



ST25RU3993 - EVAL



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ST25RU3993-EVAL.PrjPcb
















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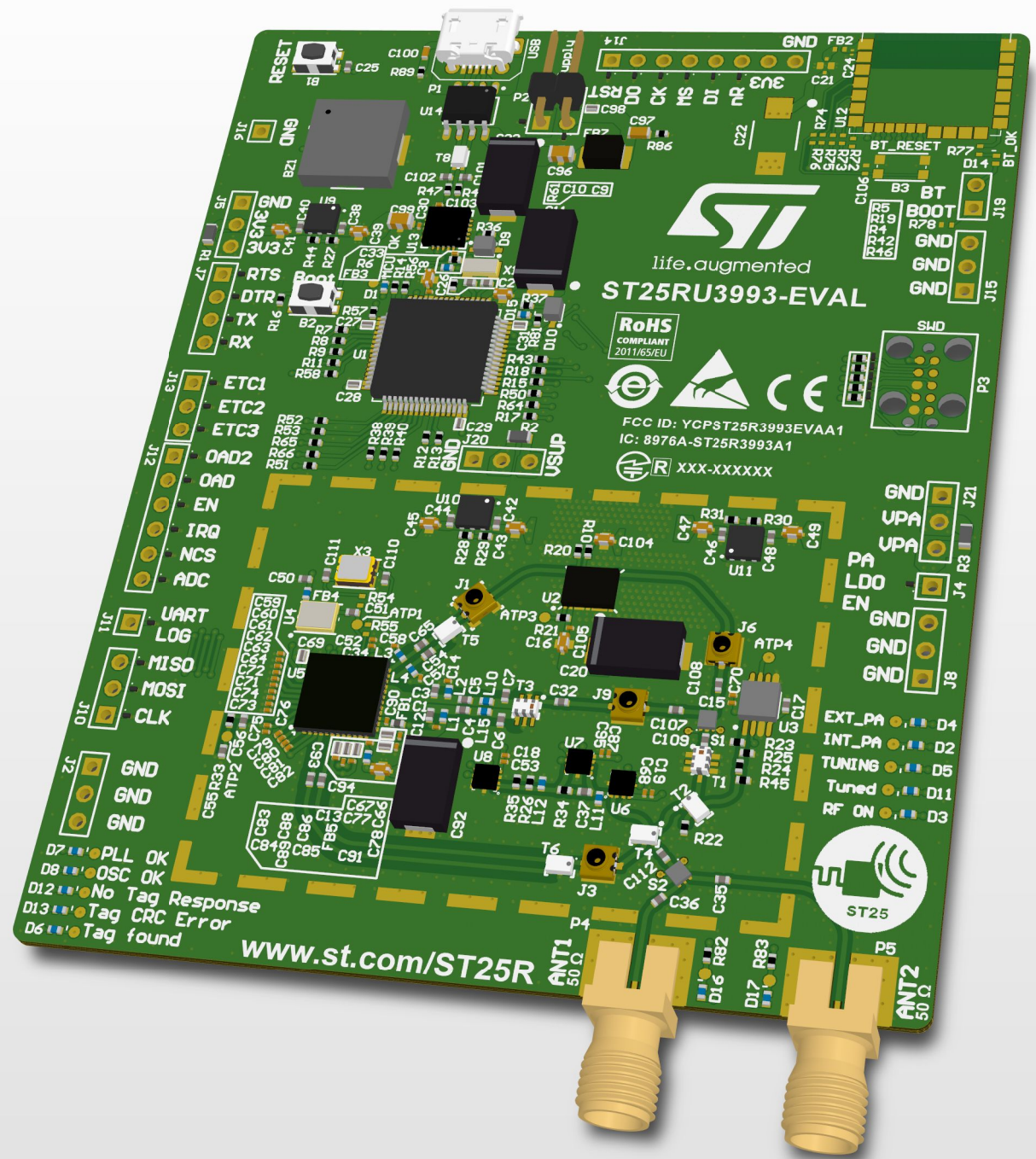
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Revision History

Revision A: Initial Design

PCB Stackup

	Layer Name	Type	Material	Thickness (mm)	Dielectric Material	Dielectric Constant
	Top Overlay	Overlay				
	Top Solder	Solder Mask/Co...	Surface Material	0.01016	Solder Resist	4.5
	Top Layer	Signal	Copper	0.043		
	Dielectric1	Dielectric	Core	0.25	FR-4 (R-1755M)	4.7
	RF GND	Signal	Copper	0.032		
	Dielectric2	Dielectric	Prepreg	0.1	FR-4 (R-1755M)	4.6
	Power	Signal	Copper	0.032		
	Dielectric3	Dielectric	Core	0.1	FR-4 (R-1755M)	4.6
	GND	Signal	Copper	0.036		
	Dielectric 5	Dielectric	Prepreg	0.1	FR-4 (R-1755M)	4.6
	Routing	Signal	Copper	0.036		
	Dielectric 4	Dielectric	Core	0.25	FR-4 (R-1755M)	4.7
	Bottom GND	Signal	Copper	0.043		
	Bottom Solder	Solder Mask/Co...	Surface Material	0.01016	Solder Resist	4.5
	Bottom Overlay	Overlay				



