

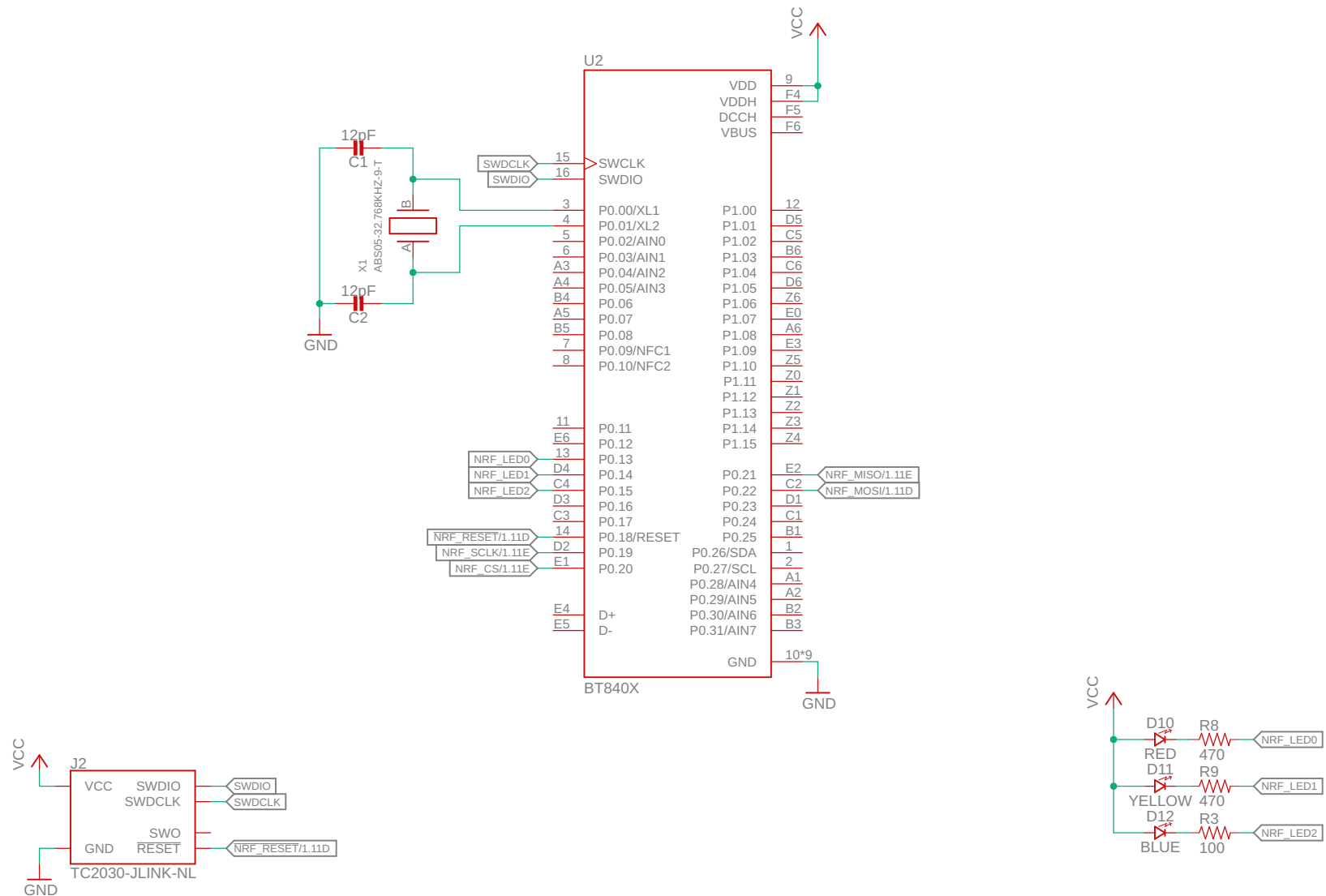
Cal

Author:

Date: 4/20/21 1:25 PM

REV:

Sheet: 1/3



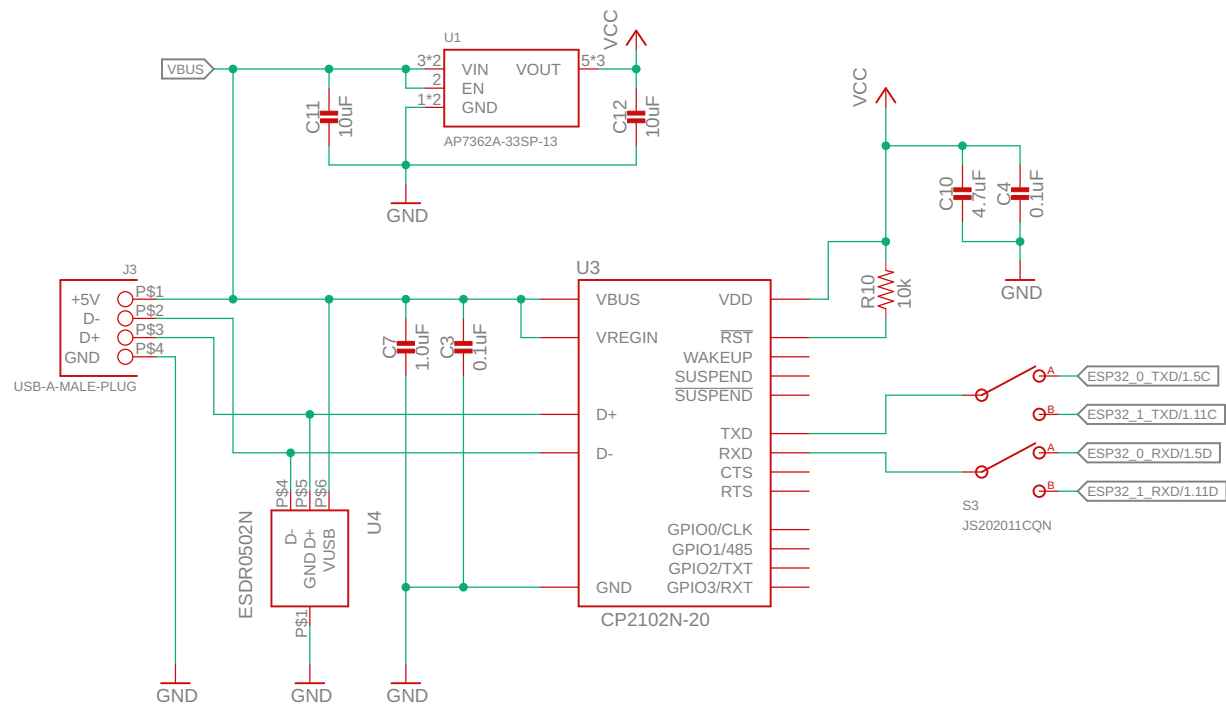
Cal

Author:

Date: 4/20/21 1:25 PM

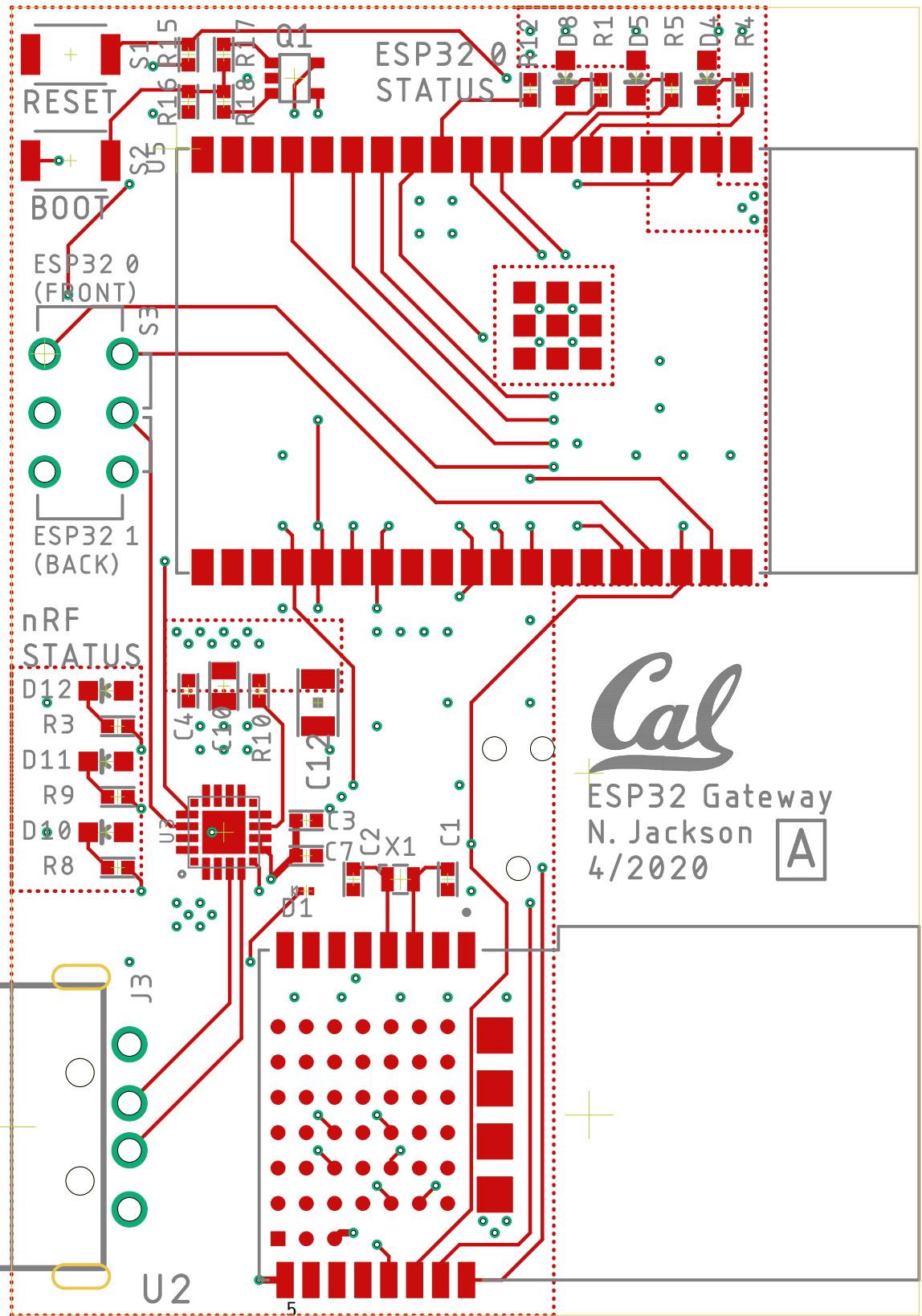
REV:

Sheet: 2/3

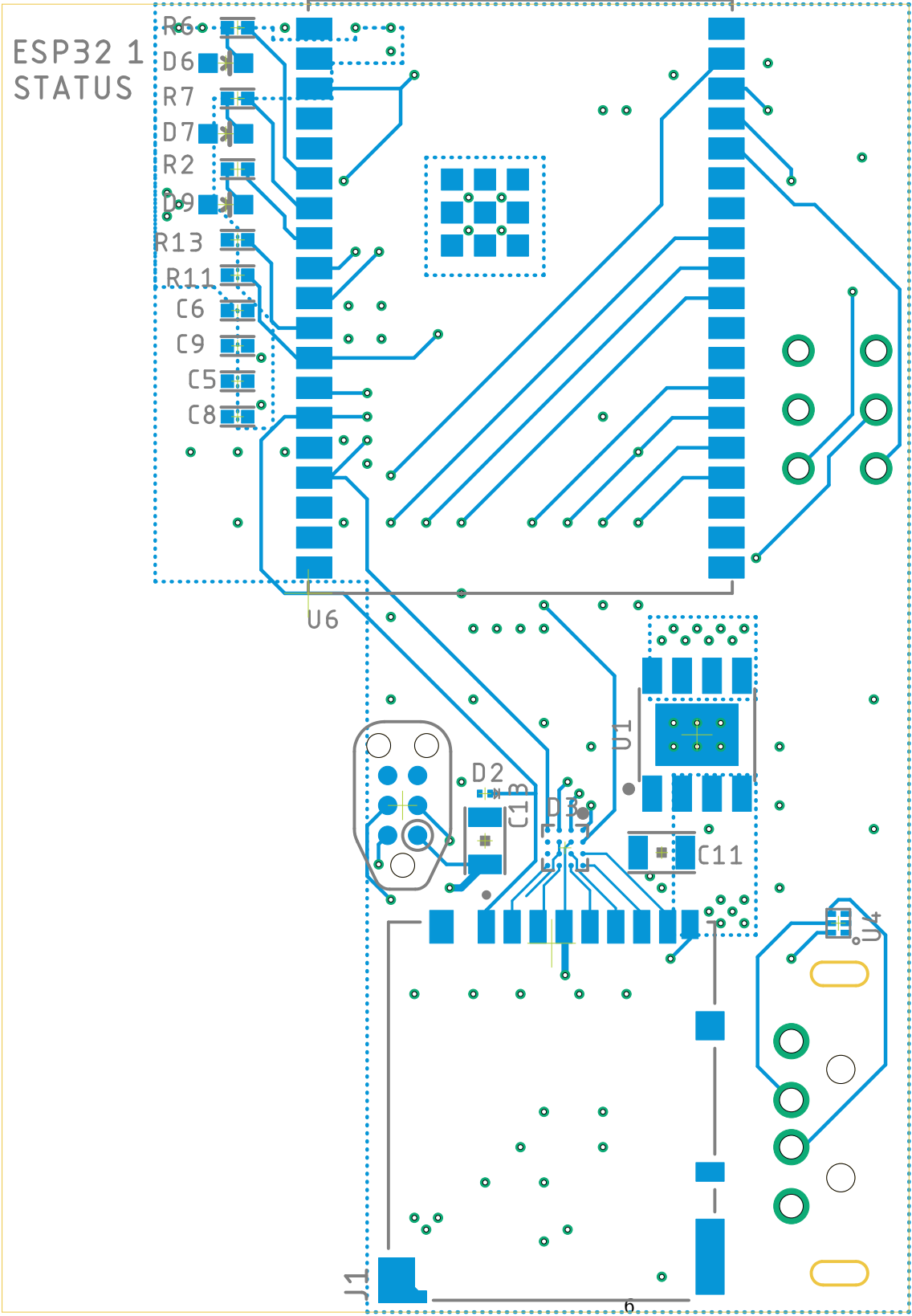


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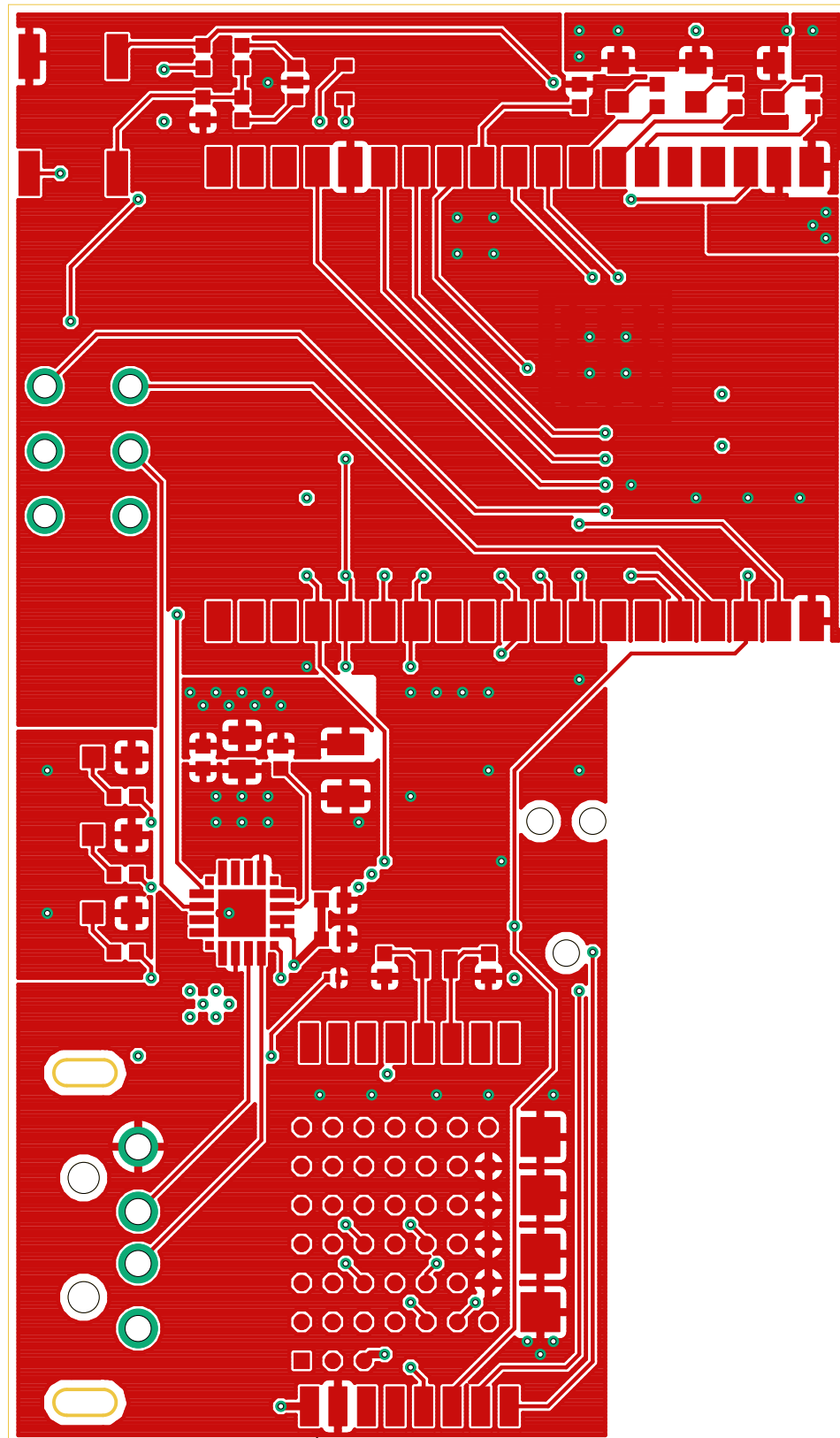




