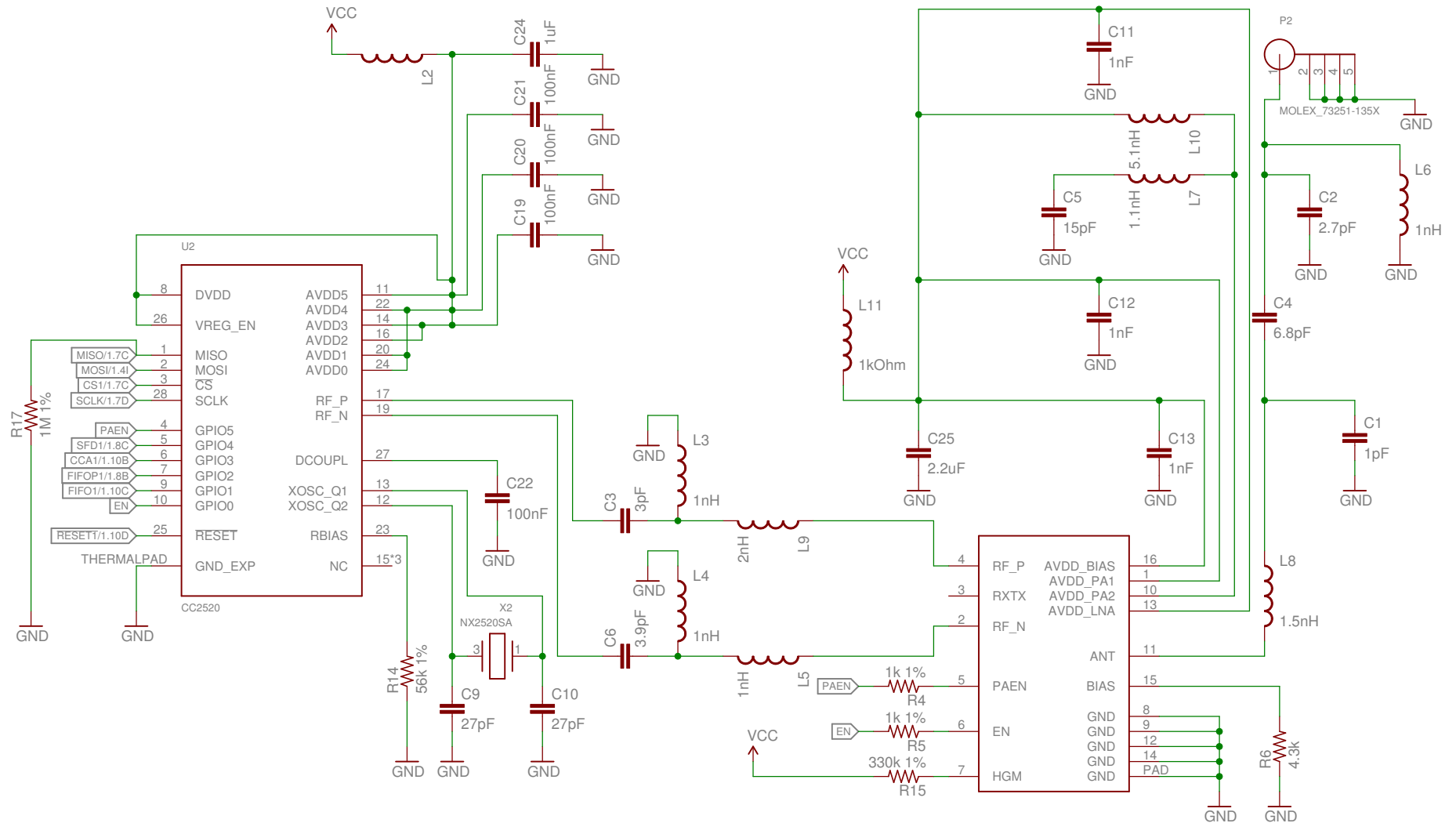
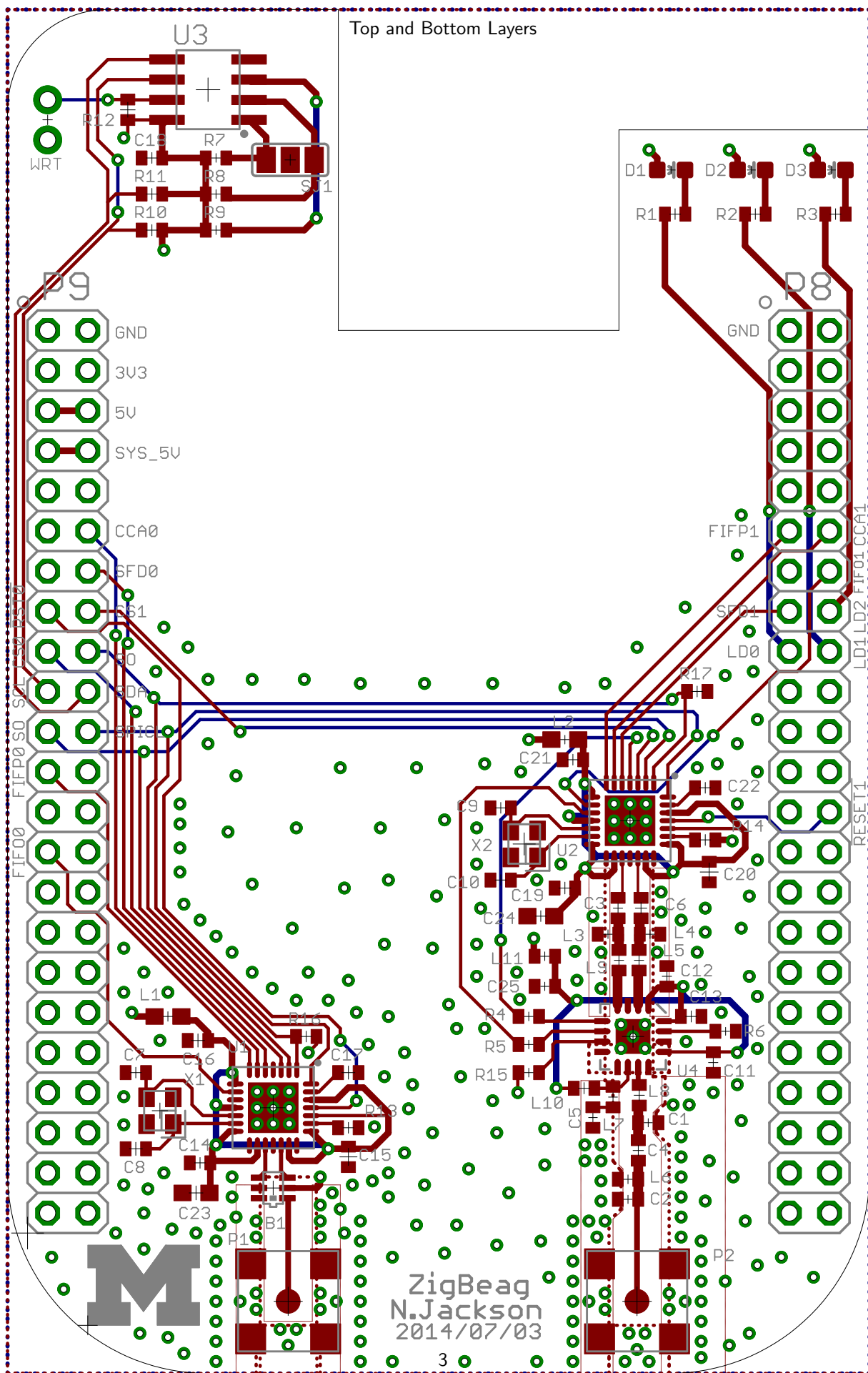


