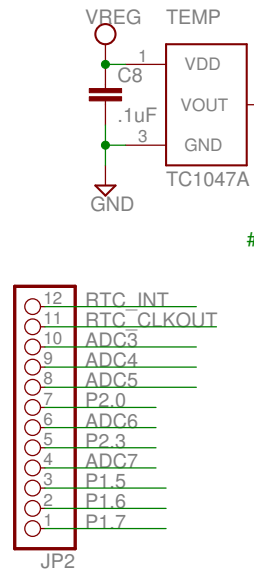
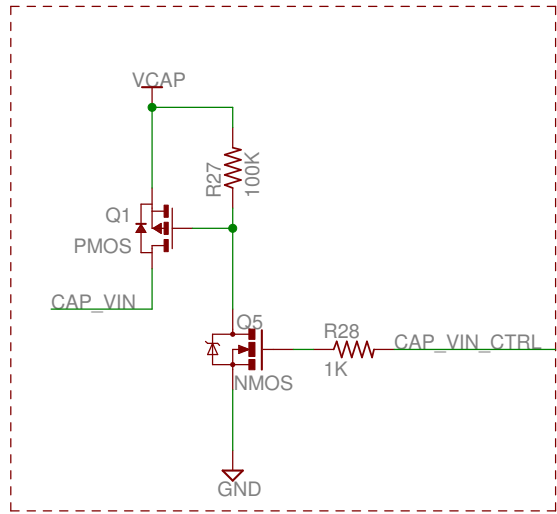
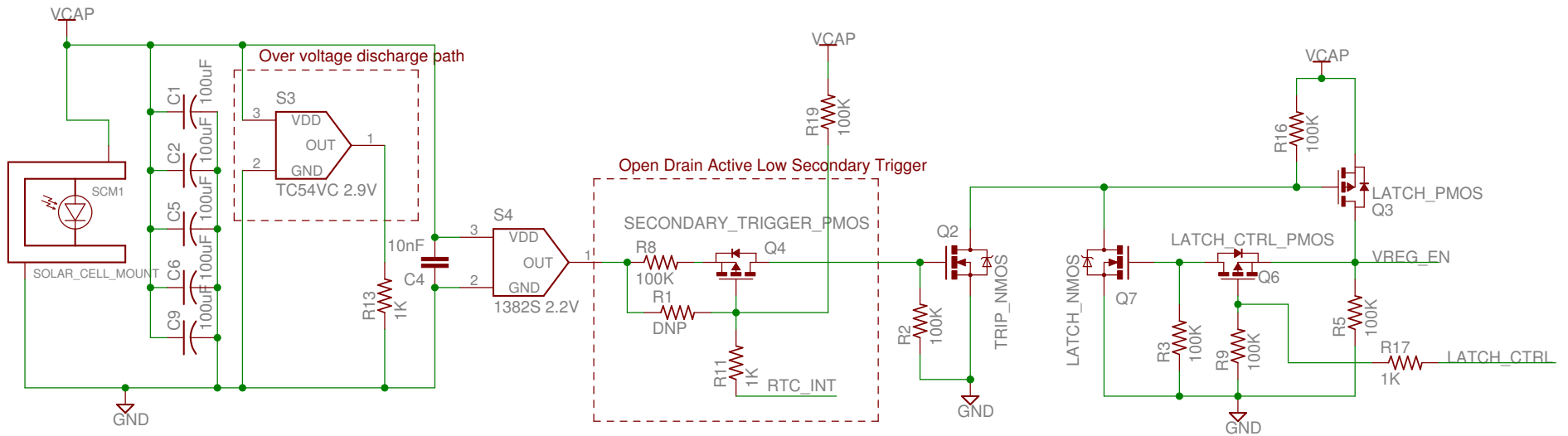