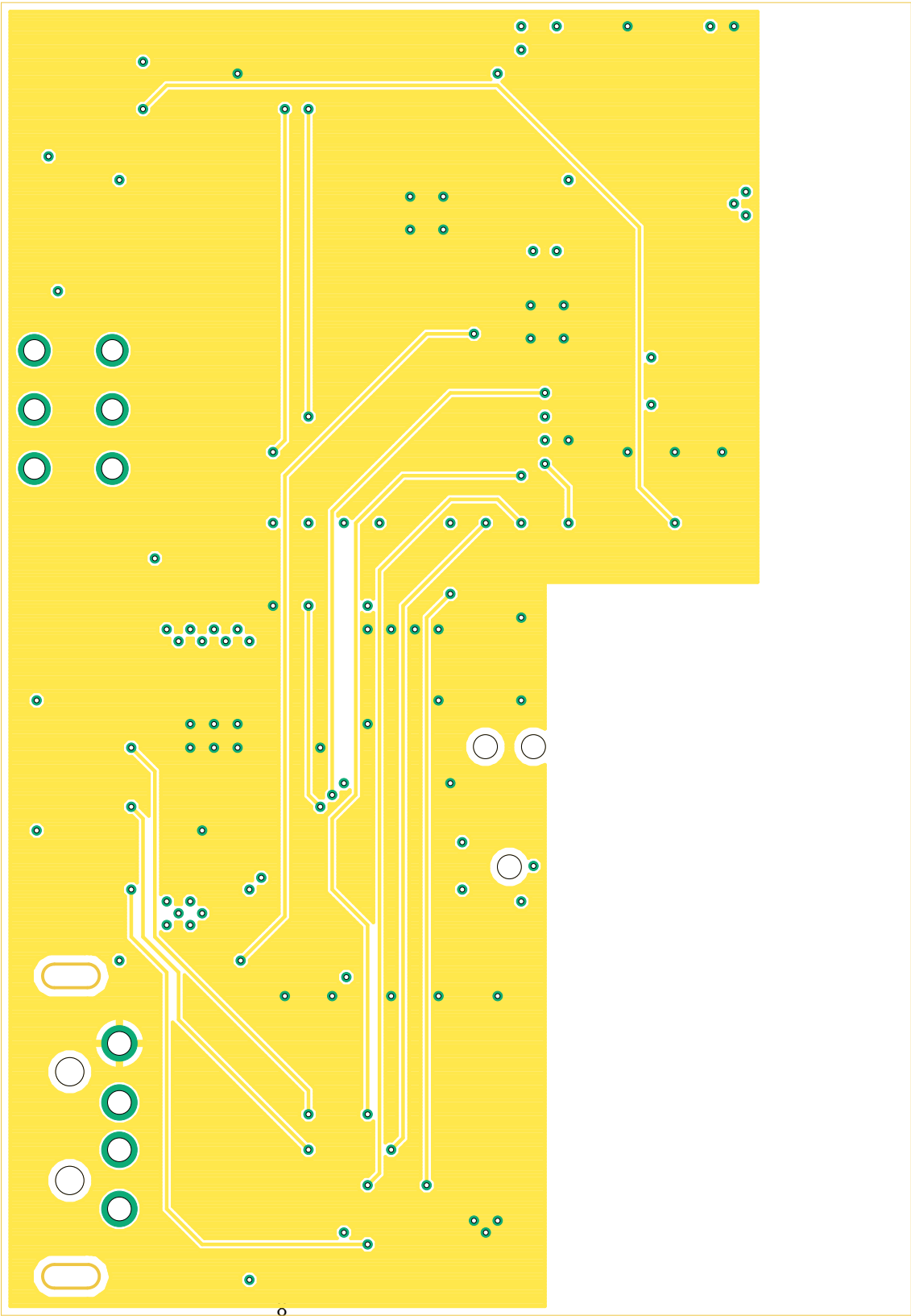
Bottom Layer

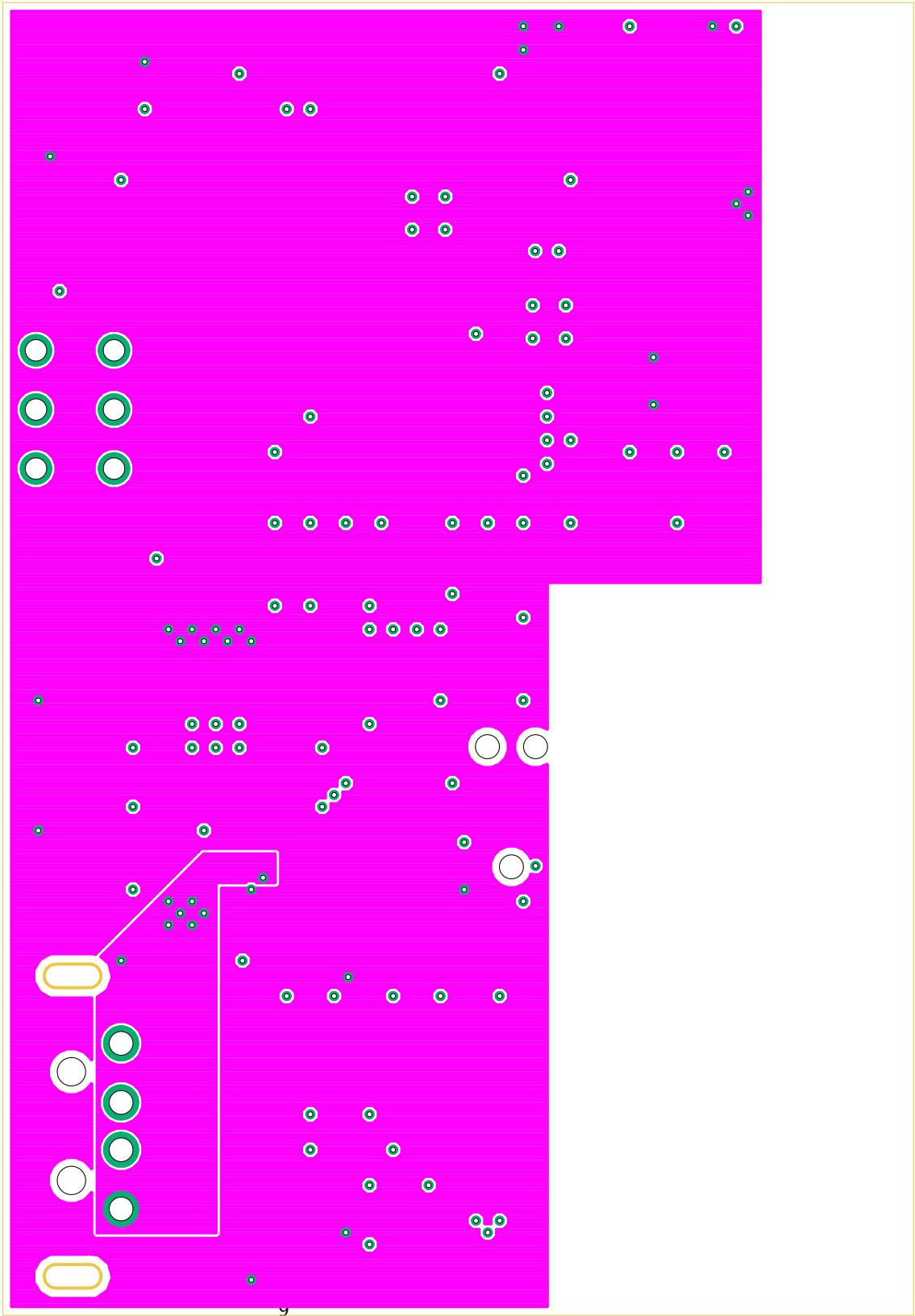


Top Copper Layer

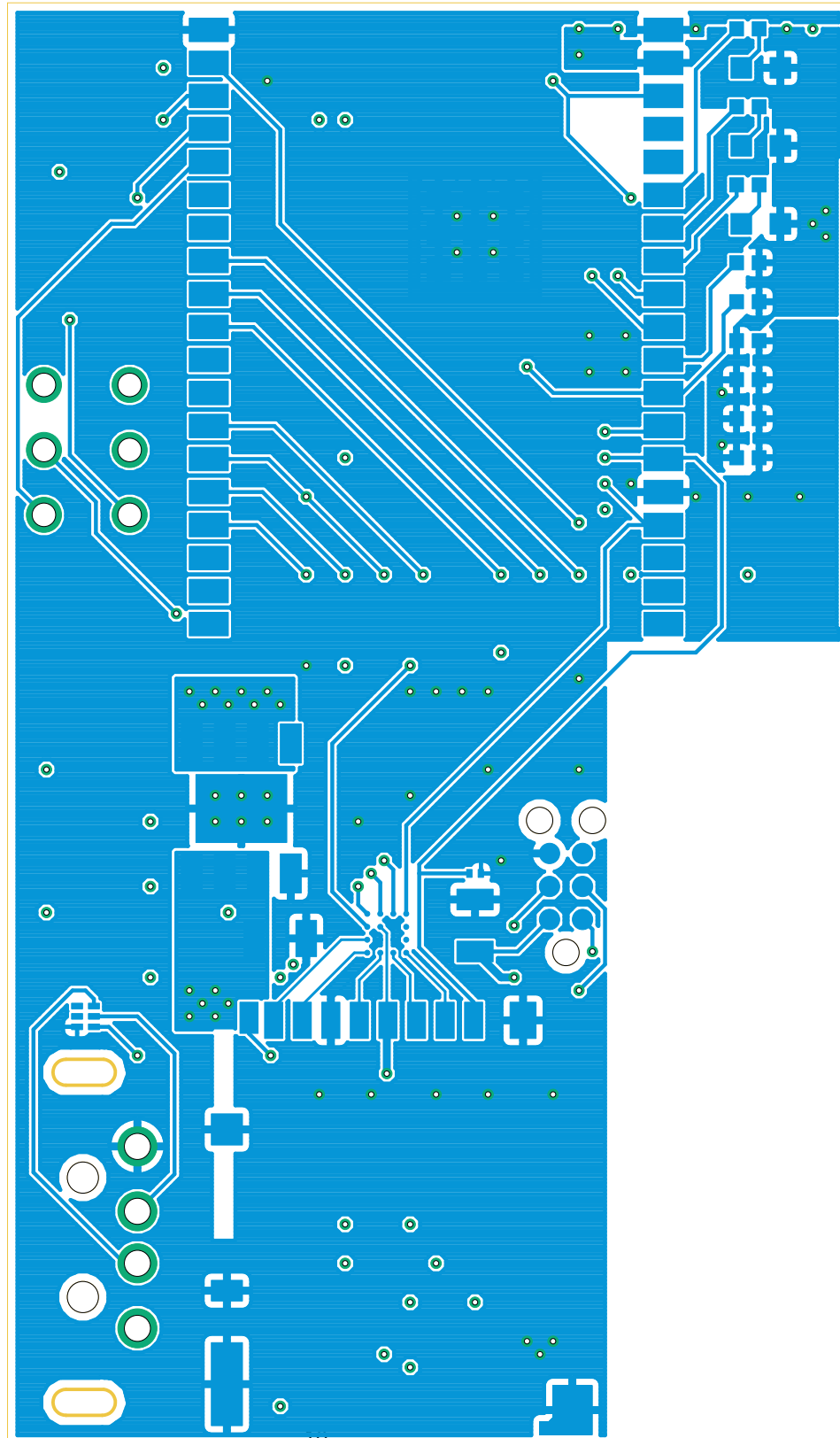


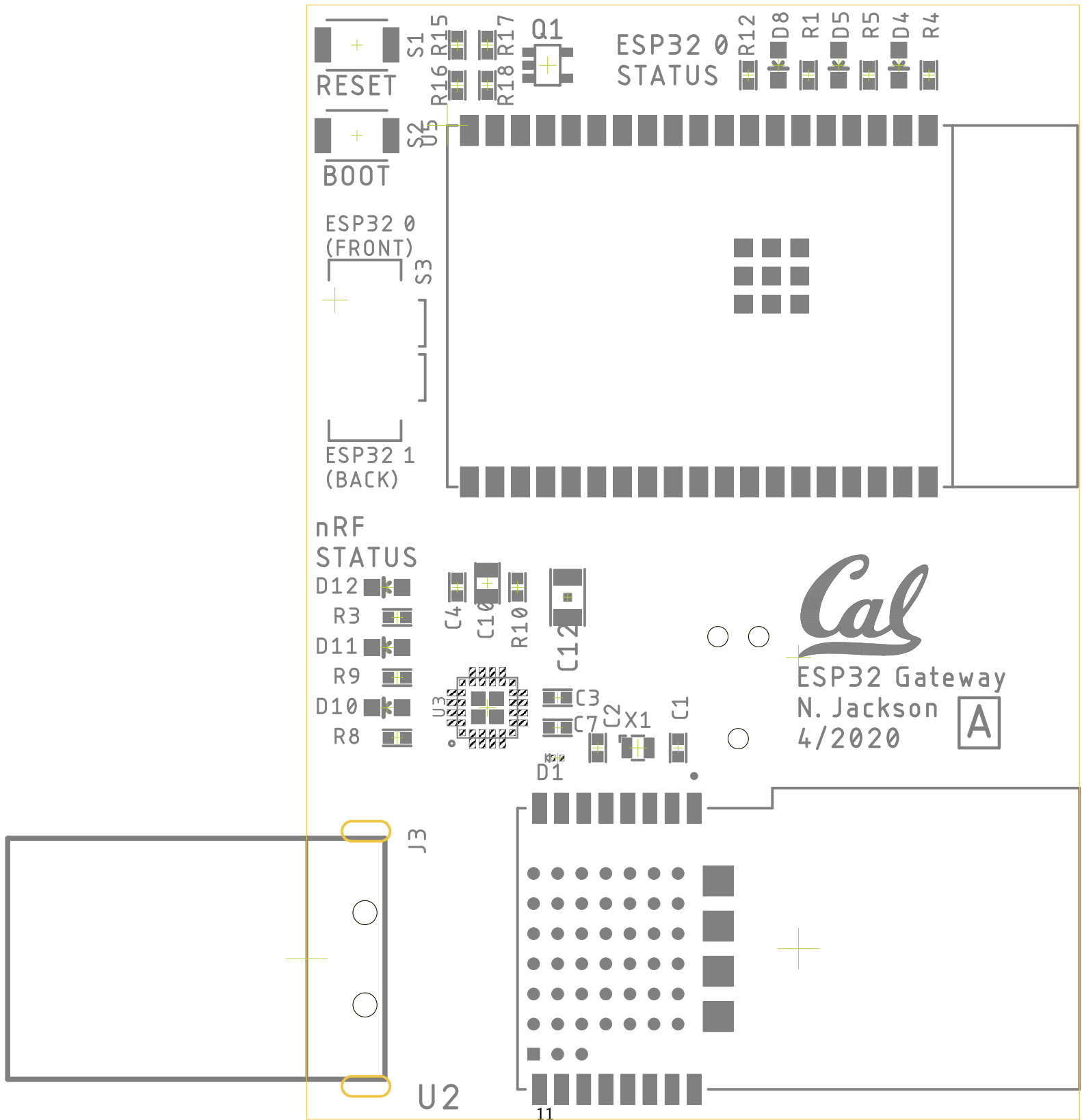
Layer 2 Copper



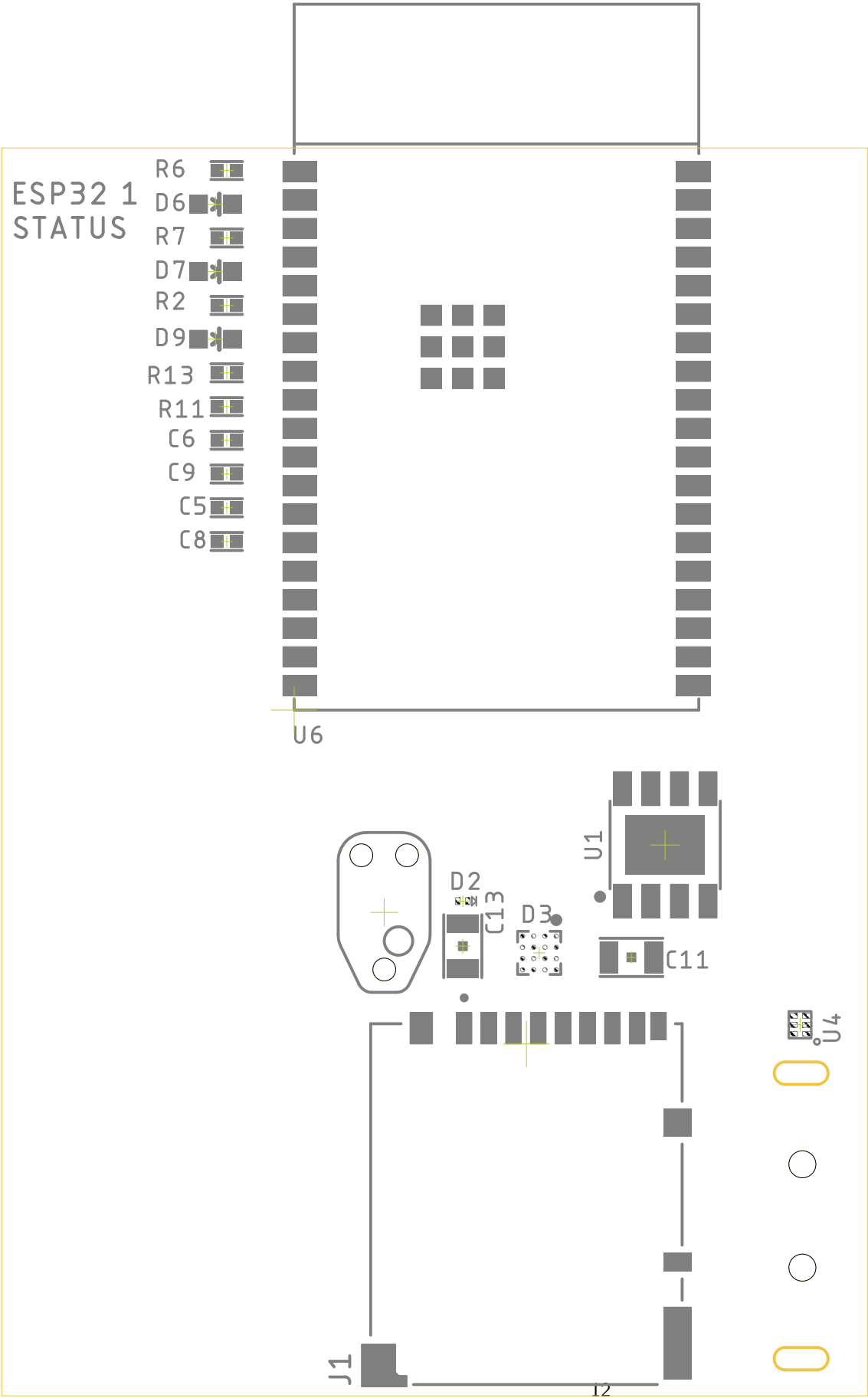


Bottom Copper Layer

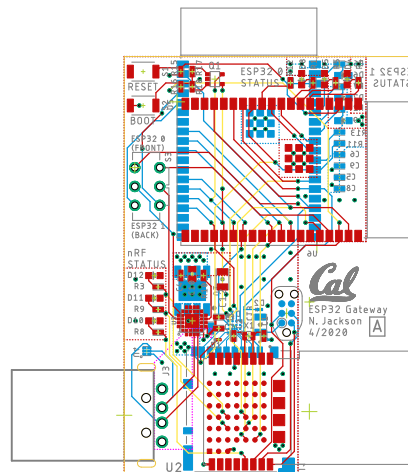




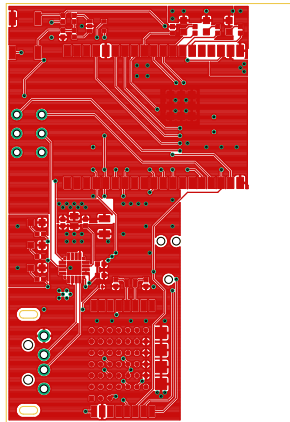
Bottom Paste Layer with Silkscreen

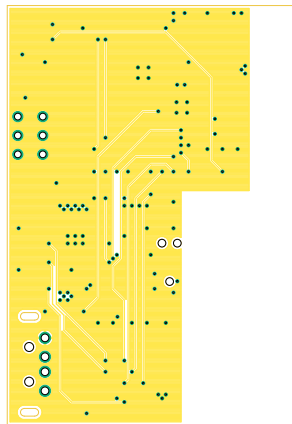


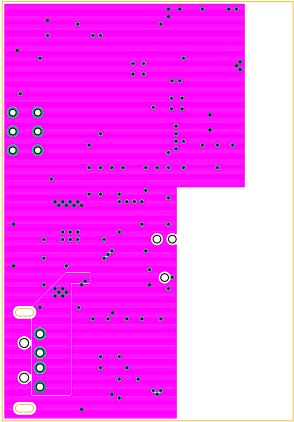
Top and Bottom Layers 1:1 Scale



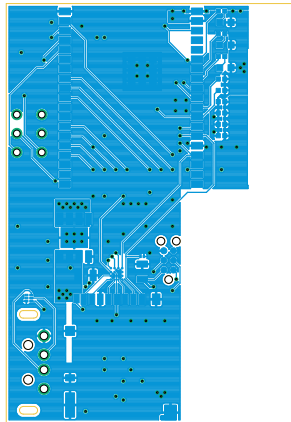
Top Layer 1:1 Scale







Bottom Copper Layer 1:1 Scale



embedded-gw_bom

Qty	Value	Device	Package
2		DIODE_ZENER0201	0201_DIODE