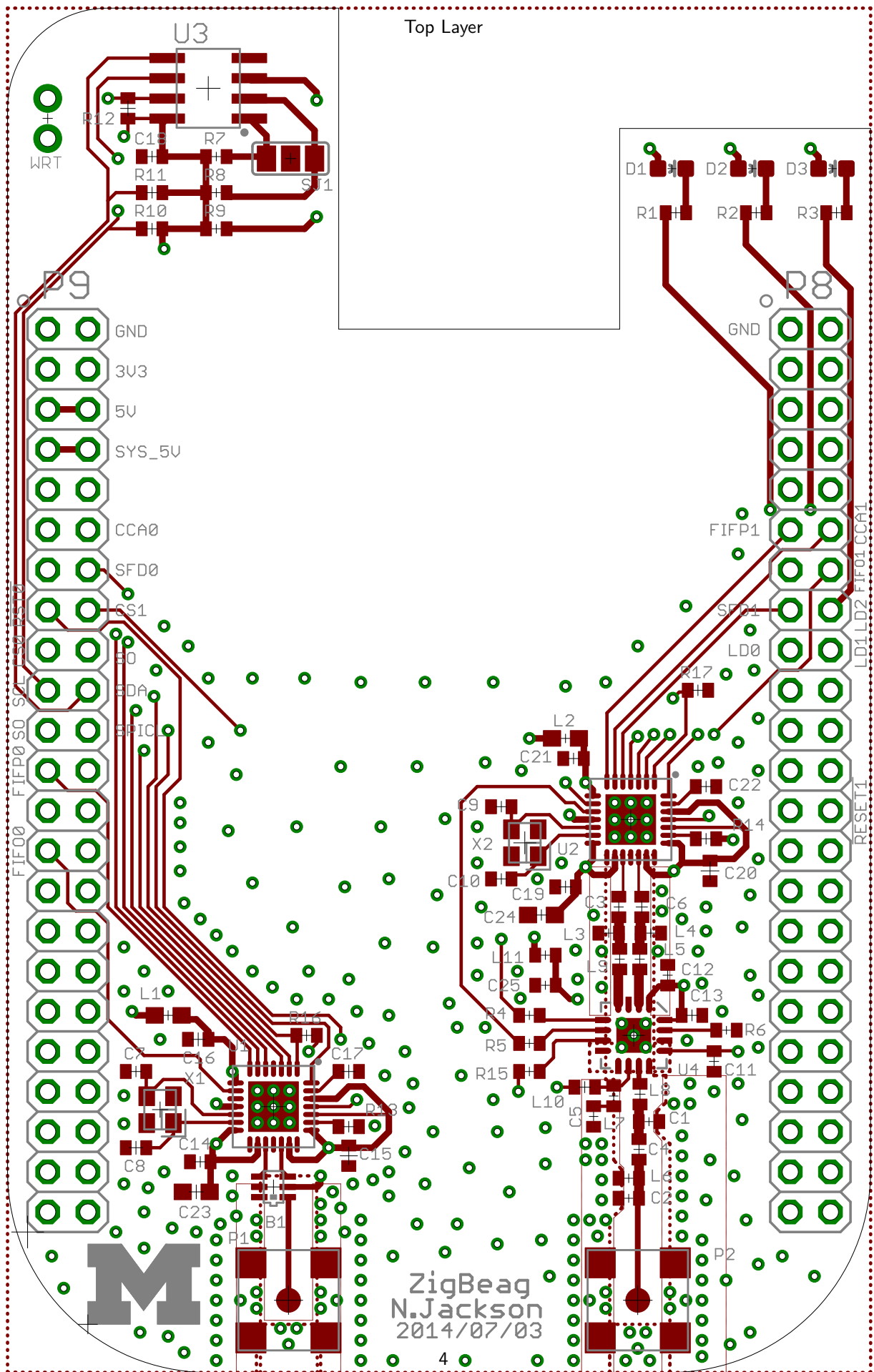
M BBB + CC2520	REV: A
	Author: Neal Jackson
	Date: 9/4/14 4:31 PM
Sheet: 1/2	