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RoHS
COMPLIANT
2011/65/EU



FCC ID: YCPST25R3993EVAA1
IC: 8976A-ST25R3993A1

XXX-XXXXXX

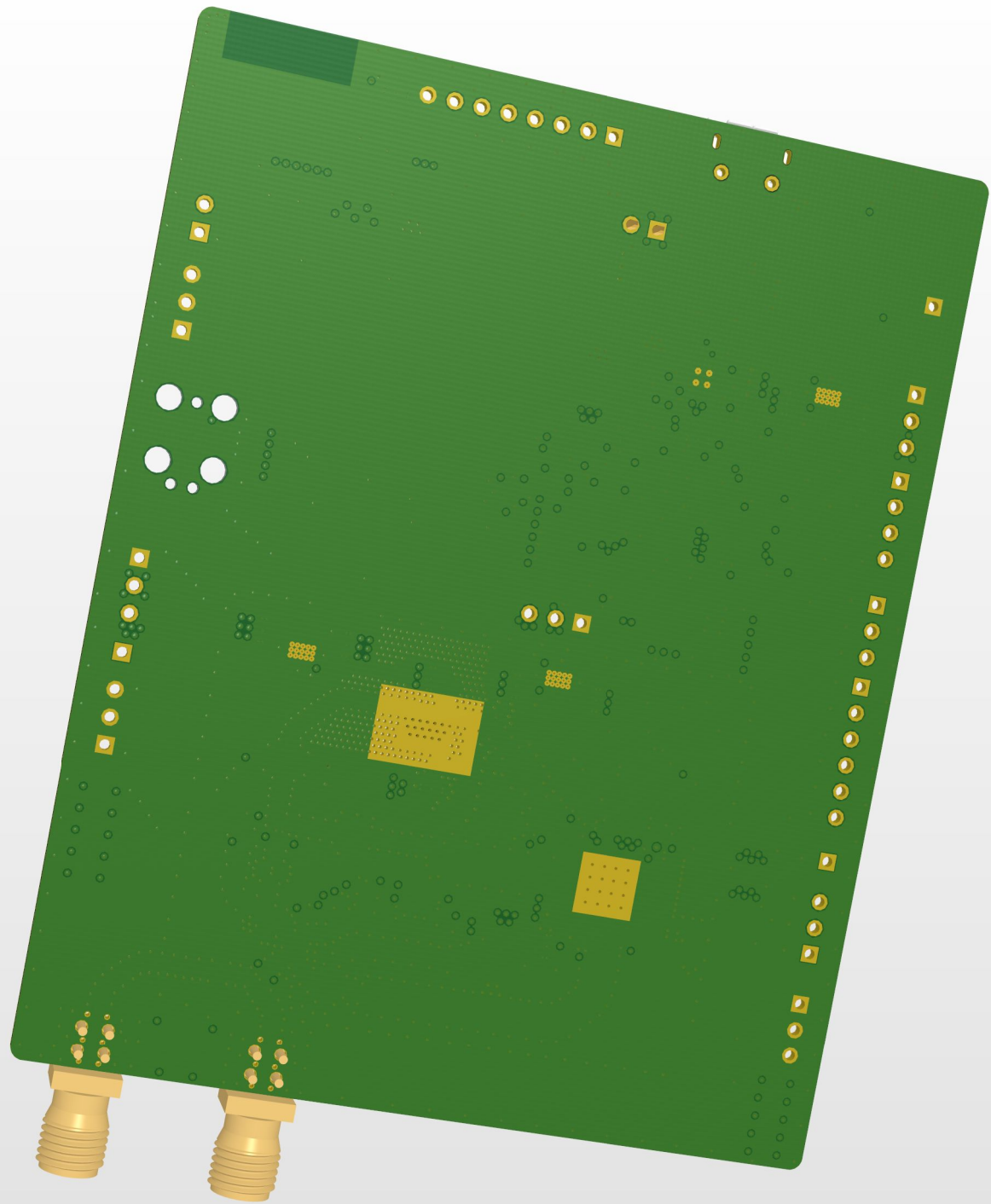
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- D8 ●●● OSC OK
- D12 ●●● No Tag Response
- D13 ●●● Tag CRC Error
- D6 ●●● Tag found

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- EXT_PA ●●● D4
- INT_PA ●●● D5
- TUNING ●●● D2
- Tuned ●●● D11
- RF ON ●●● D3

RESET 1B C25 R89 P1 P2 USB supply GND FB2 C21 C24
 QM9 91F BZ1 3U3 4f 10 9f 9f
 RTS DTR TX RX ETC1 ETC2 ETC3 OAD2 OAD EN IRQ NCS ADC
 UART LOG MISO MOSI CLK GND GND GND
 D7 D8 D12 D13 D6
 ANT1 50 Ω ANT2 50 Ω
 BT_RESET BT_BOOT BT_LOK
 RST DO CK MS DI NR CNE
 BT_RESET BT_BOOT BT_LOK
 SMD P3
 GND UPA UPA PA LDO EN GND GND
 J1 J2 J3 J4 J5 J6 J7 J8 J9 J10 J11 J12 J13 J14 J15 J16 J17 J18 J19 J20 J21 J22 J23 J24 J25 J26 J27 J28 J29 J30 J31 J32 J33 J34 J35 J36 J37 J38 J39 J40 J41 J42 J43 J44 J45 J46 J47 J48 J49 J50 J51 J52 J53 J54 J55 J56 J57 J58 J59 J60 J61 J62 J63 J64 J65 J66 J67 J68 J69 J70 J71 J72 J73 J74 J75 J76 J77 J78 J79 J80 J81 J82 J83 J84 J85 J86 J87 J88 J89 J90 J91 J92 J93 J94 J95 J96 J97 J98 J99 J100