4	0.1uF	CAPACITOR0402_CAP	0402_CAP
3	1.0uF	CAPACITOR0402_CAP	0402_CAP
3		100 RESISTOR0402_RES	0402_RES
6	10k	RESISTOR0402_RES	0402_RES
3	10uF	CAPACITOR0805_CAP	0805_CAP
2	12pF	CAPACITOR0402_CAP	0402_CAP
2	1k	RESISTOR0402_RES	0402_RES
1	4.7uF	CAPACITOR0603_CAP	0603_CAP
6		470 RESISTOR0402_RES	0402_RES
1	ABS05-32.768KHZ-9-T	ABS05-32.768KHZ-9-T	ABS05
1	AP7362A-33SP-13	AP7362A-33SP-13	SO-8EP
2	B3U-1000P	B3U-1000P	B3U-1000P
3	BLUE	LED0603	LED-0603
1	BT840X	BT840X	XCVR_BT840X
1	CP2102N-20	CP2102N-20	QFN-20-3MM
1	DM3BT-DSF-PEJS	DM3BT-DSF-PEJS	HRS_DM3BT-DSF-PEJS
1	DMN32D2LDF	DMN32D2LDF	SOT353
1	EMIF06-MSD01F2	EMIF06-MSD01F2	BGA16C50P4X4_192X192X65N
1	ESDR0502N	ESDR0502N	UDFN-6
2	ESP32-WROVER-E	ESP32-WROVER-E	ESP32-WROVER-E