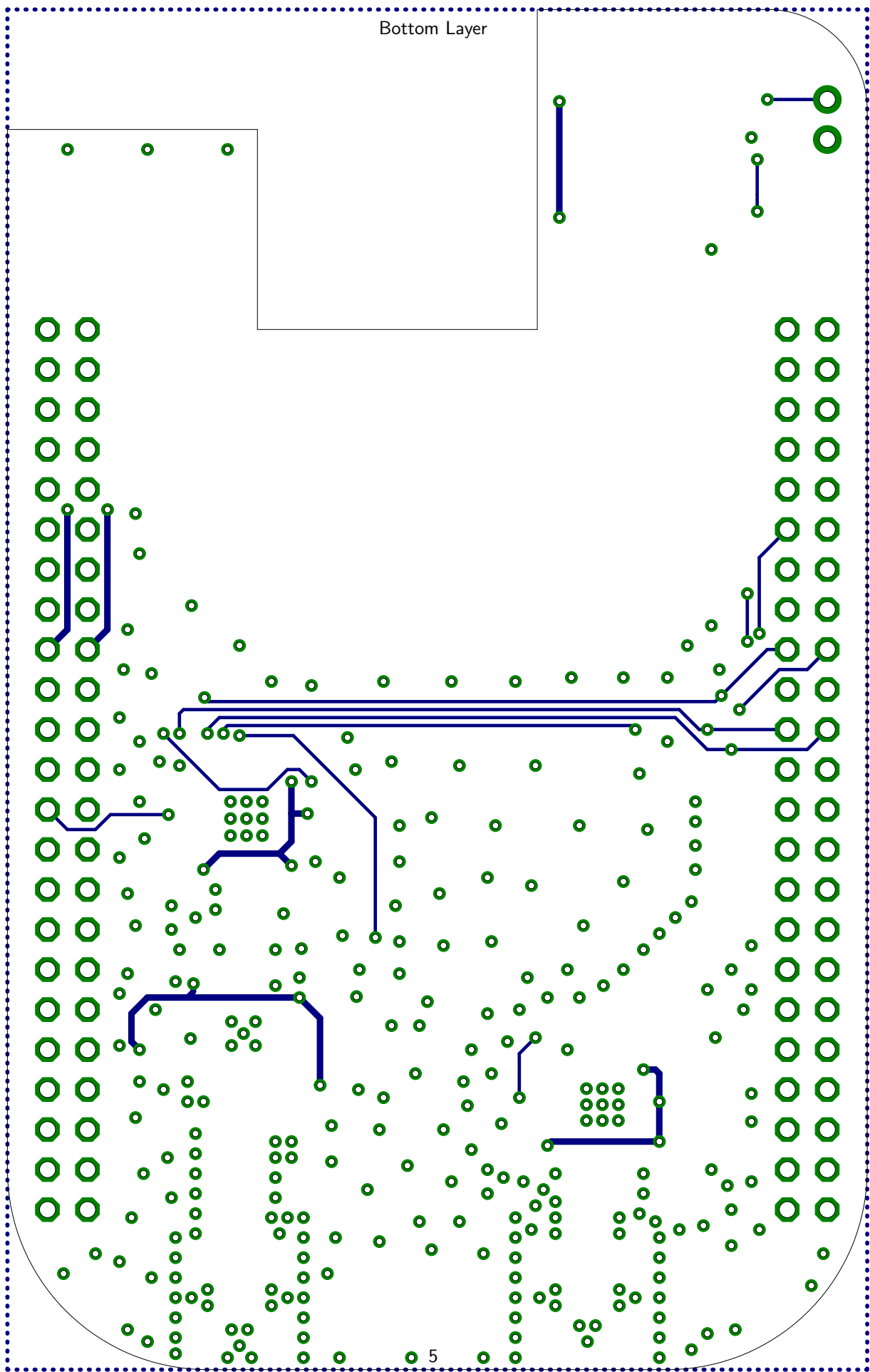


M BBB + CC2520	REV: A
Author: Neal Jackson	
Date: 9/4/14 4:31 PM	Sheet: 2/2

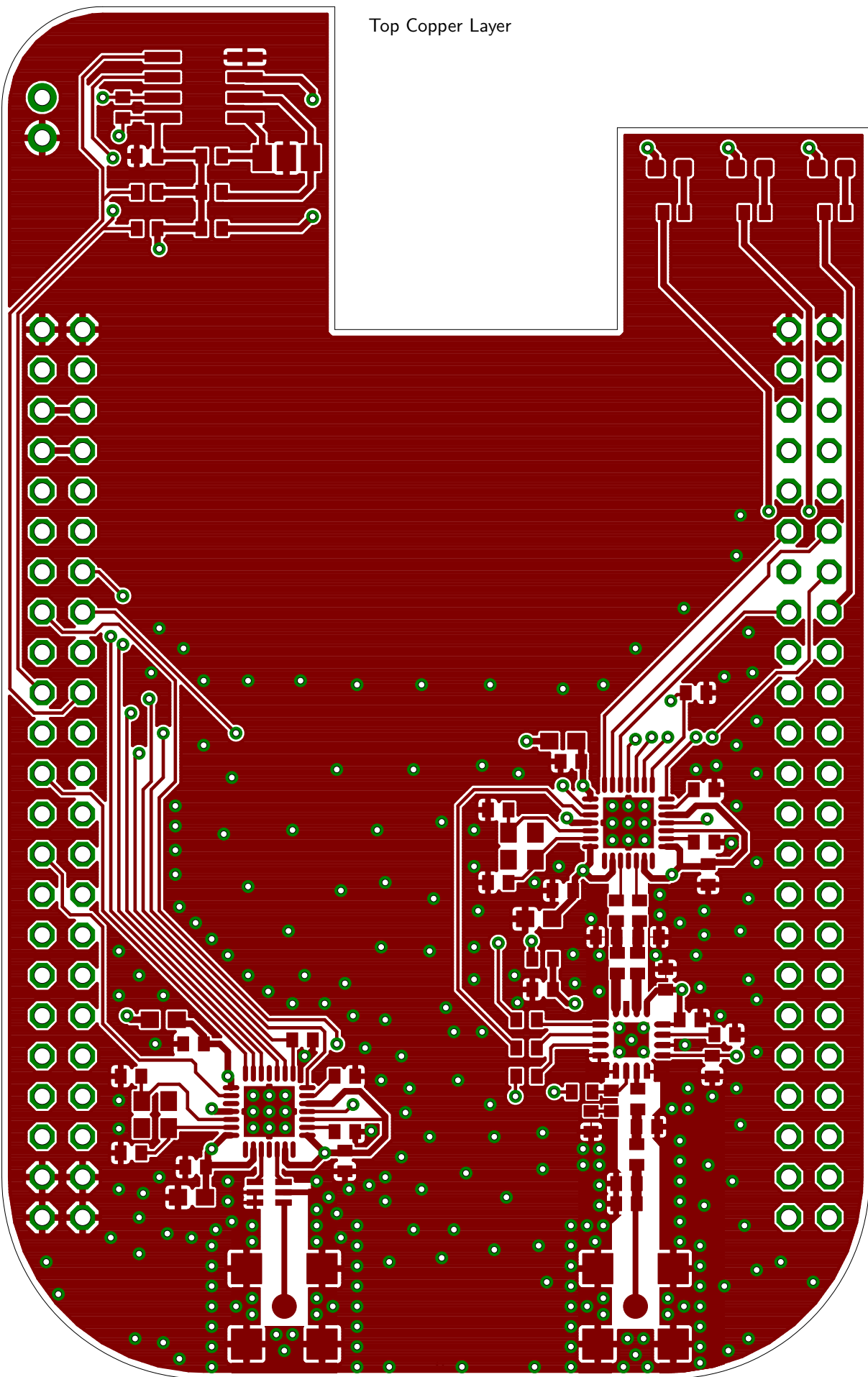


ZigBeag
N.Jackson
2014/07/03

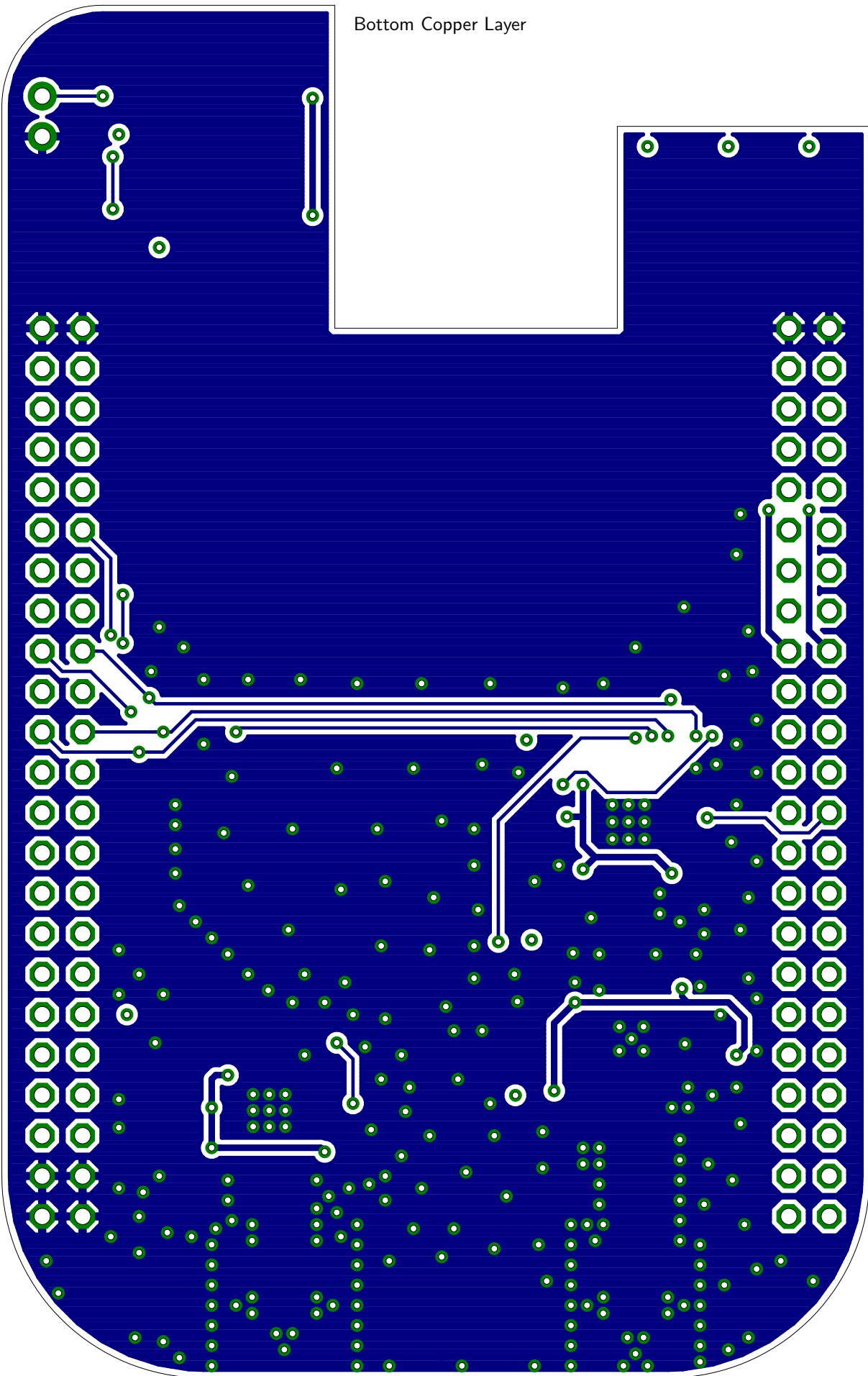


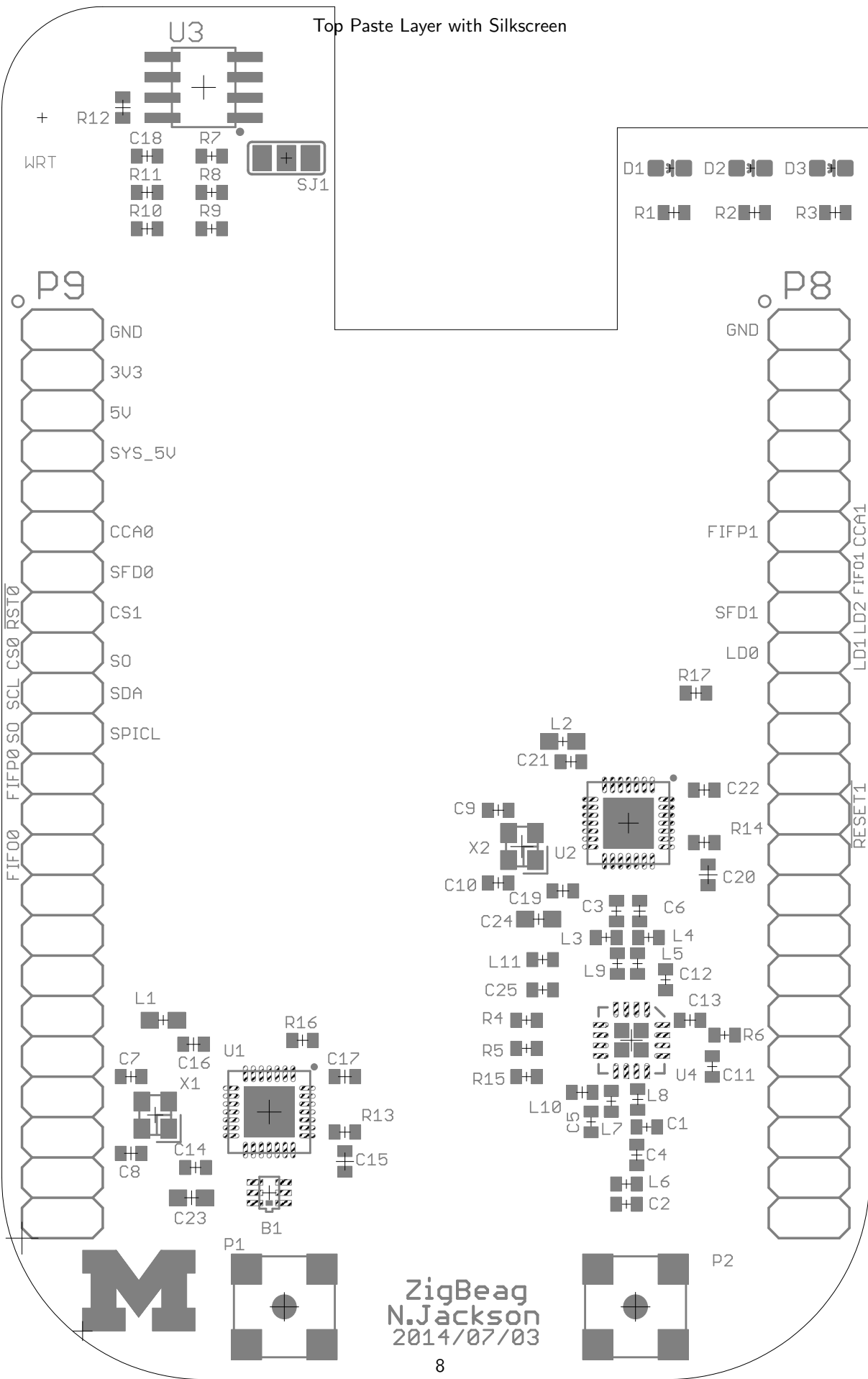