Title Page
Title_Page.SchDoc

Project Page
Project_Page.SchDoc

USB Interface
USB_Interface.SchDoc

External Interfaces
External_Interfaces.SchDoc

DC Supply
Supply.SchDoc

UHF RFID Reader
UHF_RFID.SchDoc

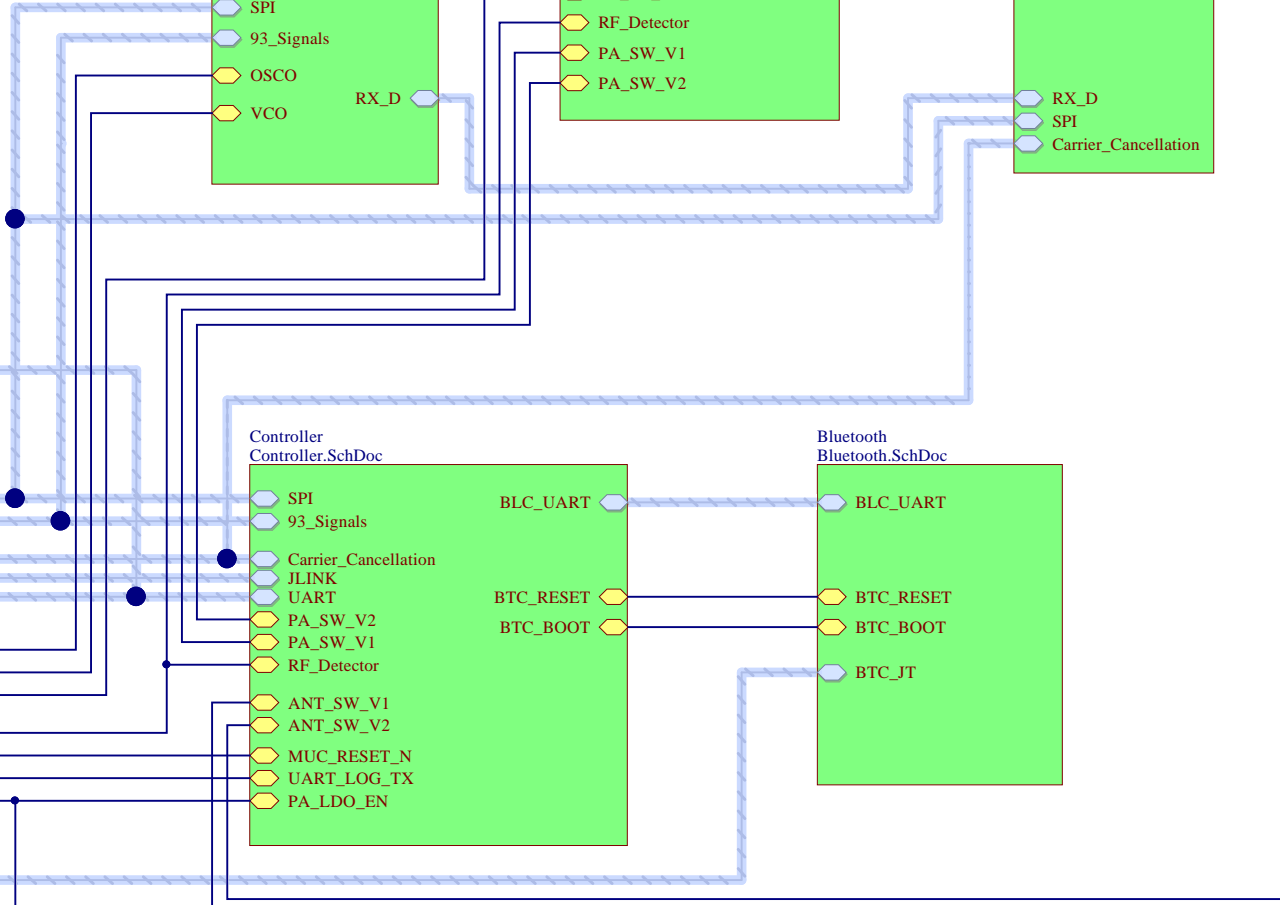
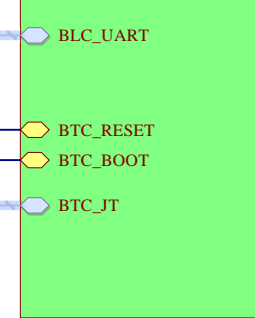
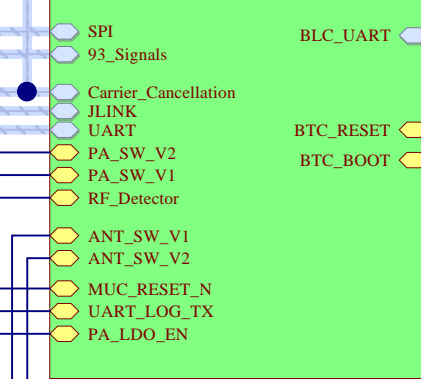
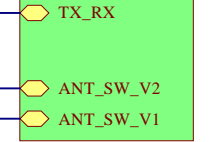
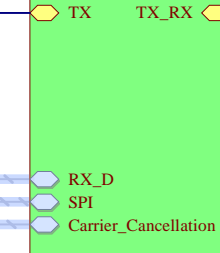
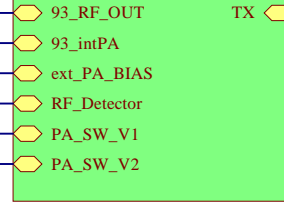
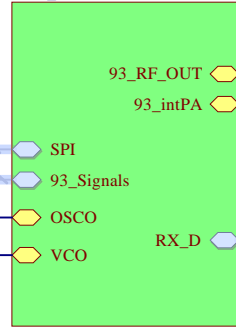
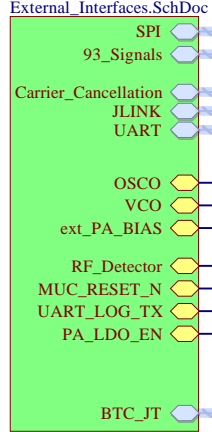
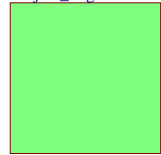
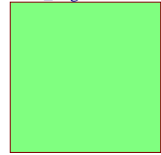
Power Amplifier
Power_Amplifier.SchDoc

