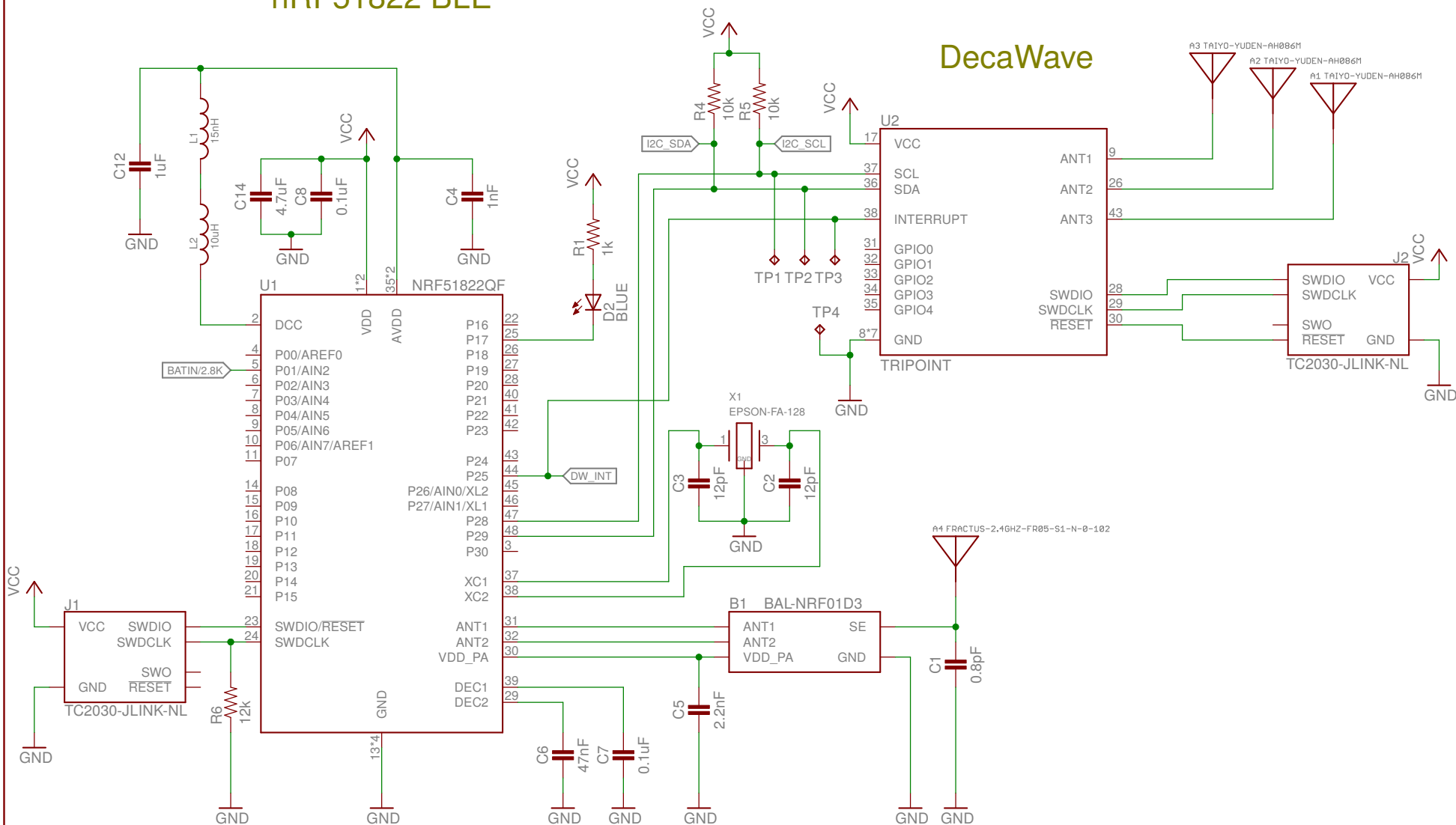




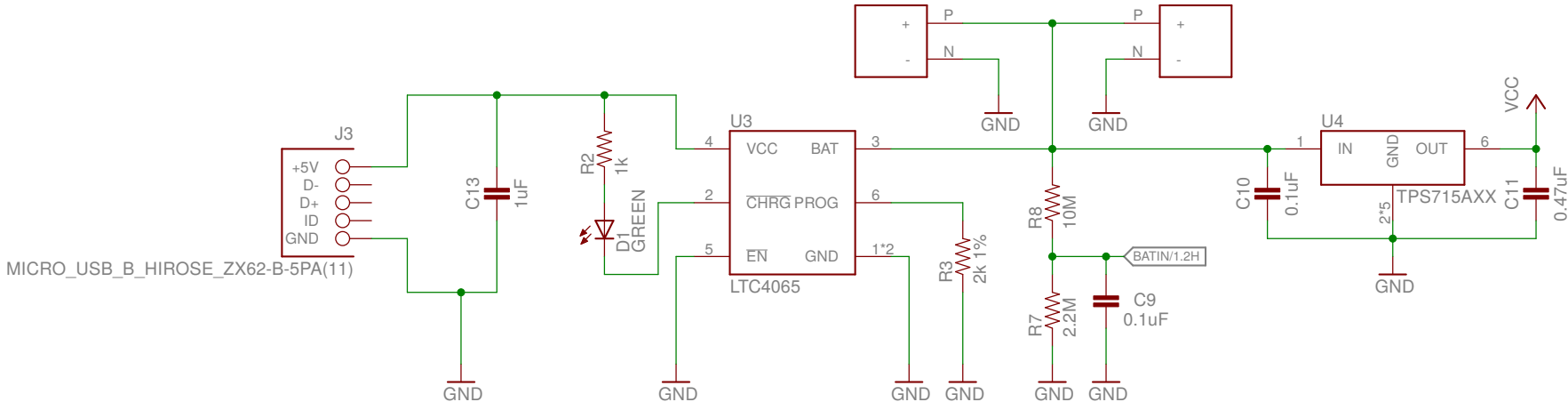
# nRF51822 BLE

# DecaWave




