uF	C-EUC0201
7	0.1uF	CAPACITOR
3	1uF	CAPACITOR
2	10uF	CAPACITOR0603_CAP
1	SML-LX0404SIUPGUSB	SML-LX0404SIUPGUSB
1	ATUM-HEADER	ATUM-HEADER
1	SH_MALE_2/1MM	SH_MALE_2/1MM
1	2.2uH	MIPSZ2012D
3	1k	RESISTOR
1	2.2k	RESISTOR
2	10k	RESISTOR
1	56k	RESISTOR
1	CC2538	CC2538
1	FM25LBTFDN-8	FM25LBTFDN-8
1	RV-3049-C3	RV-3049-C3
1	TPS62740	TPS62740
1	EPSON-FA-128	EPSON-FA-128
1	ABS05-32.768KHZ-T	ABS05-32.768KHZ-T

Sheet1

Package	Parts
FRACTUS-ANTENNA-FR05-S1-N-0-102	A1
2450BM	B1
ML-1220/F1BN	BT1
0402_CAP	C1, C2
0402_CAP	C3, C4
0402_CAP	C5
0402_CAP	C6
0402_CAP	C7
0201_CAP	C8
0402_CAP	C9, C10, C11, C12, C13, C14, C15
0402_CAP	C16, C17, C18
0603_CAP	C19, C20
1MM_SQ_4PAD	D1
ATUM-HEADER	J1
SH-1X2/1MM	J2
MIPSZ201D	L1
0402_RES	R1, R2, R3
0402_RES	R4
0402_RES	R5, R6
0402_RES	R7
S-PVQFN-N56	U1
TDFN-8	U2
MICRO-CRYSTAL-C3	U3
R-PWSON-12	U4
FA-128	X1
ABS05	X2

Sheet1

Description	DIGIKEY
Fractus Compact Reach Xtend™ chip antenna	
BALUN JTI MATCHED ZIGBEE	712-1536-1-ND
BATTERY LITH 3V RECHARGE PC PINS	P663-ND
0402 Capacitor	445-1236-1-ND
0402 Capacitor	490-5868-1-ND
0402 Capacitor	445-1251-1-ND
0402 Capacitor	445-2651-1-ND
0402 Capacitor	445-1260-1-ND
0201 Capacitor	445-1796-1-ND
0402 Capacitor	445-1265-1-ND
0402 Capacitor	445-4998-1-ND
CAP CER 10UF 6.3V 20% X5R 0603	490-7316-1-ND
1mm^2 RGB LED	67-2125-1-ND
1.0mm pitch/Disconnectable Crimp style connectors	455-1788-2-ND
FDK Multi-layer Power Inductor (Very Small Type)	
Resistor	RHM1.0KCECT-ND
Resistor	RHM2.2KCECT-ND
Resistor	RHM10KCECT-ND
Resistor	RHM56KBHCT-ND
A Powerful System-On-Chip for 2.4-GHz IEEE 802.15.4, 6LoWPAN	296-35797-1-ND
IC FRAM 4KBIT 10MHZ 8SOIC	FM25L04B-DGRA-ND
Ultra miniature Real-Time-Clock Module	
360nA Step Down Converter for Low Power Applications	296-37134-1-ND
MHz RANGE CRYSTAL UNIT	SER3800CT-ND
32.768kHz Crystal	535-11899-1-ND

Sheet1

MOUSER	NEWARK	RICHARDSON_RFPD
		FR05-S1-N-0102B
609-2450BM15A0002E	41T1684	
658-ML-1220/F1BN		
	90R7560	
	48W5745	
	55T0065	
	90R7554	
	90R7604	
	90R7553	
	87R3259	
	90R7580	
696-LX0404SIUPGUSB	23T0583	
	26P0950	
595-CC2538SF53RTQT	87W7713	
877-FM25L04B-DG		
	09X0513	
595-TPS62740DSST	27X9745	
732-FA128-32F20X-K3		
815-ABS05-32.768K-T	24W8430	