Carrier Cancellation
Carrier_Cancellation.SchDoc

Antenna Switch
Antenna_Switch.SchDoc

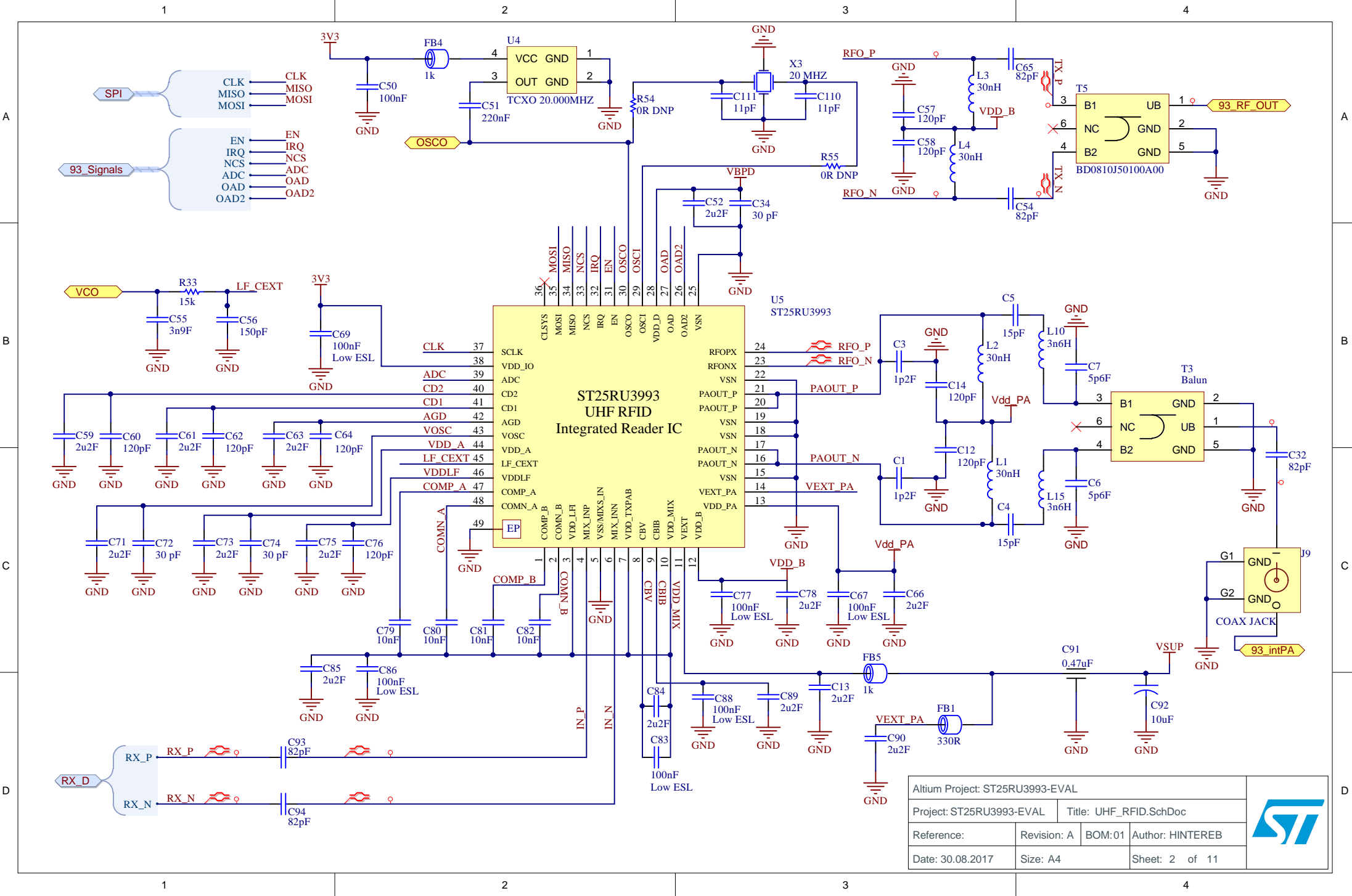
Controller
Controller.SchDoc

Bluetooth
Bluetooth.SchDoc



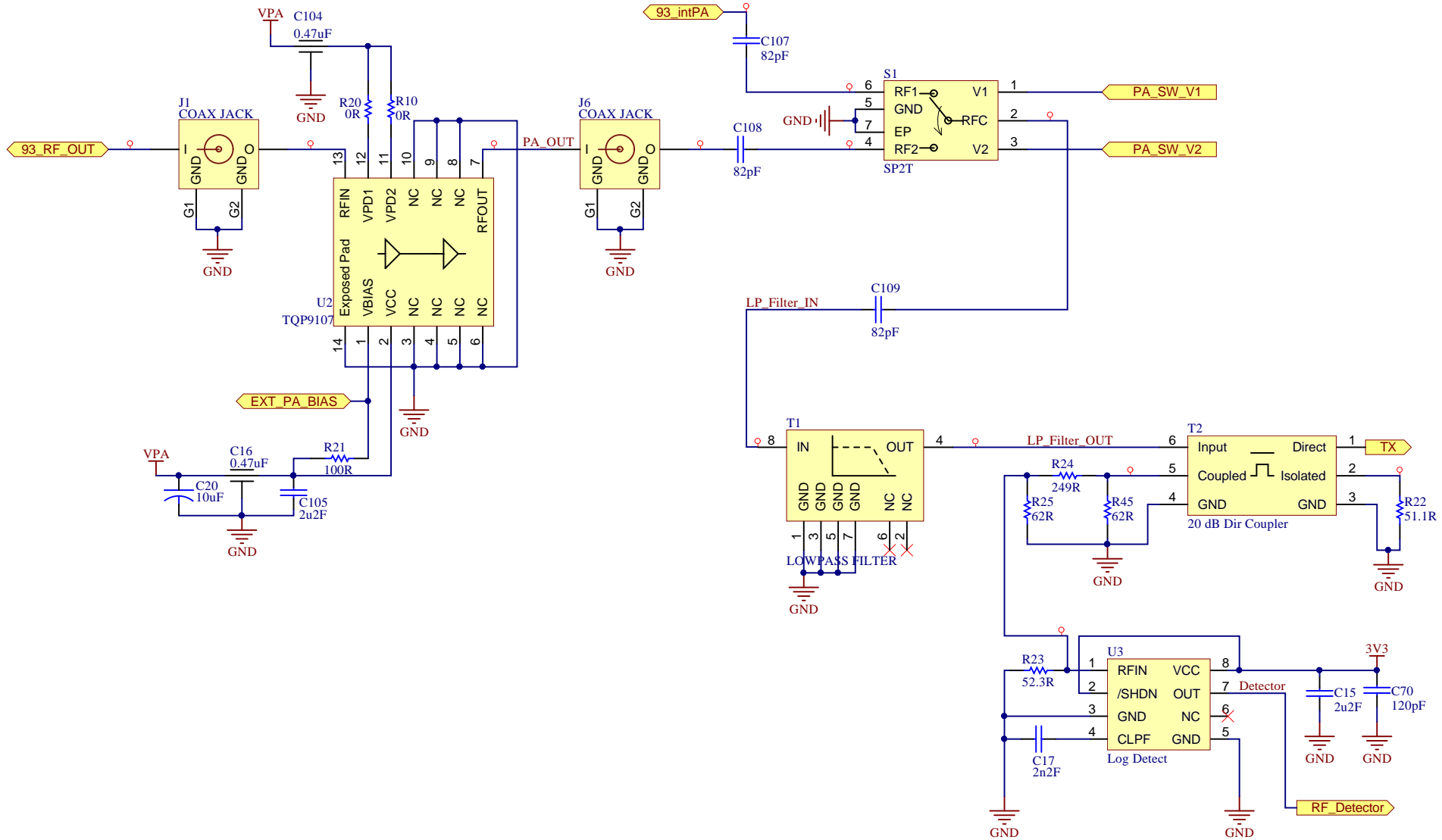