### Capacitor Voltage Measurement

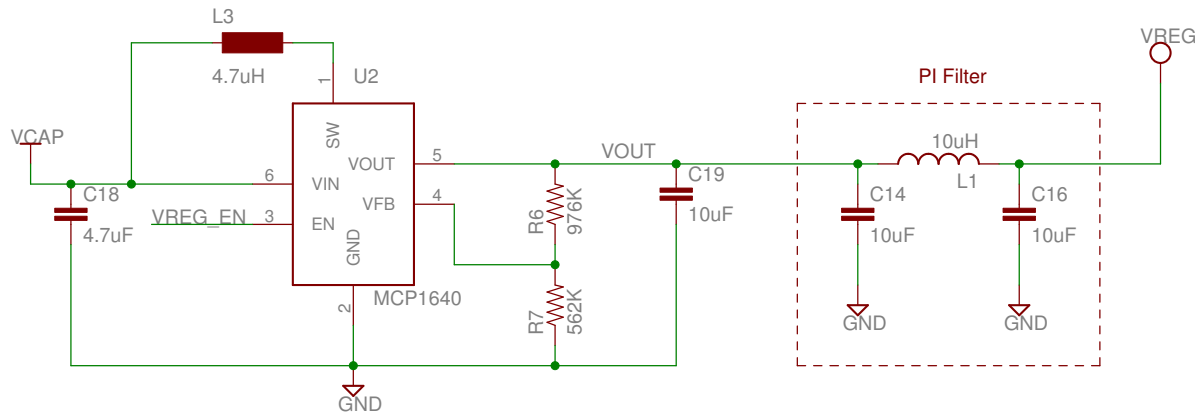


#Connect a fast stabilizing external VREF to accurate ADC readings

<b>EPIC Core Circuit</b>	
TITLE: gecko	
Document Number:	REV: <b>A</b>
Date: 10/21/13 1:51 PM	Sheet: 1/3



Currently, SCAP is connected to GND via 1K resistor.



## Voltage Detection Circuit Switching Regulator

TITLE: gecko

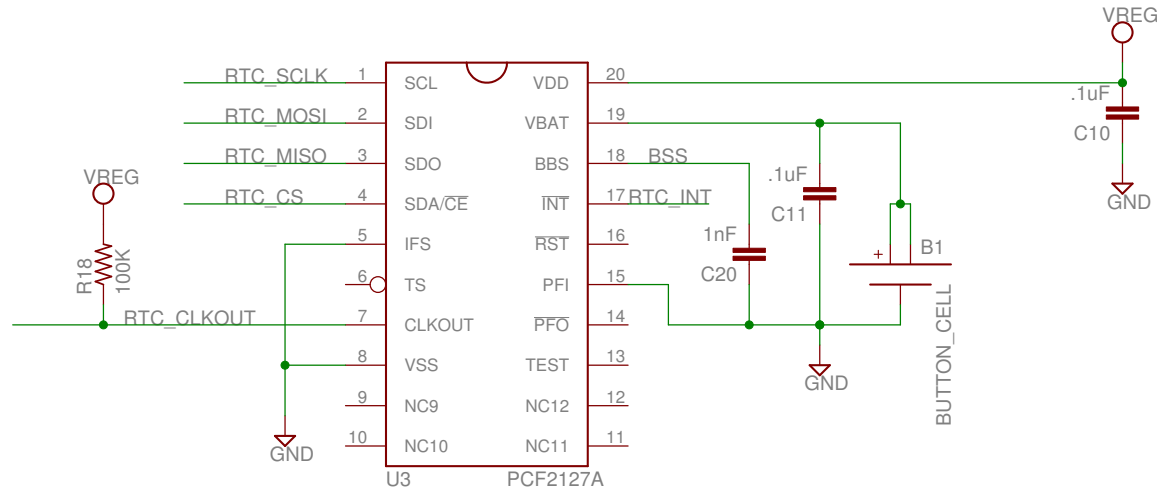
Document Number:

REV:

Date: 10/21/13 1:51 PM

Sheet: 2/3

#Remove the 32KHz crystal on Epic core. Solder RTC\_CLKOUT to ACLK input instead.