<b>M</b> PolyTag	REV: A
	Author: Brad Campbell
	Date: 7/15/15 2:18 PM
Sheet: 1/2	

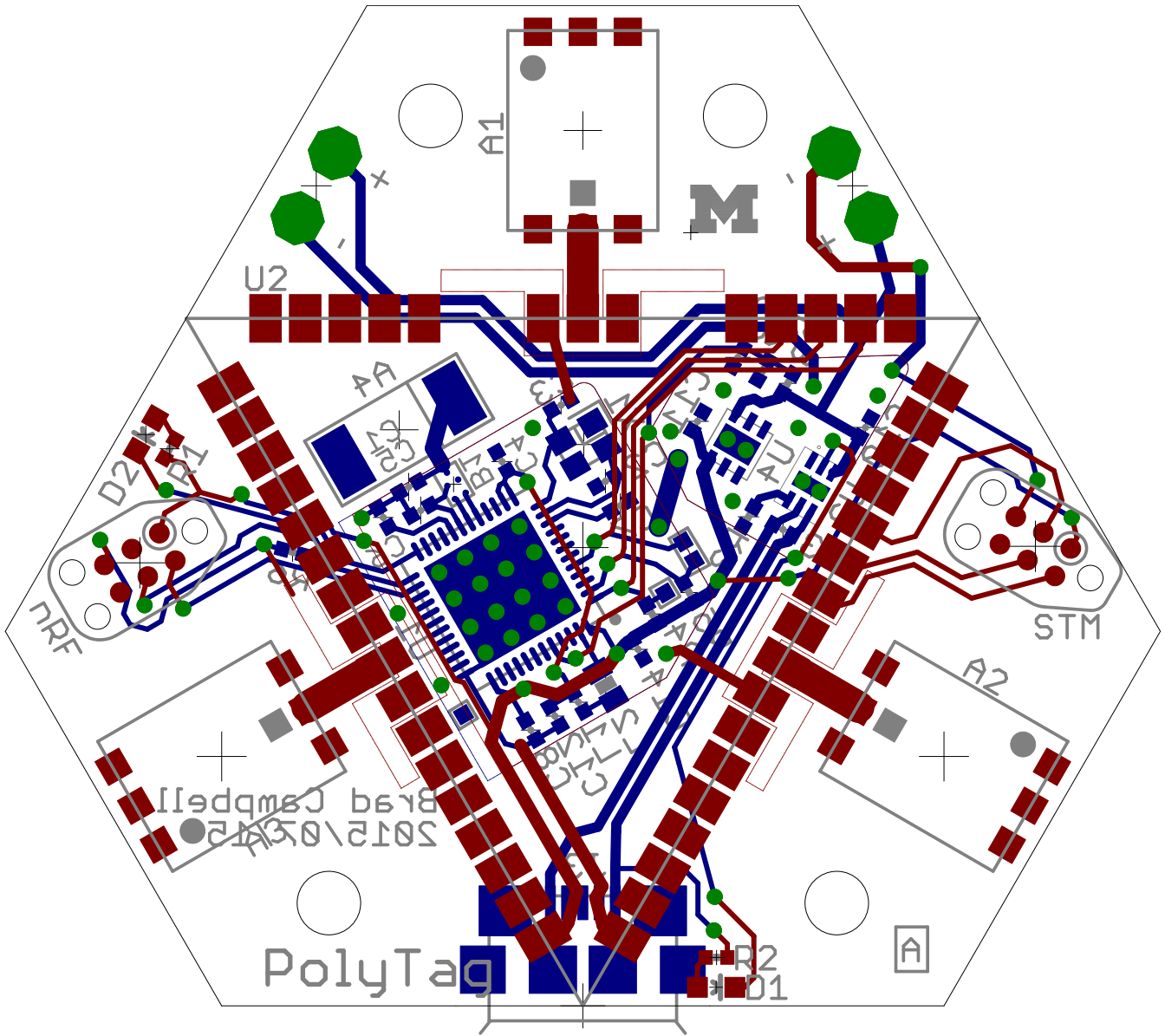