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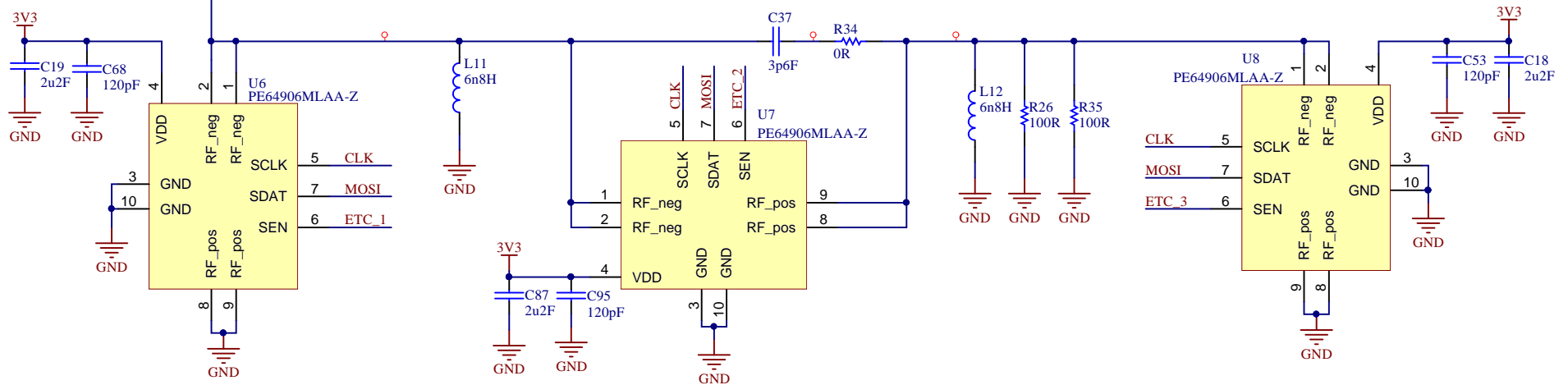
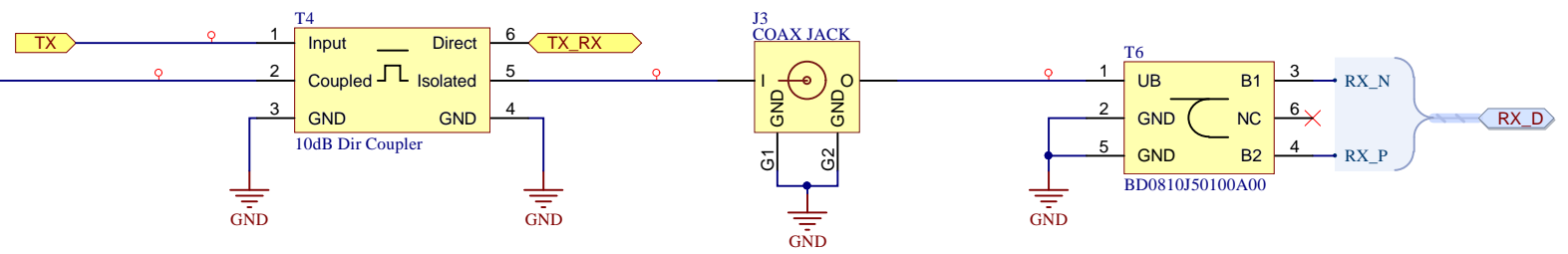
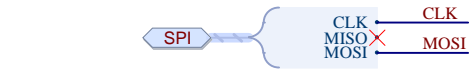
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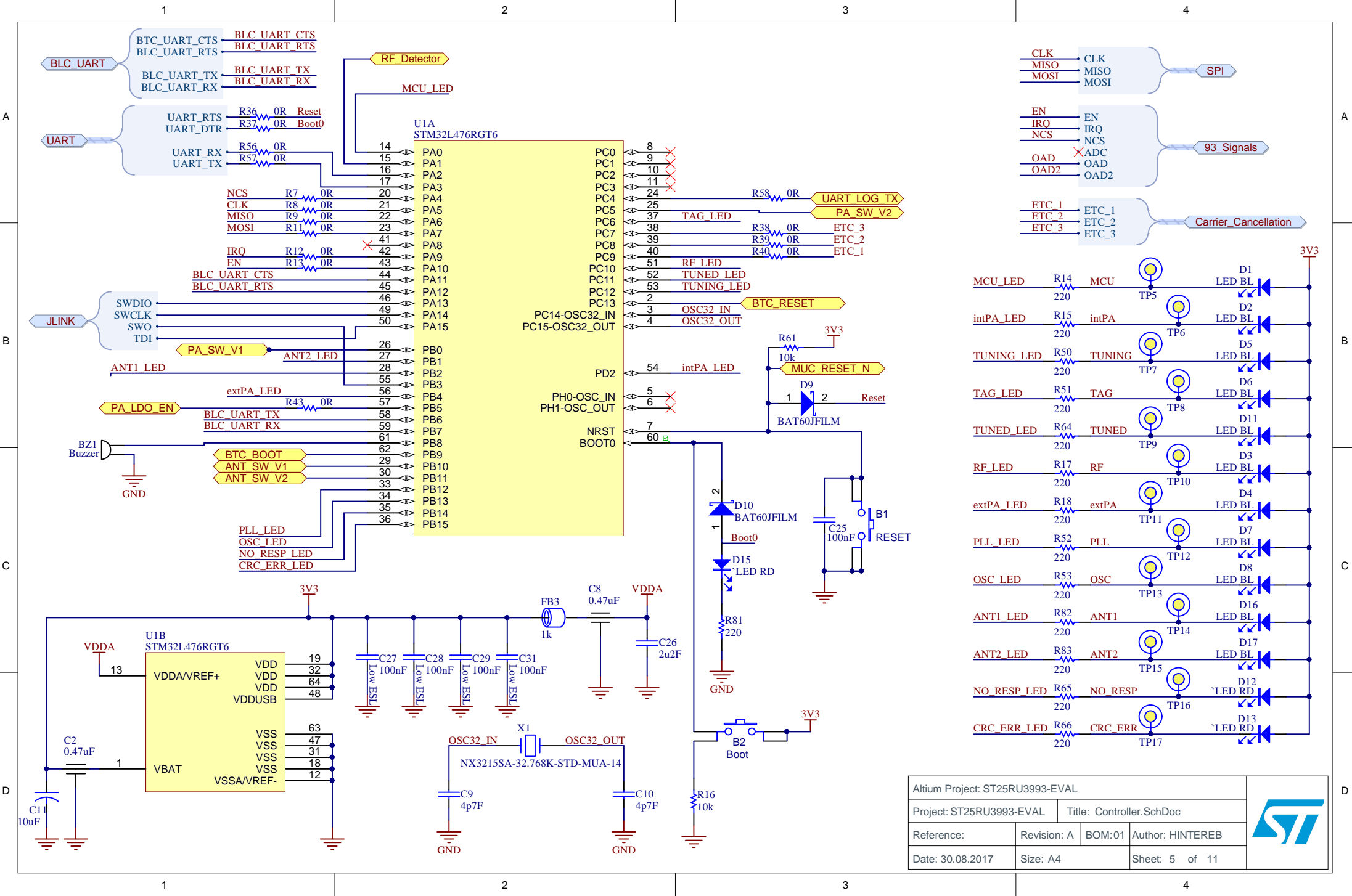