#SCAP stuff removed

## Real Time Clock

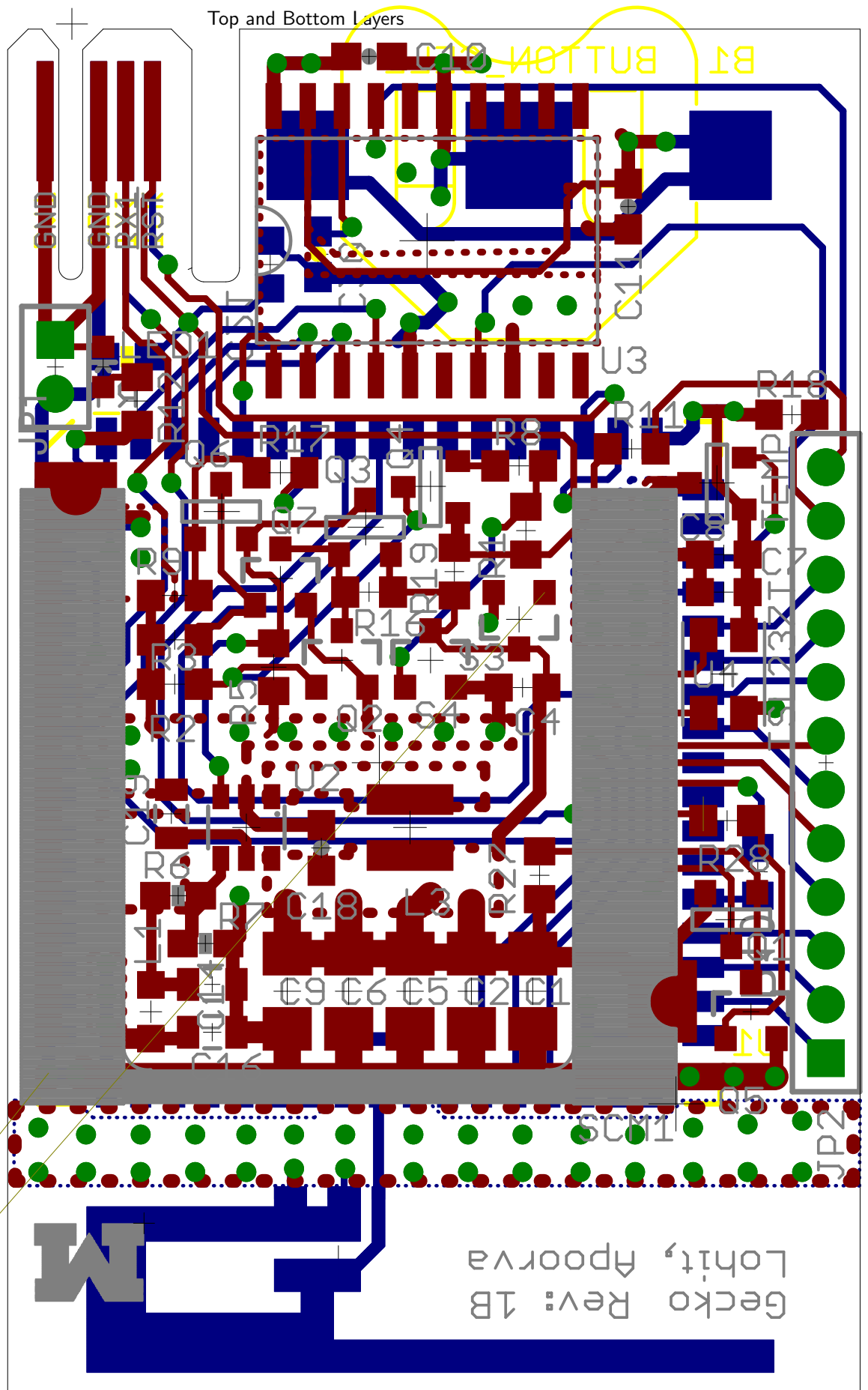
TITLE: gecko

Document Number:

REV:

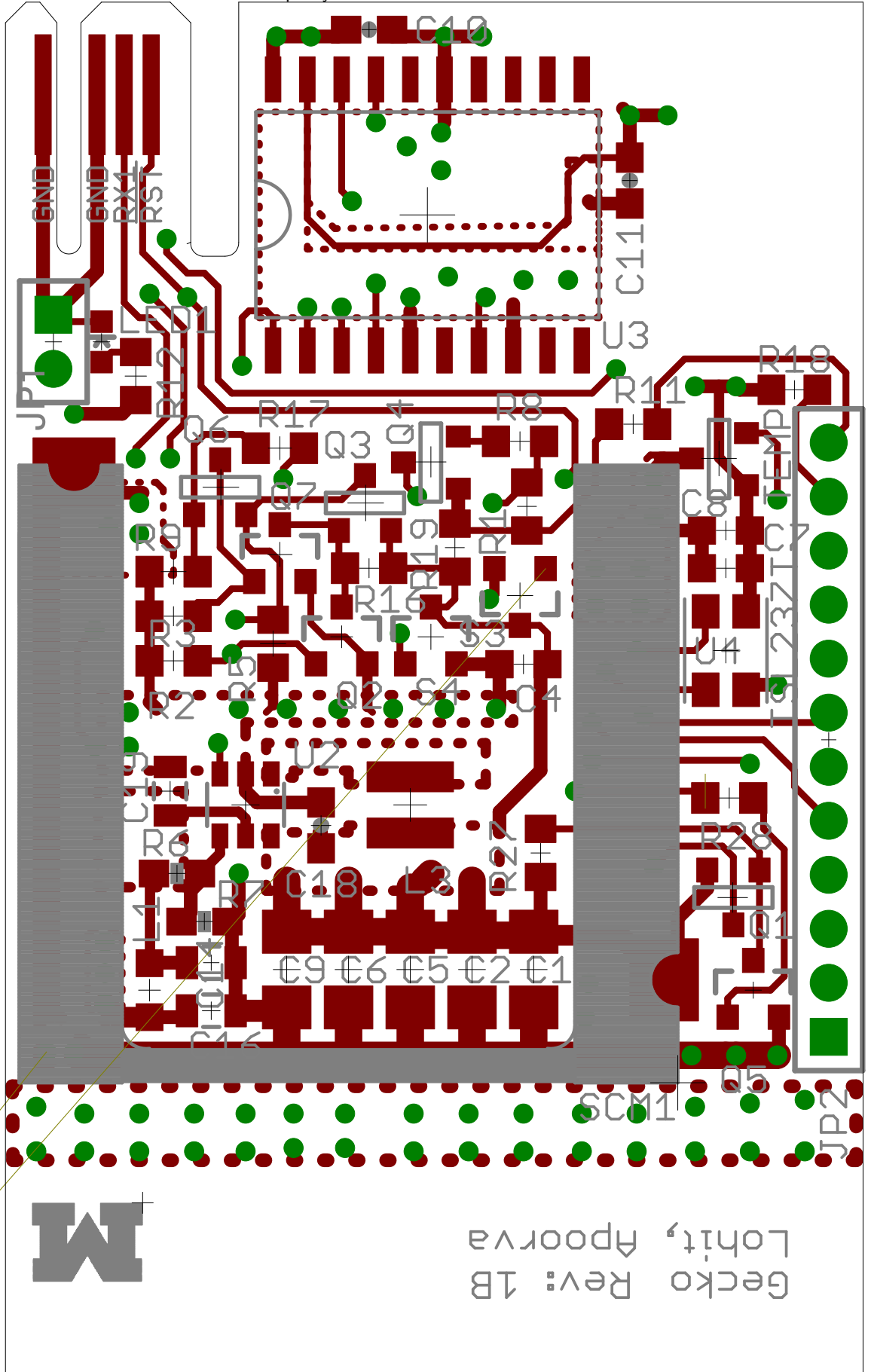
Date: 10/21/13 1:51 PM

Sheet: 3/3

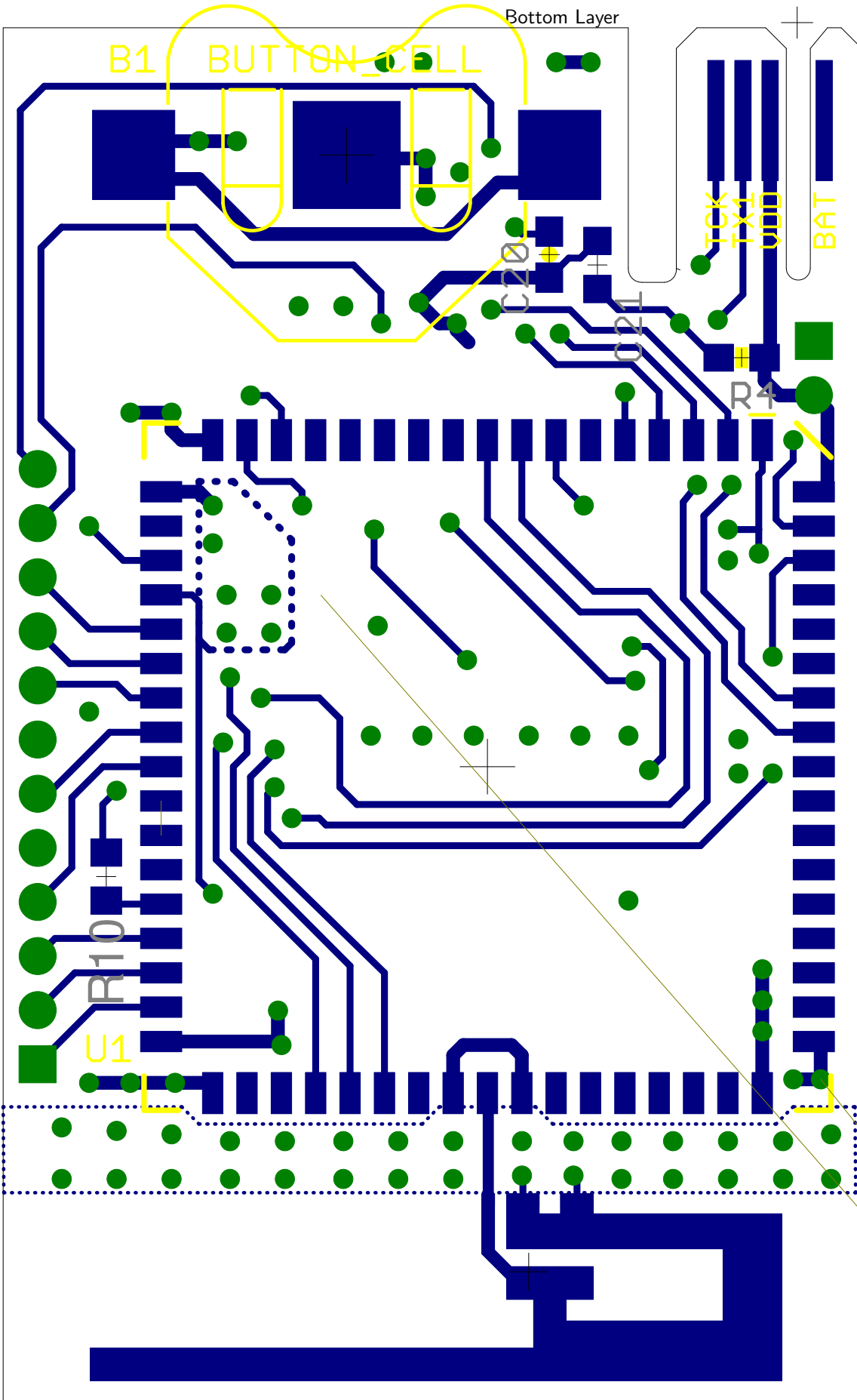