1	JS202011CQN	JS202011CQN	JS202011CQN
3	RED	LED0603	LED-0603
1	TC2030-JLINK-NL	TC2030-JLINK-NL	TC2030-IDC-NL
1	USB-A-MALE-PLUG	USB-A-MALE-PLUG	USB_A_MALE_PLUG_CUI_UP2-AH
3	YELLOW	LED0603	LED-0603

embedded-gw_bom

Parts

D1,D2

C3,C4,C5,C6

C7,C8,C9

R1,R2,R3

R10,R11,R12,R13,R15,R16

C11,C12,C13

C1,C2

R17,R18

C10

R4,R5,R6,R7,R8,R9

X1

U1

S1,S2

D8,D9,D12

U2

U3

J1

Q1

D3

U4

U5,U6

S3

D4,D6,D10

J2

J3

D5,D7,D11

Description

SMD Capacitor

SMD Capacitor

Resistor

Resistor

SMD Capacitor

SMD Capacitor

Resistor

SMD Capacitor

Resistor

32.768kHz Crystal

The AP7362 is a 1.5A adjustable/fixed output voltage linear regulator with

Switch

LED

802.15.4, Bluetooth Bluetooth v5.0, Thread, Zigbee® Transceiver Module 2.4GHz PCB Trace Surface Mou Check prices

A cheap, simple USB to UART adapter

10 (8 + 2) Position Card Connector Secure Digital - microSD™ Surface Mount, Right Angle Gold Check prices

Common source dual n-channel mosfet

Mini and micro SD Card - EMI filtering and 25 kV ESD protection

DPDT through hole

LED

USB A Male plug connector

LED

embedded-gw_bom

DIGIKEY	MANUFACTURER	MPN	Notes
ESD7381MUT5GOSCT-ND		ESD7381MUT5G	
1276-1511-1-ND		CL05B104KQ5NNNC	
1276-1010-1-ND		CL05A105KQ5NNNC	
311-100JRCT-ND		RC0402JR-07100RL	
RMCF0402JT10K0CT-ND		RMCF0402JT10K0	
1276-2404-1-ND		CL21A106KQCLNNC	
490-GCM1555C1H120GA16DCT-ND		GCM1555C1H120GA16D	
RMCF0402JT1K00CT-ND		RMCF0402JT1K00	