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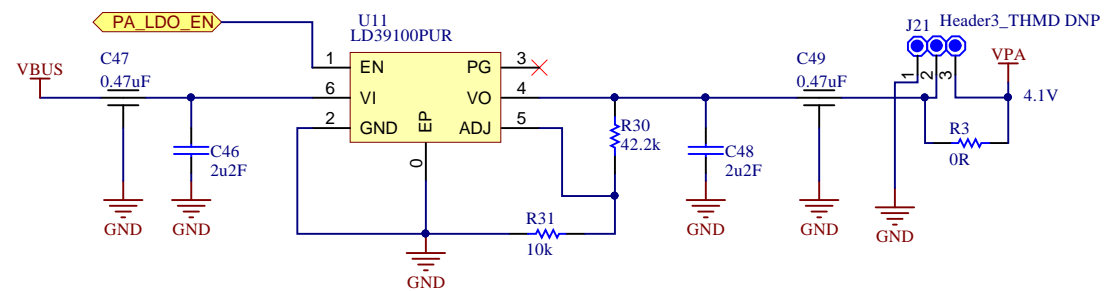
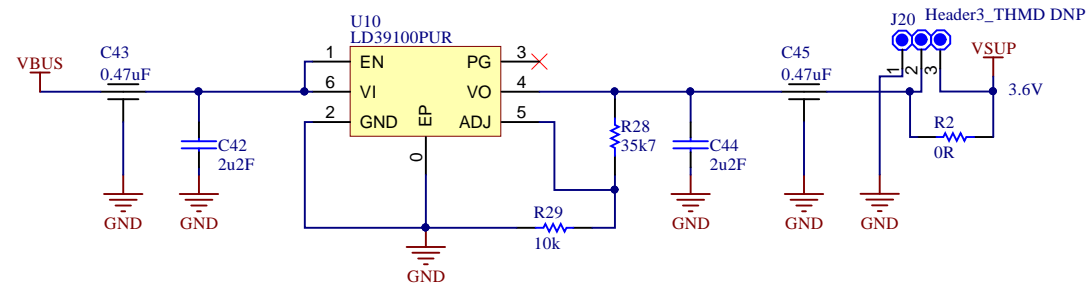
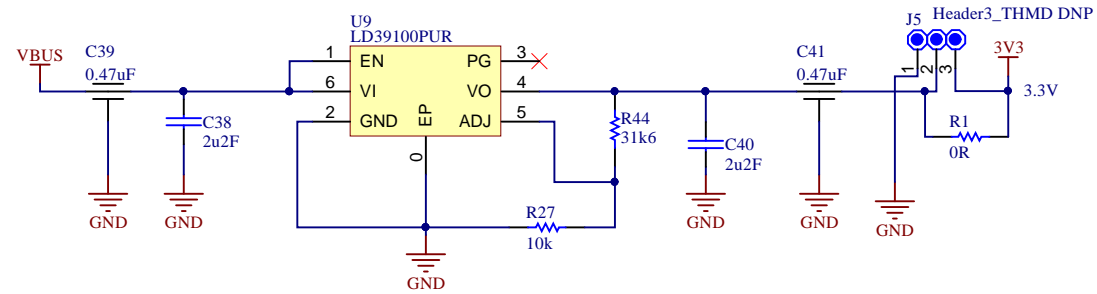