# Power Supply and Charging

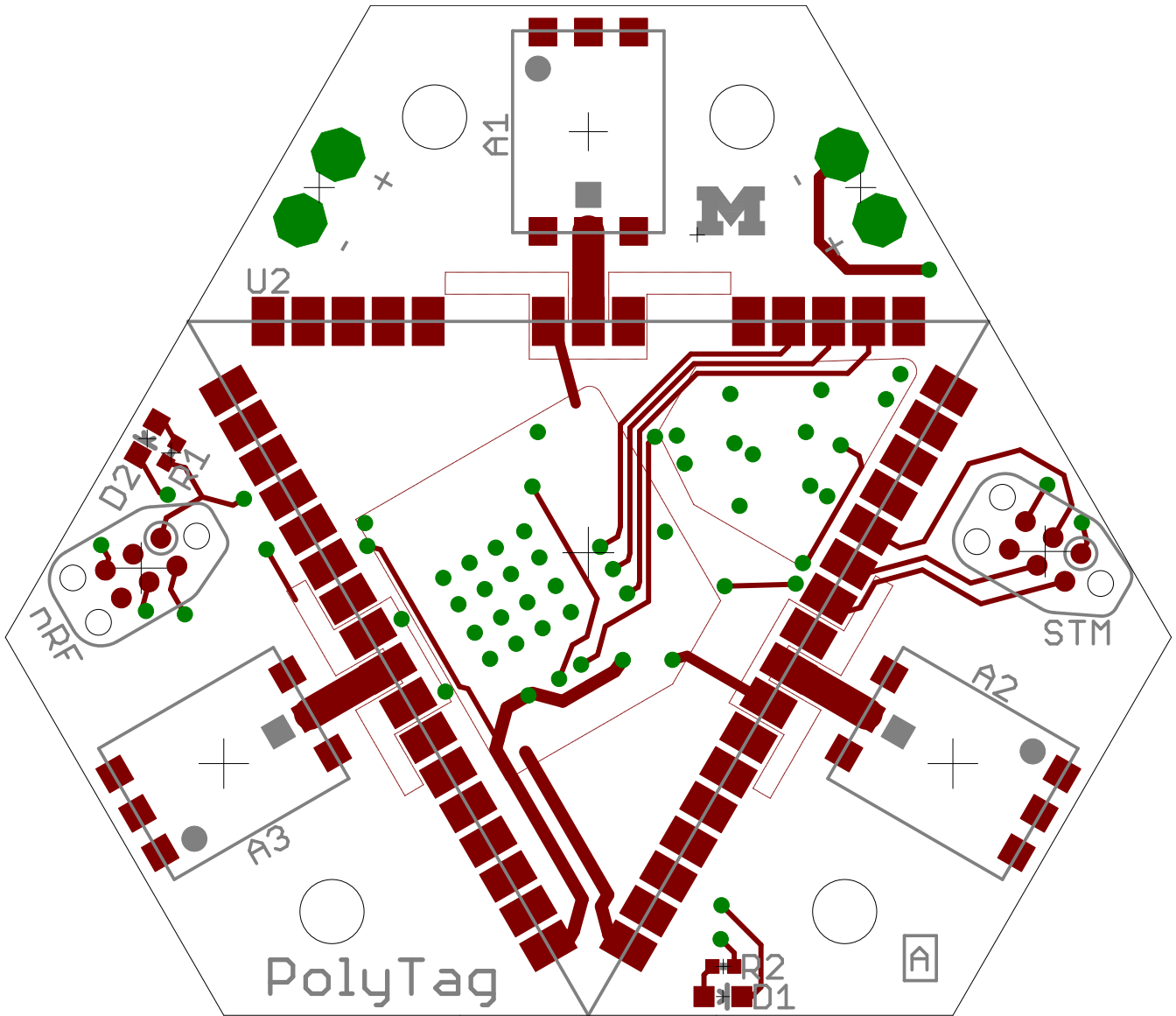


MICRO\_USB\_B\_HIROSE\_ZX62-B-5PA(11)