Top Copper Layer

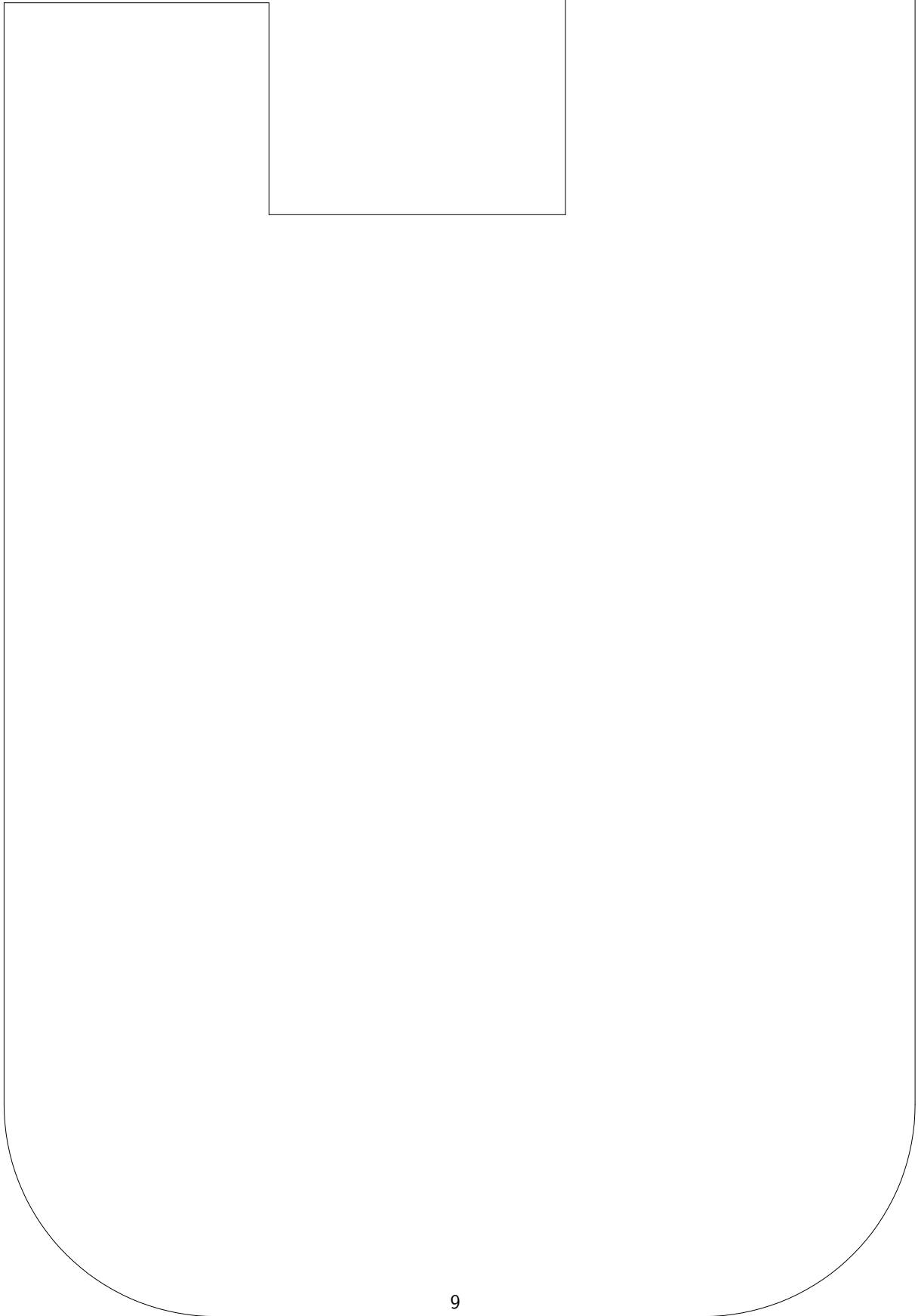


Bottom Copper Layer

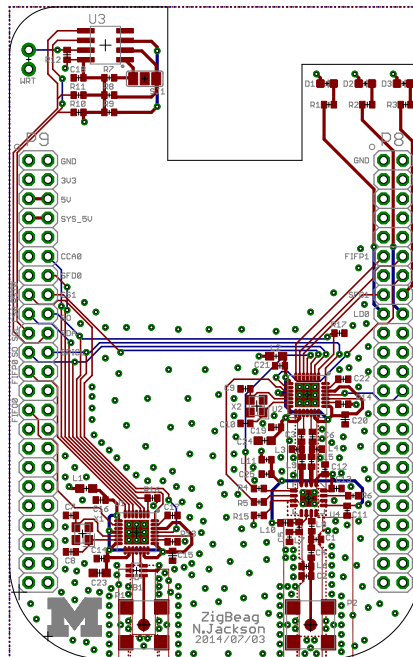




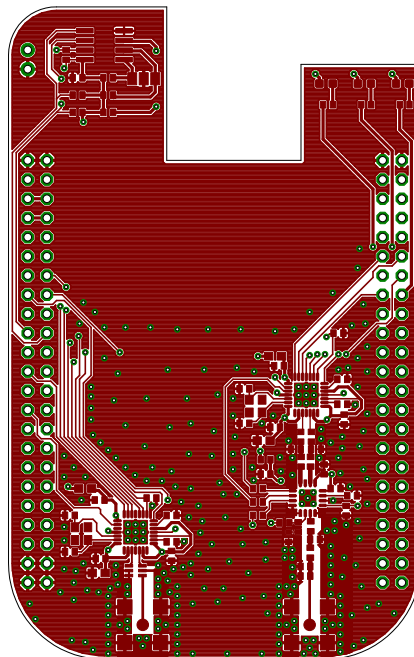
Bottom Paste Layer with Silkscreen

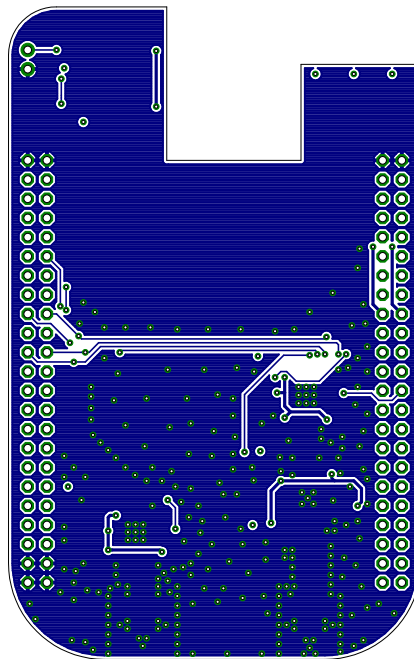