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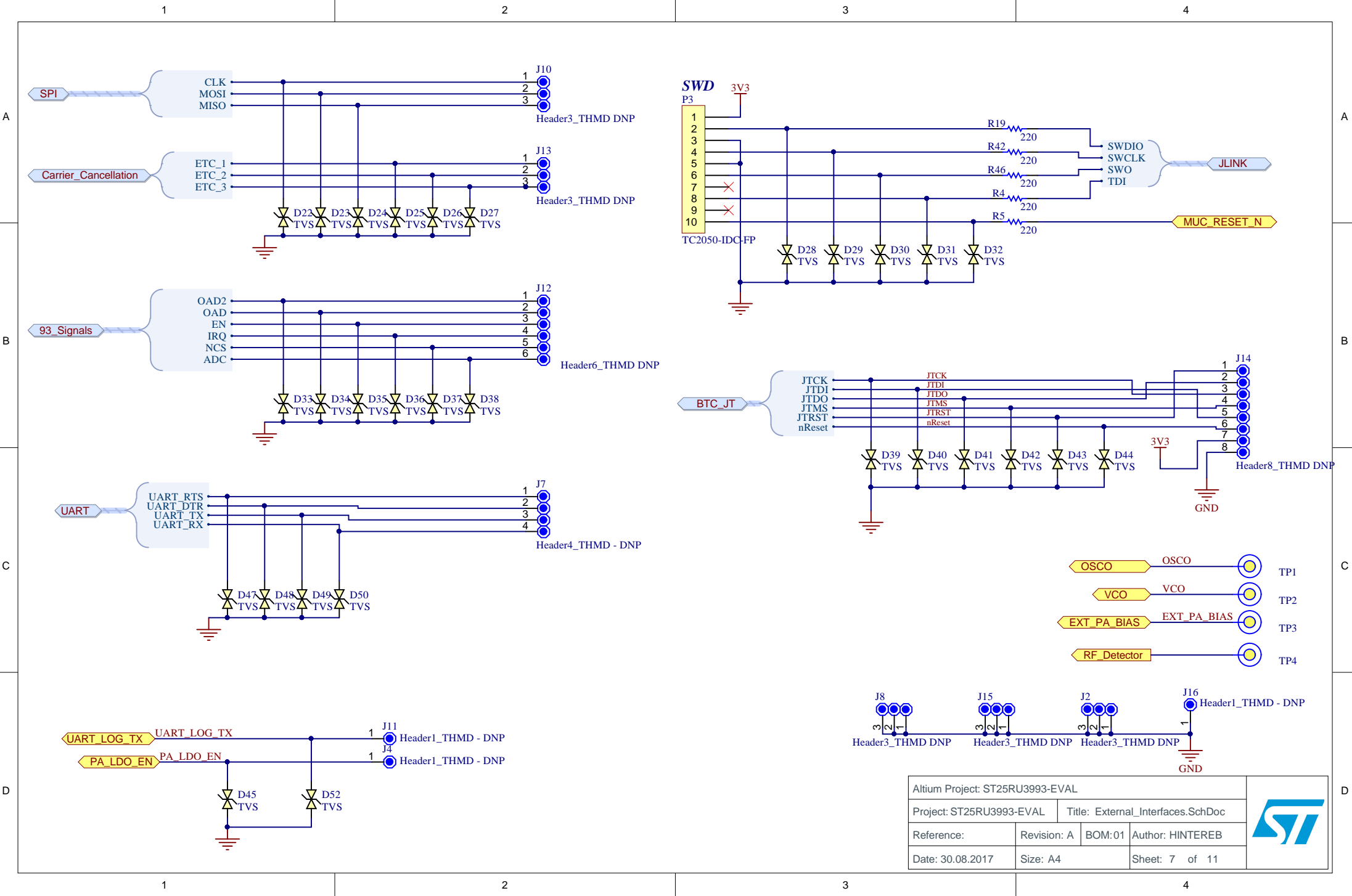
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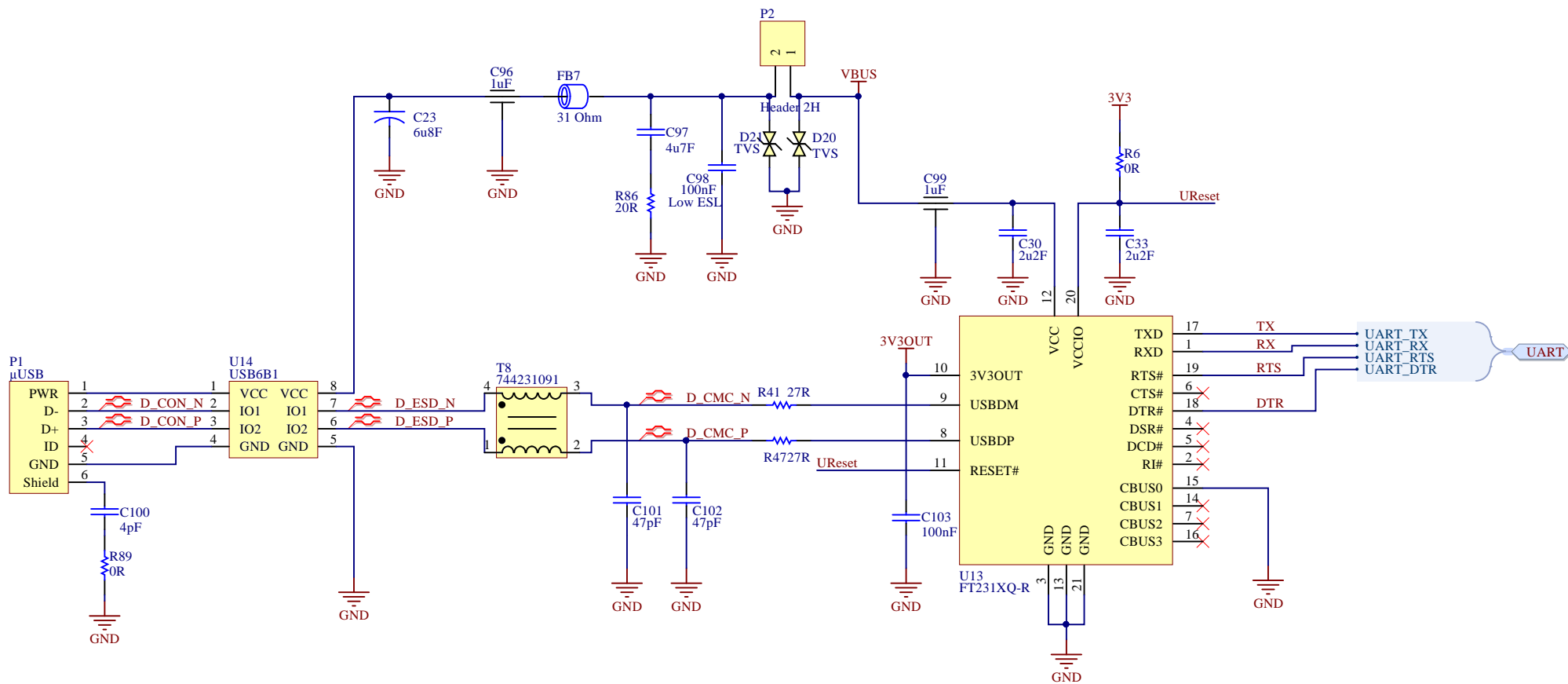




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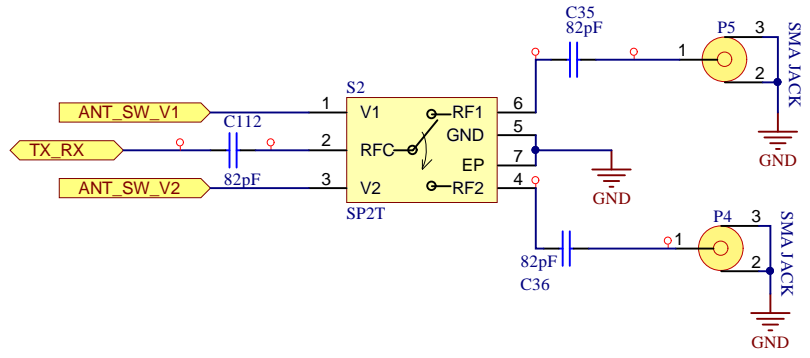