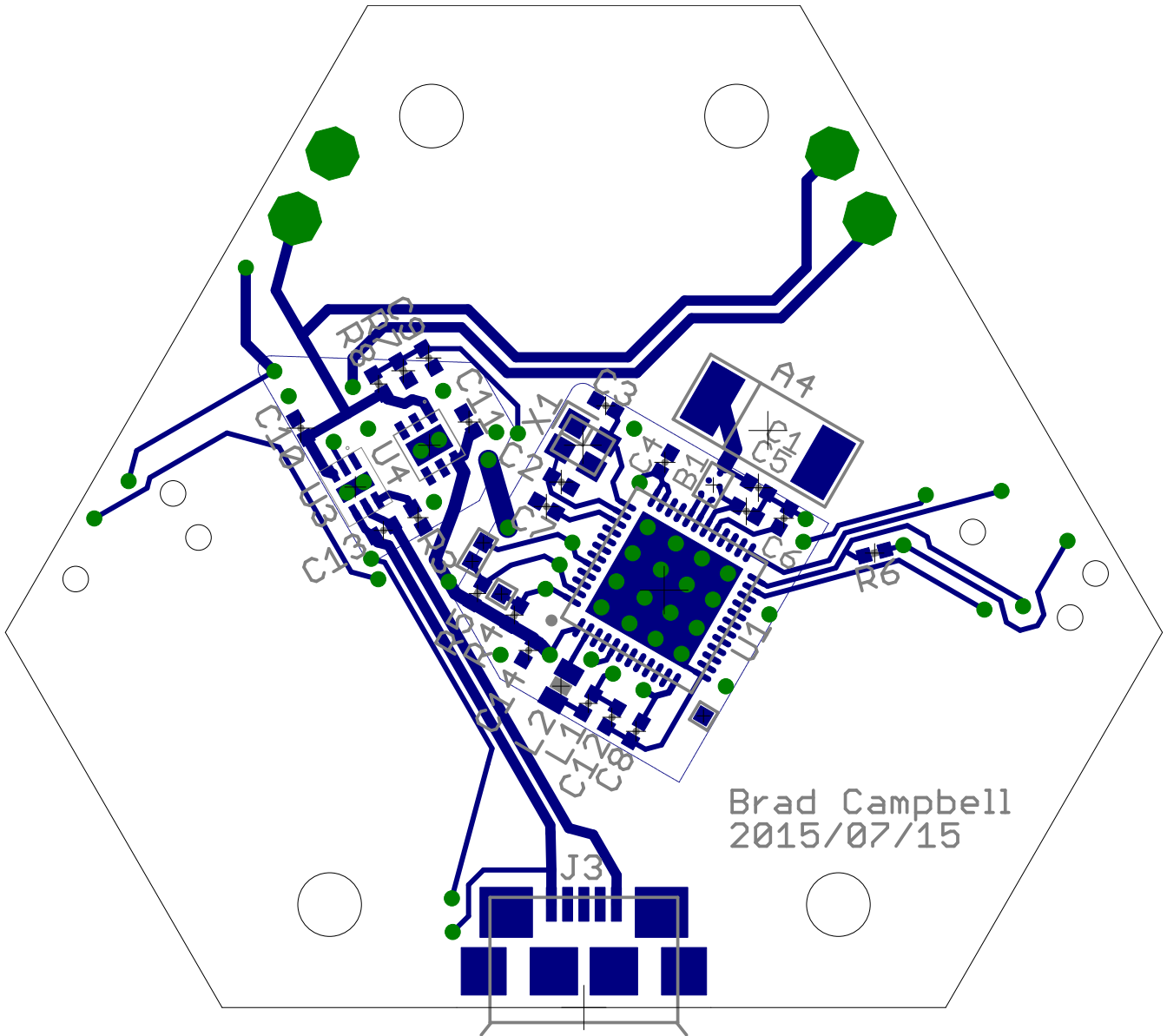
		REV: A
Author: Brad Campbell		
Date: 7/15/15 2:18 PM		Sheet: 2/2