1276-1045-1-ND		CL10A475KQ8NNNC	
311-470LRCT-ND		RC0402FR-07470RL	
535-11897-1-ND	Abracon	ABS05-32.768KHZ-9-T	
AP7362A-33SP-13DICT-ND	Diodes Incorporated	AP7362A-33SP-13	
SW1020CT-ND	Omron	B3U-1000P	
160-1827-1-ND		LTST-C193TBKT-5A	
1914-BT840XCT-ND	Fanstel Corp.	BT840X	
336-3692-ND	SiLabs	CP2102N-A01-GQFN20	
HR1942TR-ND	Hirose Connector	DM3BT-DSF-PEJS	
DMN32D2LDF-7DICT-ND	Diodes Incorporated	DMN32D2LDF-7	
497-5903-1-ND	STMicroelectronics	EMIF06-MSD01F2	
ESDR0502NMUTBGOSCT-ND		ESDR0502NMUTBG	
1965-ESP32-WROVER-E(8MB)CT-ND	Espressif Systems	ESP32-WROVER-E (8MB)	
401-2001-ND	C&K	JS202011CQN	
160-1830-1-ND		LTST-C193KRKT-5A	
			DNI
102-3996-ND	CUI	UP2-AH-1-TH	
160-1831-1-ND		LTST-C193KSKT-5A	