Top and Bottom Layers 1:1 Scale



Top Layer 1:1 Scale





Qty	Value	Device
1	2450BM15A0002	2450BM15A0002
1	1pF	C-EUC0402
3	1nF	C-EUC0402
9	100nF	C-EUC0402
1	2.7pF	C-EUC0402
2	1uF	C-EUC0603
1	2.2uF	C-EUC0402
1	3pF	C-EUC0402
1	6.8pF	C-EUC0402
1	15pF	C-EUC0402
1	3.9pF	C-EUC0402
4	27pF	C-EUC0402
1		LED0603
1		LED0603
1		LED0603
2	1k Ohm	INDUCTOR0603
1	5.1nH	INDUCTOR0402
1	1k Ohm	INDUCTOR0402
4	1nH	INDUCTOR0402
1	1.1nH	INDUCTOR0402
1	1.5nH	INDUCTOR0402
1	2nH	INDUCTOR0402
2	MOLEX_73251-135X	MOLEX_73251-135X
2	BBB_HEADERS	BBB_HEADERS
3		470 R-US_R0402
2	5.6k 5%	R-US_R0402
1	10k 1%	R-US_R0402
2	56k 1%	R-US_R0402
1	330k 1%	R-US_R0402
2	1M 1%	R-US_R0402
2	1k 1%	R-US_R0402
1	4.3k	R-US_R0402
3	4.75k	R-US_R0402
2	CC2520	CC2520
1	CAT24C256WI-GT3	CAT24C256WI-GT3
1	CC2591	CC2591
1	JUMPER-PTH-2-NO	JUMPER-PTH-2-NO
2	NX2520SA	NX2520SA