Top and Bottom Layers

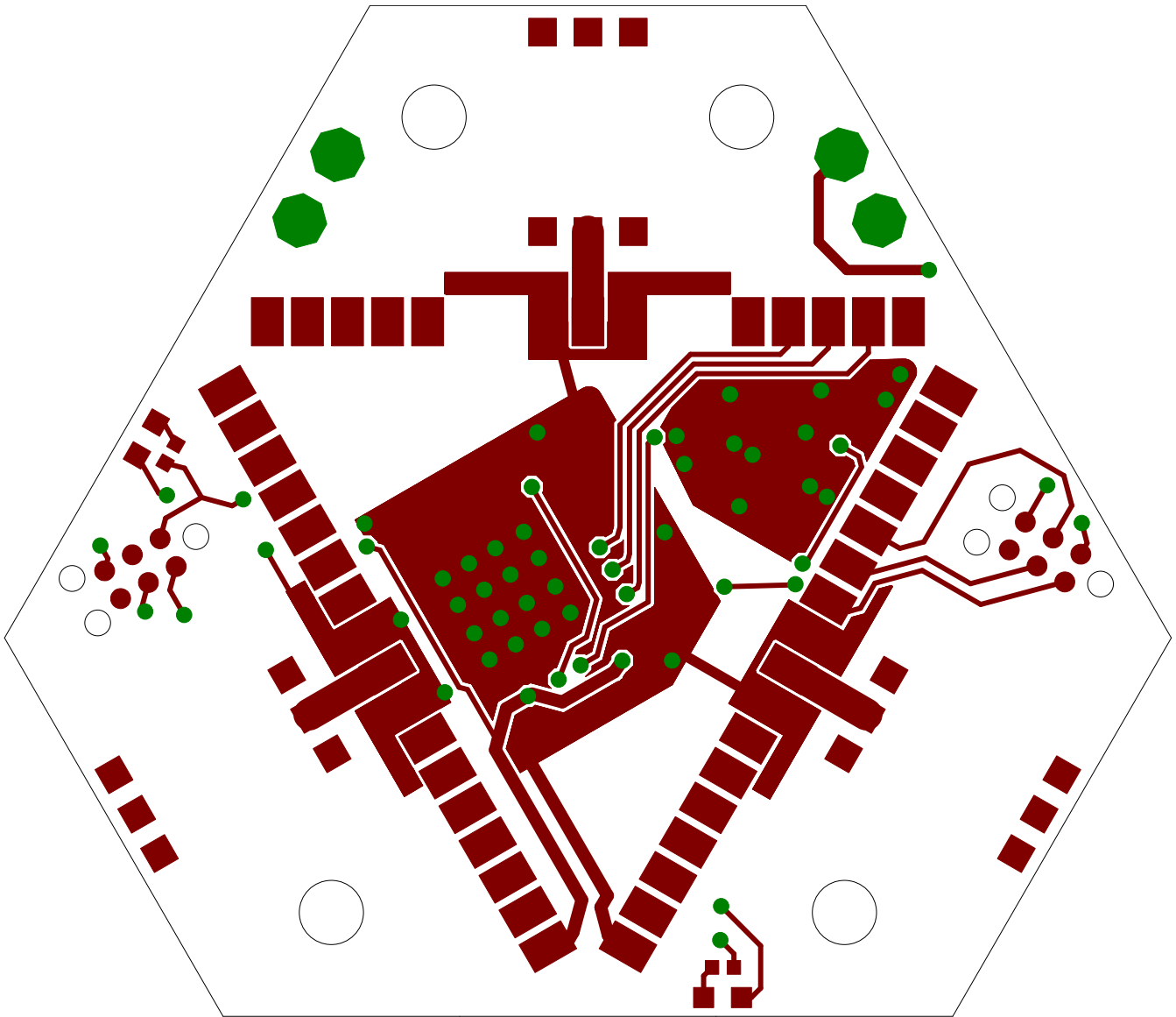




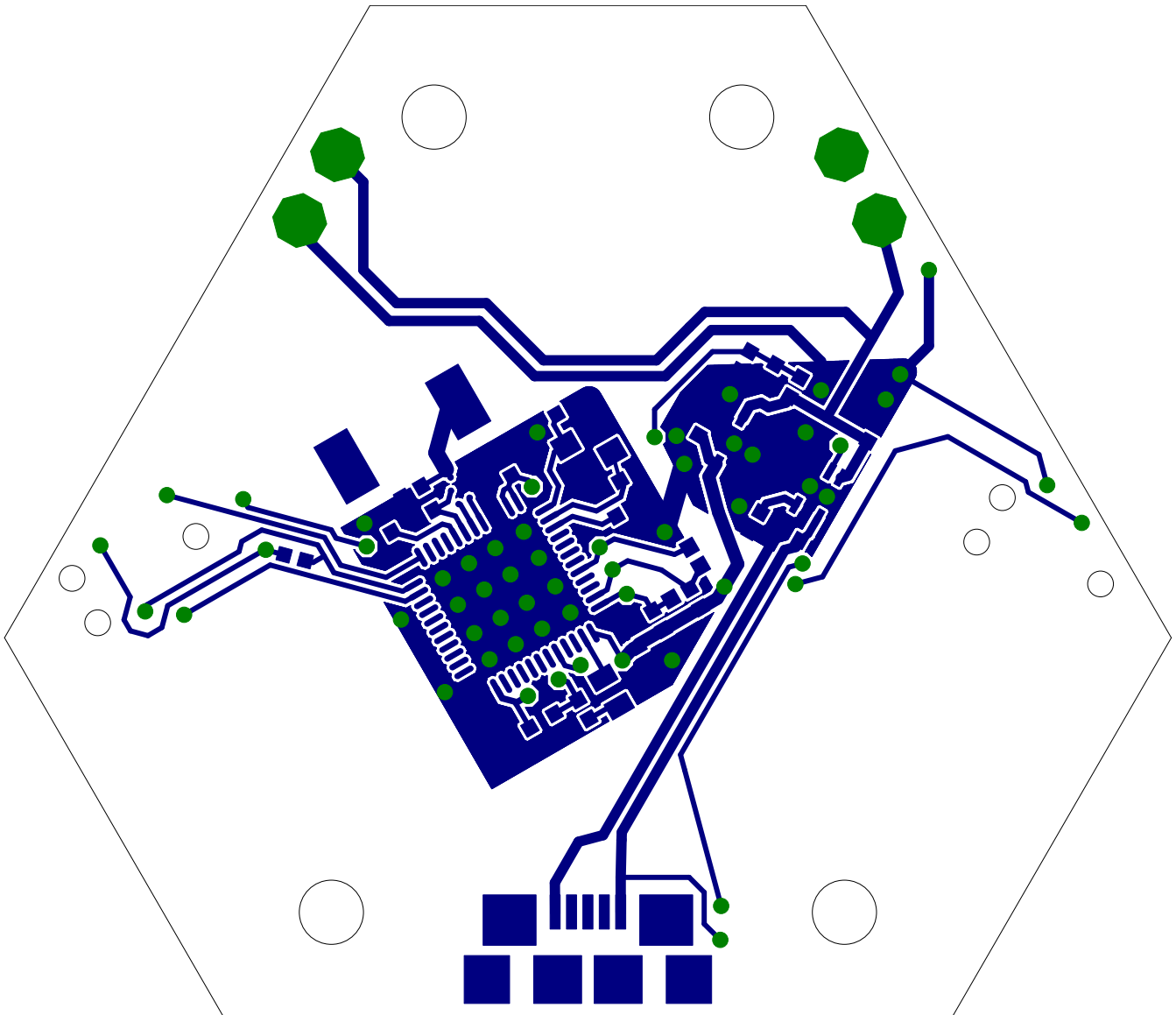
Bottom Layer



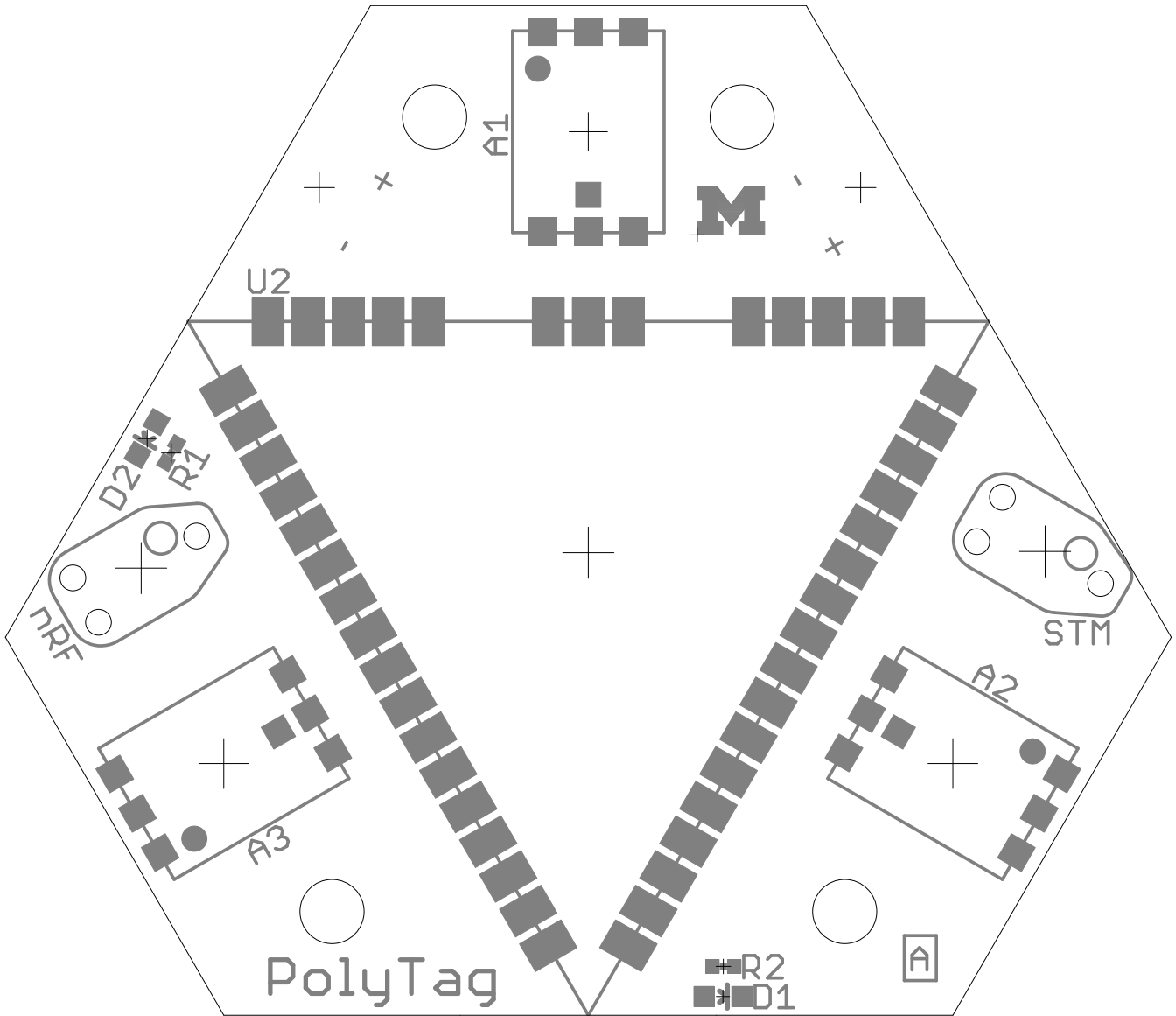
Top Copper Layer



Bottom Copper Layer

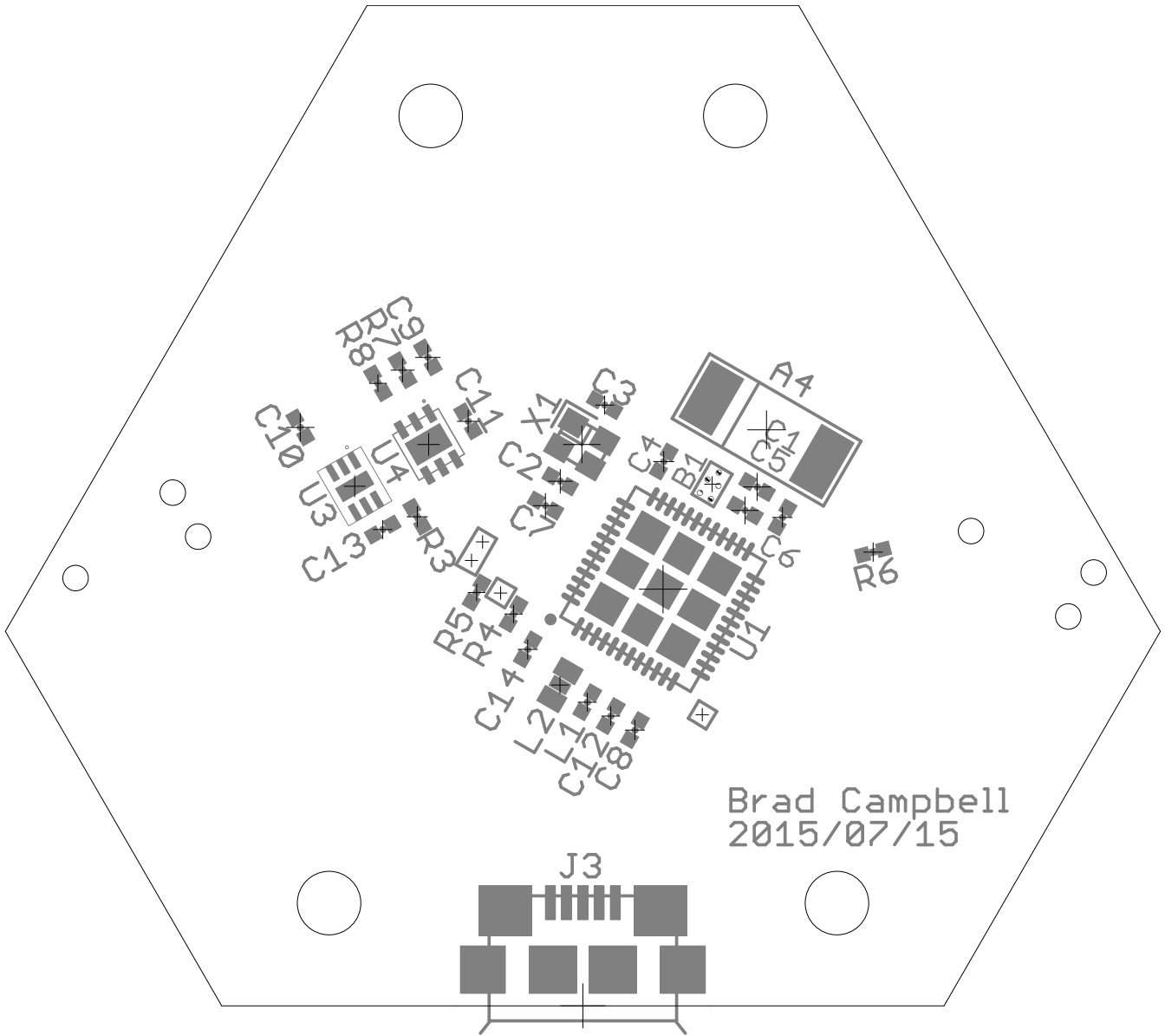


Top Paste Layer with Silkscreen

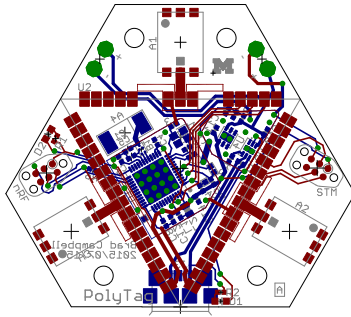




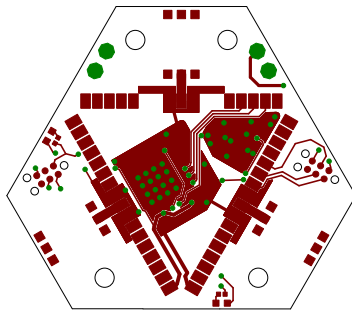
Bottom Paste Layer with Silkscreen



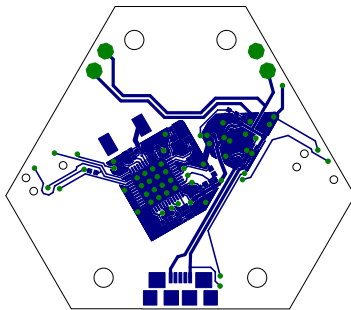
Top and Bottom Layers 1:1 Scale



Top Layer 1:1 Scale



Bottom Copper Layer 1:1 Scale



Sheet1

Qty	Value	Device
3	TAIYO-YUDEN-AH086M	TAIYO-YUDEN-AH086M
1	FRACTUS-2.4GHZ-FR05-S1-N-0-102	FRACTUS-2.4GHZ-FR05-S1-N-0-102
1	BAL-NRF01D3	BAL-NRF01D3
1	0.8pF	CAPACITOR
2	12pF	CAPACITOR
1	1nF	CAPACITOR
1	2.2nF	CAPACITOR