R13

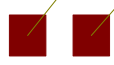
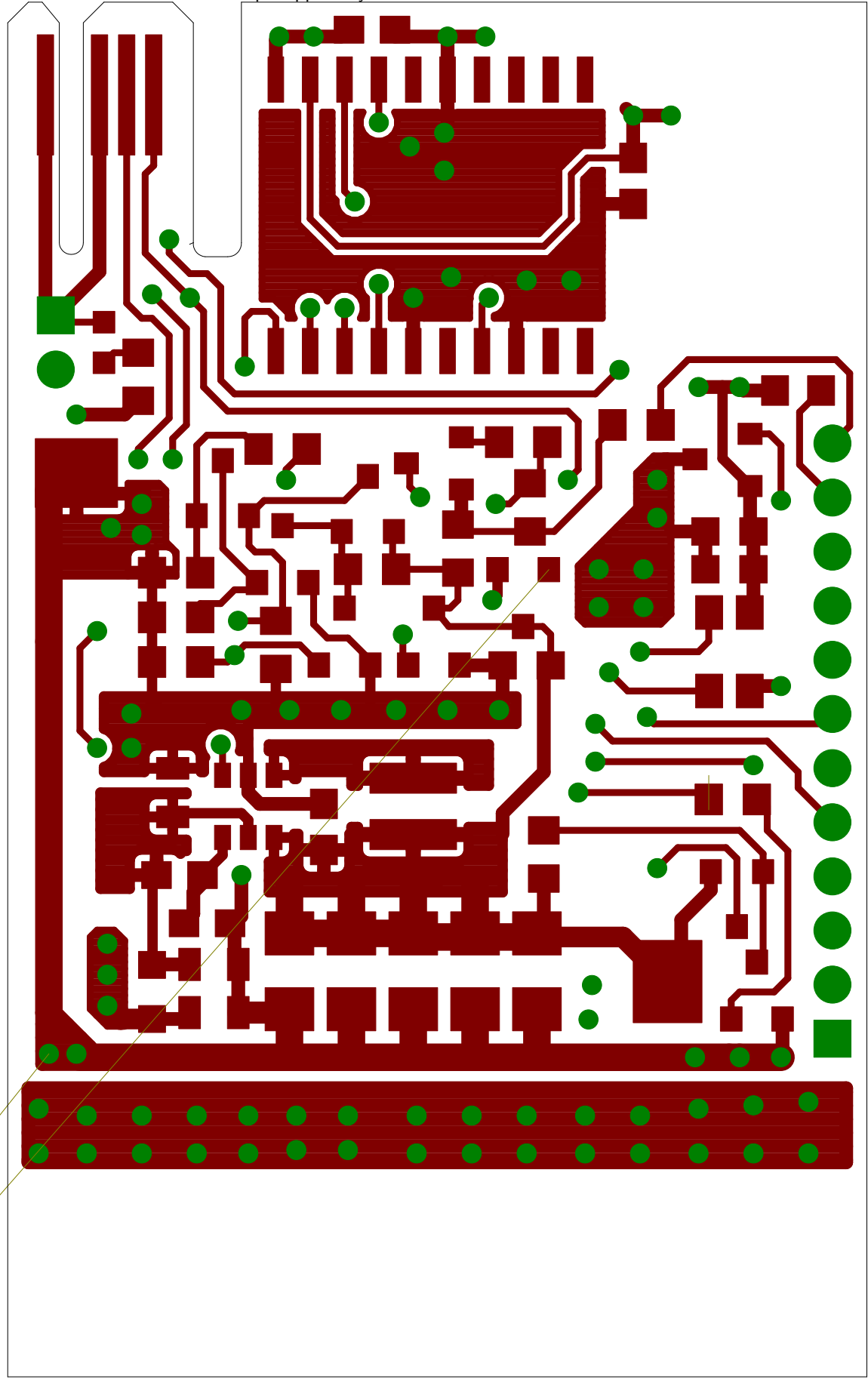
Top Layer