Package
2450BM
C0402
C0402
C0402
C0402
C0603
C0402
C0402
C0402
C0402
C0402
C0402
LED-0603
LED-0603
LED-0603
L0603
C0402
C0402
C0402
C0402
C0402
C0402
SMA-J/PCB
BBB_HEADERS
R0402
R0402
R0402
R0402
R0402
R0402
R0402
R0402
R0402
S-PVQFN-N28
SOIC-8
PVQFN-16
PTH-JUMPER-2-NO_NO_SILK
NX2520SA

Parts

B1

C1

C11, C12, C13

C14, C15, C16, C17, C18, C19, C20, C21, C22

C2

C23, C24

C25

C3

C4

C5

C6

C7, C8, C9, C10

D1

D2

D3

L1, L2

L10

L11

L3, L4, L5, L6

L7

L8

L9

P1, P2

P9, P8

R1, R2, R3

R10, R11

R12

R13, R14

R15

R16, R17

R4, R5

R6

R7, R8, R9

U1, U2

U3

U4

WRT

X1, X2

Description

BALUN JTI MATCHED ZIGBEE

Capacitor, 1p, 0402, NP0, +/-0.1pF 50V

Capacitor, 1n, 0402, NP0, 5%, 50V

Capacitor, 100n, 0402, X5R, 10%, 10V

Capacitor, 2p7, 0402, NP0, +/-0.25pF, 50V

Capacitor, 1u0, 0402, X5R, 10%, 6.3V

Capacitor, 2u2, 0402, X5R, 20%, 4V

Capacitor, 3p, 0402, NP0, +/-0.25pF, 50V

Capacitor, 6p8, 0402, NP0, +/-0.25pF 50V

Capacitor, 15p, 0402, NP0, 5%, 50V

Capacitor, 3p9, 0402, NP0, +/-0.25pF, 50V

Capacitor, 27p, 0402, NP0, 5%, 50V

LEDs

LEDs

LEDs

EMI filter bead, 0603 1Kohms GHz Band Gen Use

Inductor, 5n1, 0402, +/-0.3 nH

EMI filter bead, 0402 1Kohms GHz Band Gen Use

Inductor, 1n0, 0402, Monolithic type, +/-0.3 nH

Inductor, 1n1, 0402, Monolithic type, +/-0.3 nH

Inductor, 1n5, 0402, wire-wound type, +/-0.1 nH

Inductor, 2n0, 0402, +/-0.3 nH

SMA JACK SMT 50 OHM

2x23 Pin Header

RESISTOR, American symbol

RESISTOR, American symbol

RESISTOR, American symbol

RESISTOR, American symbol

RESISTOR, American symbol

RESISTOR, American symbol

RESISTOR, American symbol

RESISTOR, American symbol

RESISTOR, American symbol

2.4 GHZ IEEE 802.15.4/ZIGBEE® RF TRANSCEIVER

256kb Serial CMOS EEPROM

2.4GHz Range Extender

2x1 Pin Header

CRYSTAL 32MHZ 10PF SMD

DIGIKEY	SAMTEC	MAJOR LEAGUE
712-1536-1-ND		
490-6206-1-ND		
490-3244-1-ND		
490-1318-1-ND		
490-5934-1-ND		
490-1550-1-ND		
490-4518-1-ND		
490-5872-1-ND		
490-5949-1-ND		
490-5888-1-ND		
490-1272-1-ND		
490-5869-1-ND		
160-1834-1-ND		
160-1835-1-ND		
160-1837-1-ND		
490-1015-1-ND		
490-6573-1-ND		
490-3999-1-ND		
490-2610-1-ND		
490-6567-1-ND		
490-6782-1-ND		
490-6569-1-ND		
WM9357-ND		
	SSW-123-03-T-D	SSHQ-123-D-08-G-LF
RHM470JCT-ND		
RHM5.6KCGCT-ND		
RHM10.0KCDCT-ND		
P56.0KLCT-ND		
RHM330KCFCT-ND		
RHM1.00MCDCT-ND		
RHM1.00KCDCT-ND		
1276-4078-1-ND		
1276-4083-1-ND		
296-22996-1-ND		
CAT24C256WI-GT3OSCT-ND		
296-23603-1-ND		
SAM1081-02-ND	TSW-102-26-S-S	
644-1065-1-ND		

Manufacturer part number:

2450BM15A0002E

GRM1555C1H1R0BA01D

GRM1555C1H102JA01D

GRM155R61A104KA01D

GRM1555C1H2R7CA01D

GRM188R60J105KA01D

GRM155R60G225ME15D

GRM1555C1H3R0CA01D

GRM1555C1H6R8CA01D

GRM1555C1H150JA01D

GRM1555C1H3R9CZ01D

GRM1555C1H270JA01D

LQG15HS5N1S02D

BLM15HG102SN1D

LQG15HS1N0S02D

LQG15HS1N1S02D

LQW15AN1N5B00D

LQG15HS2N0S02D

SSHQ-123-D-08-G-LF

Comments

Original part number: GRM1555C1H1R0BZ01D

Original part number: GRM1555C1H2R7CZ01D

Using a 4v instead of reference design 6.3

Original part number: GRM1555C1H3R0CZ01D

Original part number: GRM1555C1H6R8CZ01D

Original part number: GRM1555C1H150JZ01D

Original part number: GRM1555C1H270JZ01D