1	47nF	CAPACITOR
4	0.1uF	CAPACITOR
1	0.47uF	CAPACITOR
2	1uF	CAPACITOR
1	4.7uF	CAPACITOR
1	GREEN	LED0603
1	BLUE	LED0603
1	MICRO_USB_B_HIROSE_ZX62-B-5PA(11)	MICRO_USB_B_HIROSE_ZX62-B-5PA(11)
1	15nH	INDUCTOR0402
1	10uH	INDUCTOR0603
2	1k	RESISTOR0402_RES
1	2k 1%	RESISTOR0402_RES
2	10k	RESISTOR0402_RES
1	12k	RESISTOR0402_RES
1	2.2M	RESISTOR0402_RES
1	10M	RESISTOR0402_RES
1	NRF51822QF	NRF51822QF
1	TRIPOINT	TRIPOINT
1	LTC4065	LTC4065
1	TPS715AXX	TPS715AXX
1	16MHz	TXC-8Y

Sheet1

Package	Parts
TAIYO-YUDEN-AH086M	A1, A2, A3
FRACTUS-ANTENNA-FR05-S1-N-0-102	A4
BAL-NRF01D3	B1
0402_CAP	C1
0402_CAP	C2, C3
0402_CAP	C4
0402_CAP	C5
0402_CAP	C6
0402_CAP	C7, C8, C9, C10
0402_CAP	C11
0402_CAP	C12, C13
0402_CAP	C14
LED-0603	D1
LED-0603	D2
USB_MICRO_B-HIROSE-ZX62-B-5PA(11)	J3