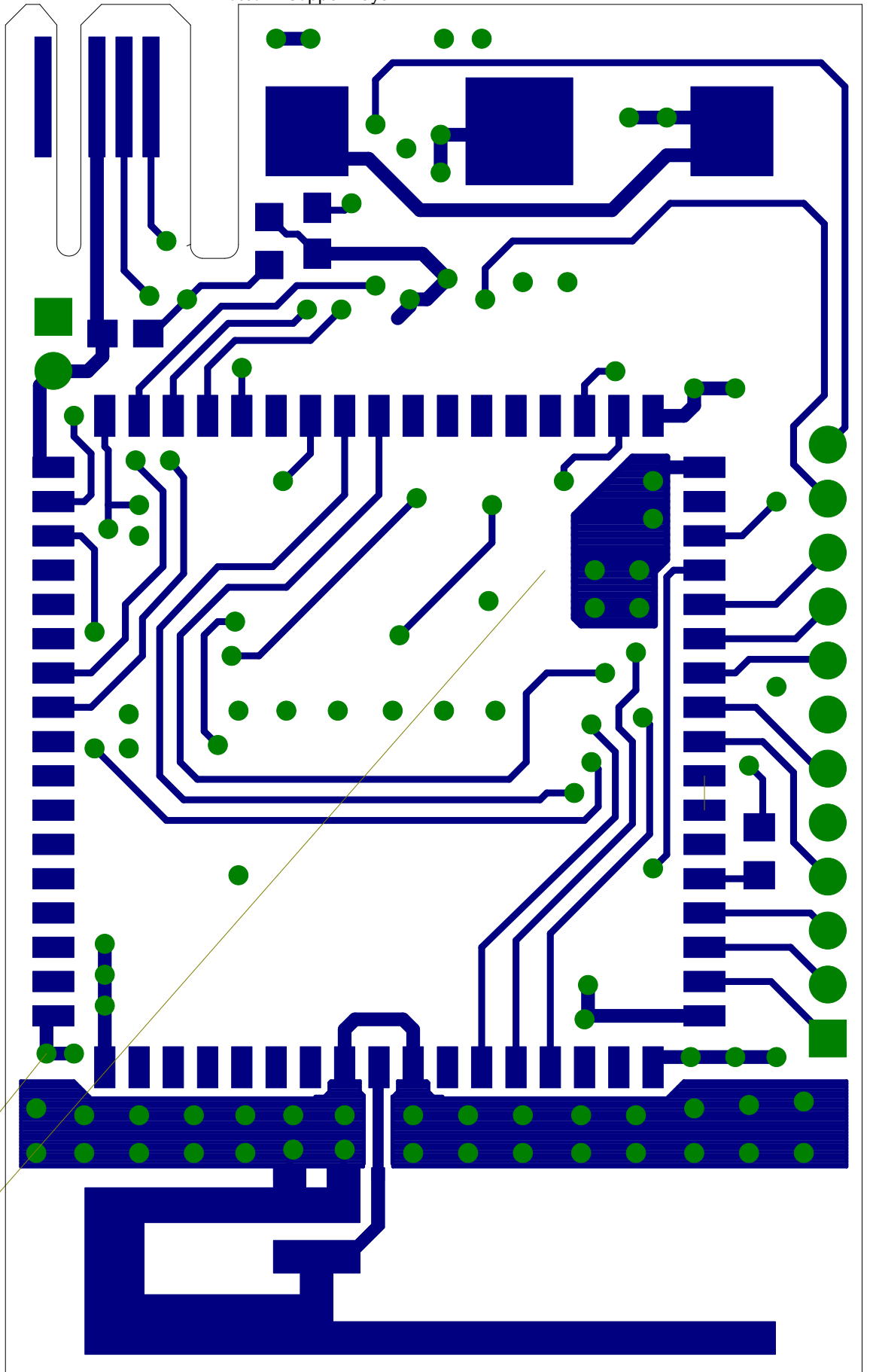
R13



Top Copper Layer

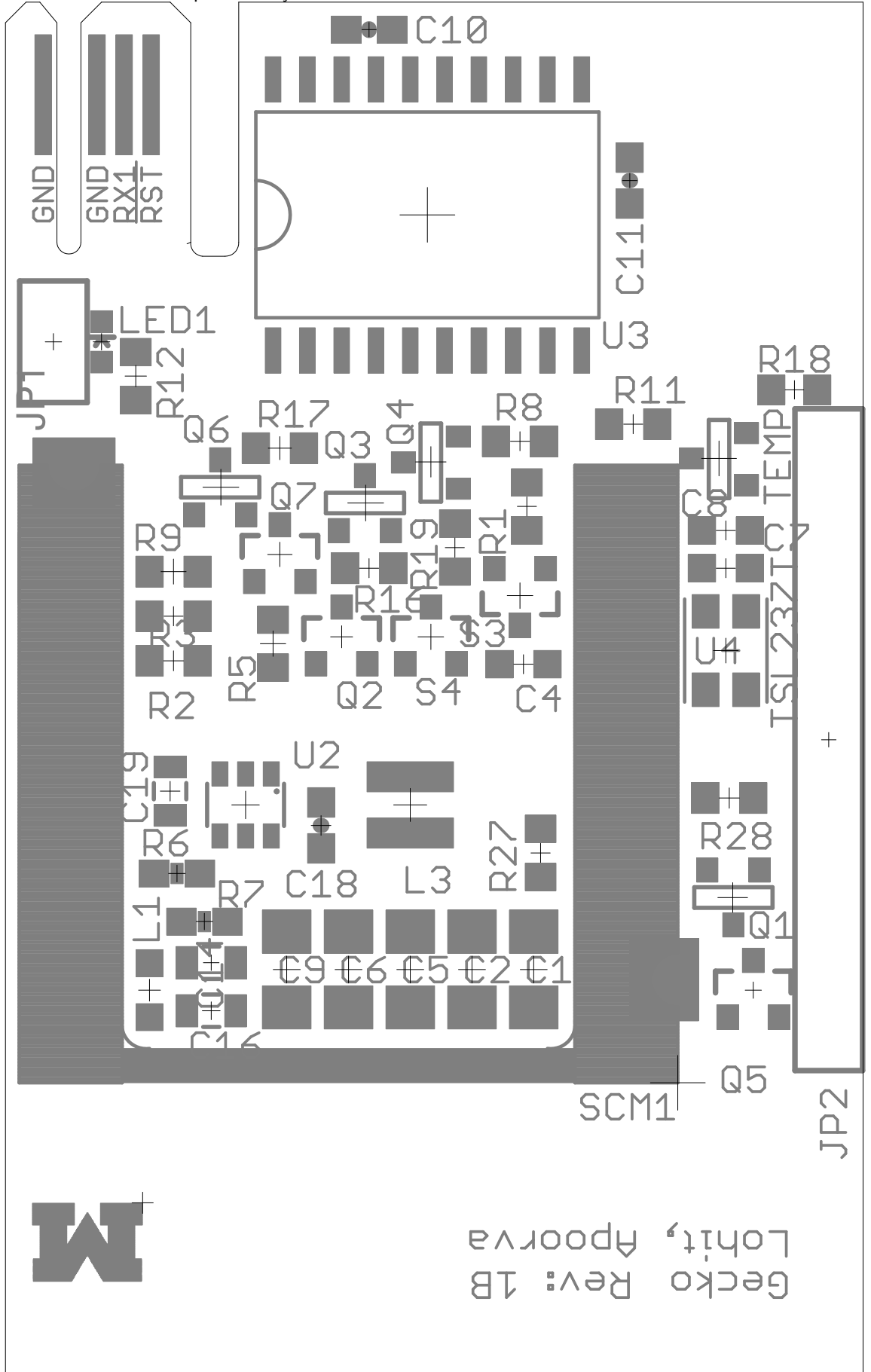


Bottom Copper Layer





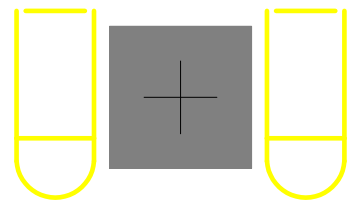
Top Paste Layer with Silkscreen



R13

Bottom Paste Layer with Silkscreen

B1 BUTTON\_CELL

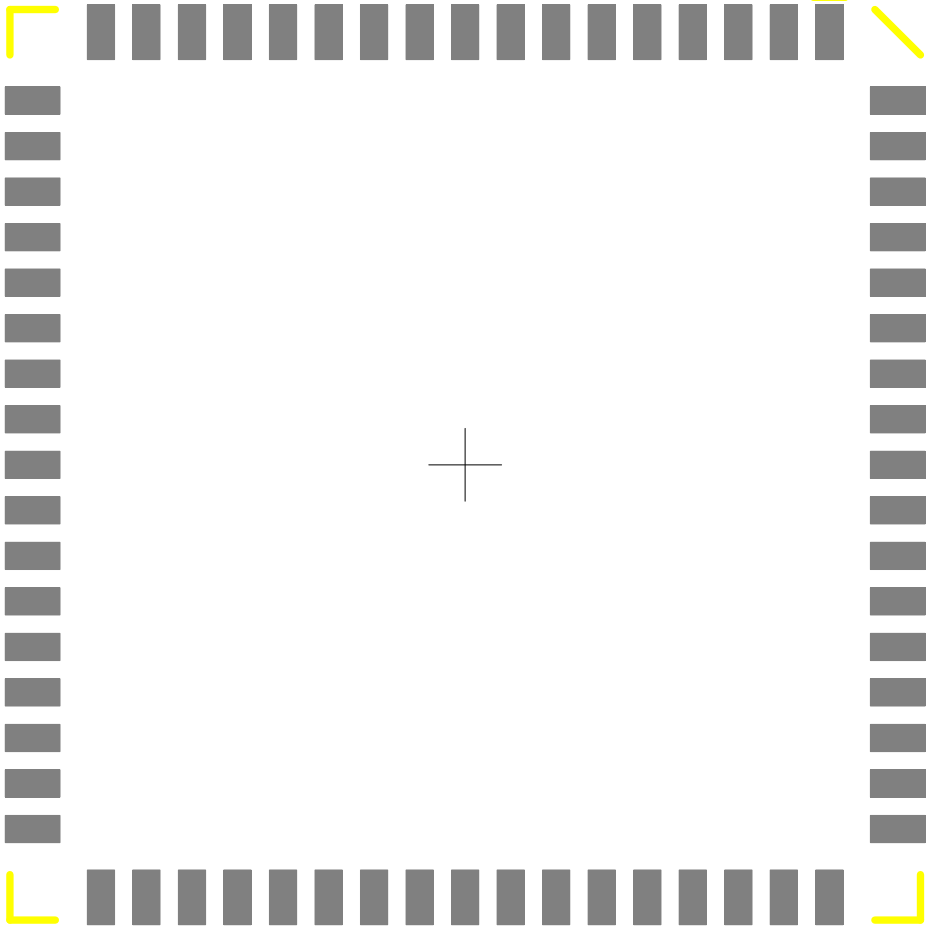


C20

C21

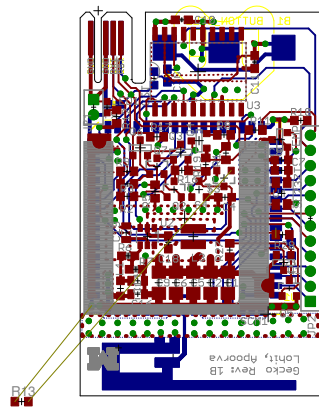


R4

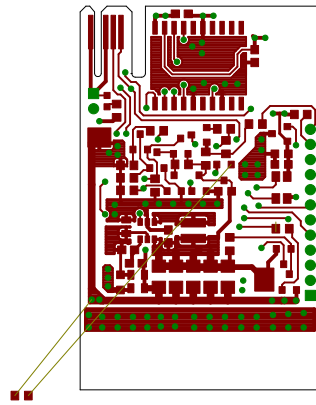


U1 R10

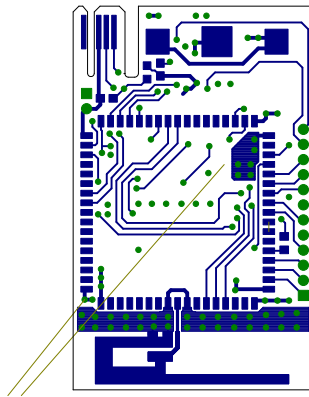
Top and Bottom Layers 1:1 Scale



Top Layer 1:1 Scale



Bottom Copper Layer 1:1 Scale



Partlist exported from /Users/lohityerva/Dropbox/Eagle/Gecko/Gecko with VREG revB/Gecko.sch at 6/14/12

Qty	Value	Device	Parts	Digi-Key (others)