0402_CAP	L1
0603_CAP	L2
0402_RES	R1, R2
0402_RES	R3
0402_RES	R4, R5
0402_RES	R6
0402_RES	R7
0402_RES	R8
QFN-48-6MM	U1
TRIPOINT	U2
DFN-6/2MM	U3
WDFN-6	U4
TXC-8Y	X1

## Sheet1

### Description

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UWB Antenna - 3.1-8GHz

Fractus Compact Reach Xtend™ chip antenna is engineered specifically for Bluetooth, 50 ohm nominal input / conjugate match balun to nRF51422-QFAA,

0402 Capacitor

0402 Capacitor

0402 Capacitor

0402 Capacitor

0402 Capacitor

0402 Capacitor

0402 Capacitor

0402 Capacitor

0402 Capacitor

LEDs

LEDs

Connector Receptacle USB - micro B 2.0 5 Position Surface Mount, Right Angle, Horizontal

INDUCTOR HI FREQ 15NH 5% 0402

INDUCTOR 10UH 50MA 0603

Resistor

Resistor

Resistor

Resistor

Resistor

Resistor

Multiprotocol Bluetooth® 4.0 low energy/2.4 GHz RF SoC

UWB Ranging Module

LION/LIPO Battery Charging IC Low current

80ma LDO Regulator. Very low quiescent current. Always active.

CRYSTAL 16MHZ 8PF SMD

Sheet1

DIGIKEY	MOUSER	NEWARK RICHARDSON_RFPD
587-2204-1-ND		
		FR05-S1-N-0102B
497-13637-1-ND	511-BAL-NRF01D3	
490-6269-1-ND		
490-6197-1-ND		
490-1303-1-ND		
490-5419-1-ND		
445-1264-1-ND		
490-1318-6-ND		
490-3266-1-ND		
1276-1513-1-ND		
445-5947-1-ND		
160-1647-1-ND		
H11634CT-ND	798-ZX62-B-5PA11	86P8793
587-1521-1-ND		
490-4025-1-ND		
RHM1.0KCECT-ND		
RHM2KCDCT-ND		
RHM10.0KCDCT-ND		
RHM12.0KCDCT-ND		
541-2.20MLCT-ND		
RHM10MBICT-ND		
1490-1032-1-ND	949-NRF51822-QFAB-R7	
LTC4065LEDC#TRMPBFCT-ND		
296-22584-1-ND		
887-2003-1-ND		