		1	LED0603	
*		00hm Resistor	*****	
	4	.1uF	CAP0603-CAP	
	7	1K	R-US_R0603	
	1	1nF	CAP0603-CAP	
	1	4.7uF	CAP0603-CAP	
	1	4.7uH	INDUCTOR	Order from coilcraft direct ->
	2	10nF	CAP0603	
	3	10uF	CAP0805	
	1	10uH	L-USL2012C	(0805 layout)
	1	47K	RESISTOR0603-RES	
	10	100K	R-US_R0603	

5 100uF	C-USC1206	478-3130-1-ND
1	470 RESISTOR	
1 562K	RESISTOR0603-RES	
1 976K	RESISTOR0603-RES	
1 1382S 2.2V		1382 MN1382SCPCT-ND
1 BUTTON_CELL	BUTTON_CELL	3000KCT-nd
1 EPIC-CORE_A	EPIC-CORE_A	
4 PMOS	PMOSSOT23	SI2305ADS-T1-GE3CT-ND
2 NMOS	MOSFET-NCHANNELSMD	568-2355-1-ND
1 MCP1640	MCP1640	MCP1640T-I/CHYCT-ND
1 PCF2127A	PCF2127A	
1 SOLAR_CELL_MOUNT	SOLAR_CELL_MOUNT	(Dropbox Eagle part)

2 TC54VC 2.9V

1 TC1047A

1 TSL237T

TC1047A

TSL237T

1382 TC54VC2902ECB71CT-ND

856-TSL237T



! 10:16 PM

Discription  
RED?

LED1

Look at schematic

SCAP1

C10 C11 C7 C8

R13 R20 R10 R11 R17 R28 R23

C20

C18

EPL3012-472MLB

L3

C4 C21

C14 C16 C19

L1

R4

R18 R2 R3 R5 R8 R9 R16 R19

CAP TANT 100UF 6.3V 20% 1210 (low DCL)	C1 R12	C2	C5	C6	C9
	R7				
	R6				
IC VOLT DETECT 2.0V CMOS SMD	S4				
HOLDER BATTERY COIN 12MM DIA SMD	B1				
	U1				
MOSFET P-CH 8V 5.4A SOT23-3	Q6	Q3	Q1	Q4	
MOSFET N-CH 30V 4.9A SOT-23	Q7	Q5	Q2		
IC BOOST SYNC ADJ 0.1A SOT23-6	U2 U3				
GECKO-SOLAR-MOUNT-A	SCM1				

IC VOLT DETECTOR 2.9V SOT23A

S1 S3  
TEMP

U4

R27 R22