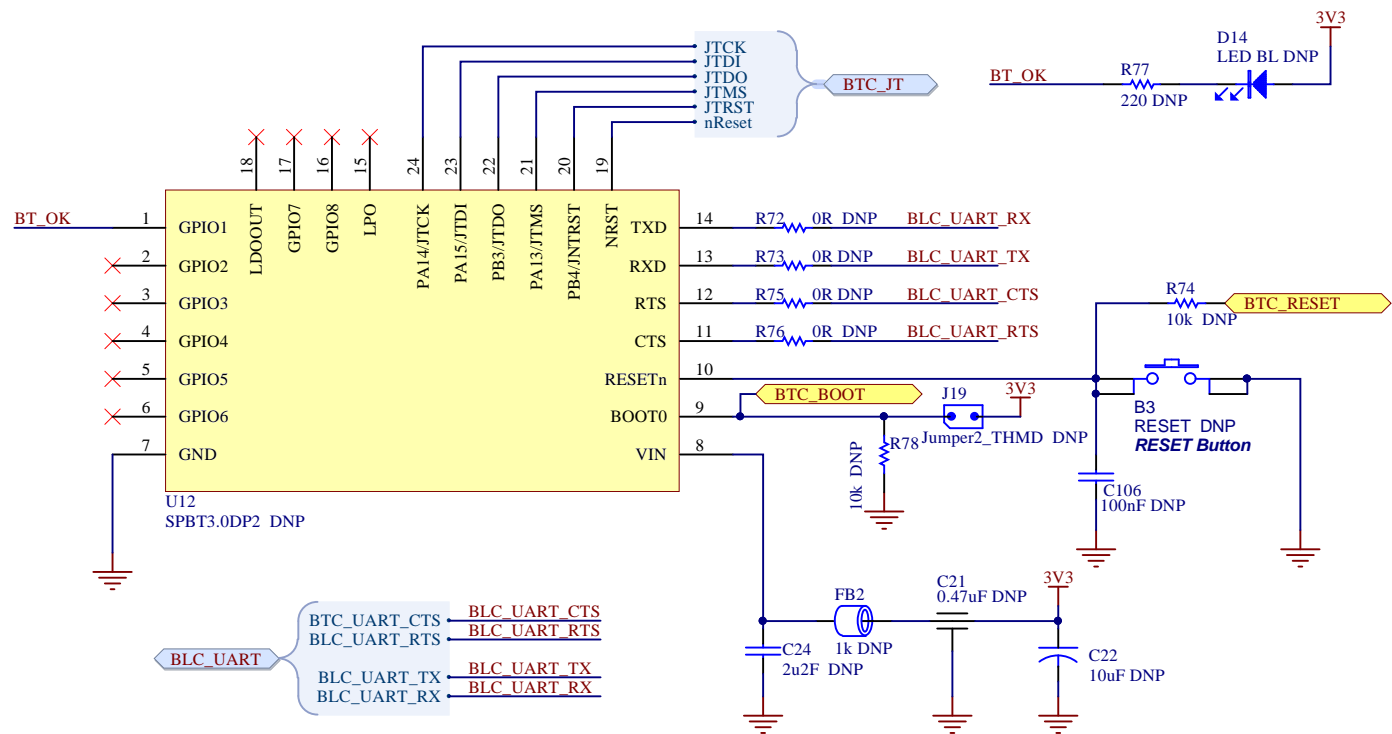


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1

2

3

4

A

A

B

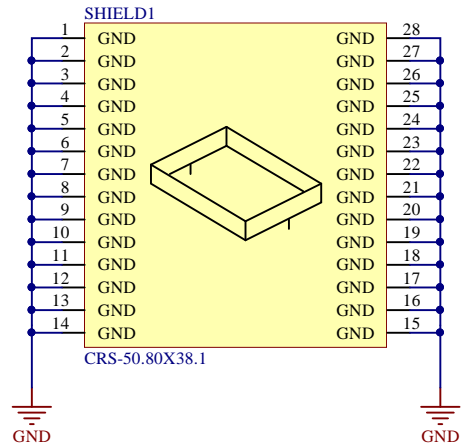
B


C

C

D

D



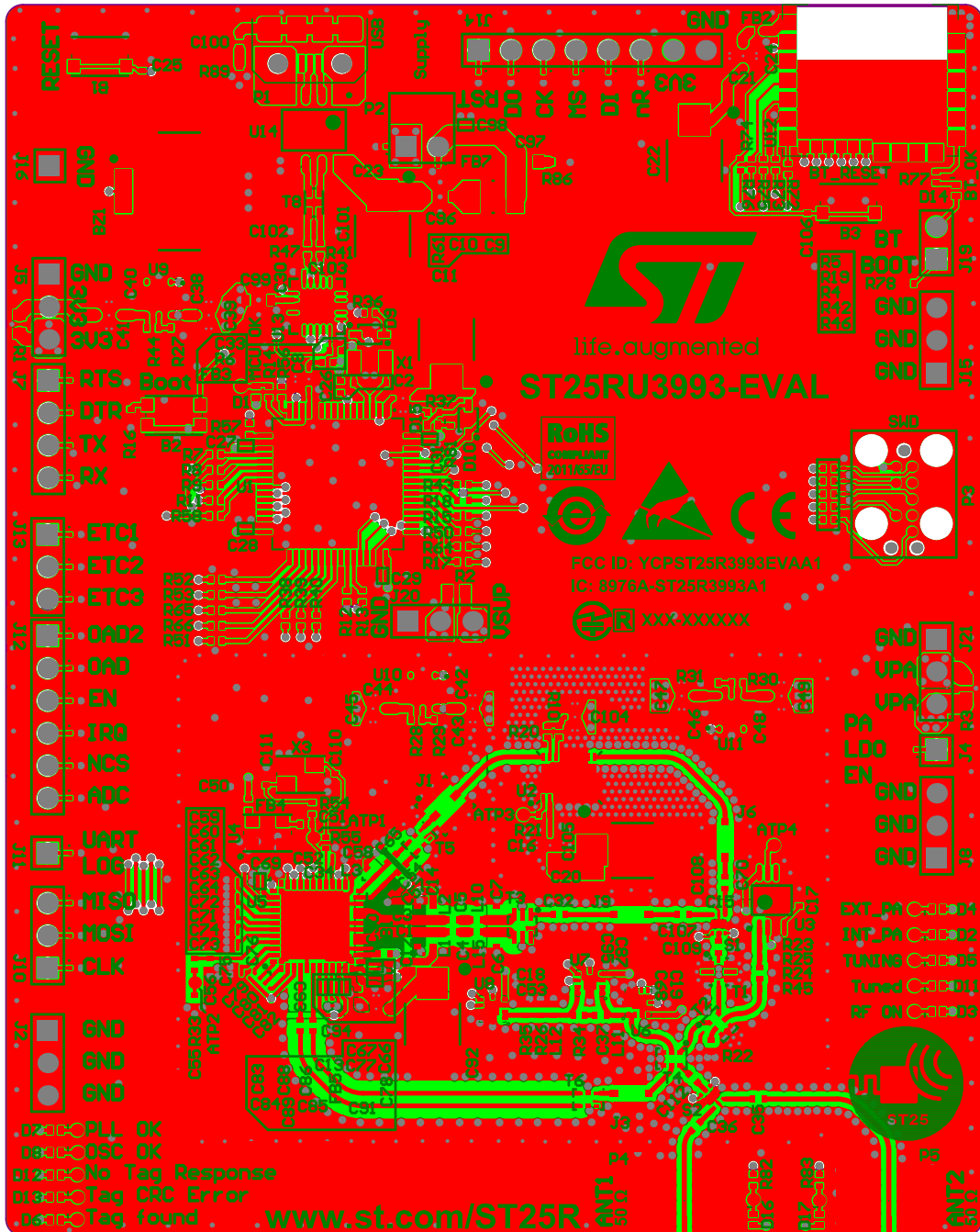
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1

2

3

4



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FCC ID: YGPST25R3993EVA A1
IC: 8976A-ST25R3993A1

XXX-XXXXX

.D2XDCPLL OK
.D8XDCOSC OK
D12XDCNo Tag Response
D13XDCTag CRC Error
.D4XDCTag found

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EXT_PA C00D04
INT_PA C00D02
TUNING C00D05
Tuned C00D011
RF ON C00D03

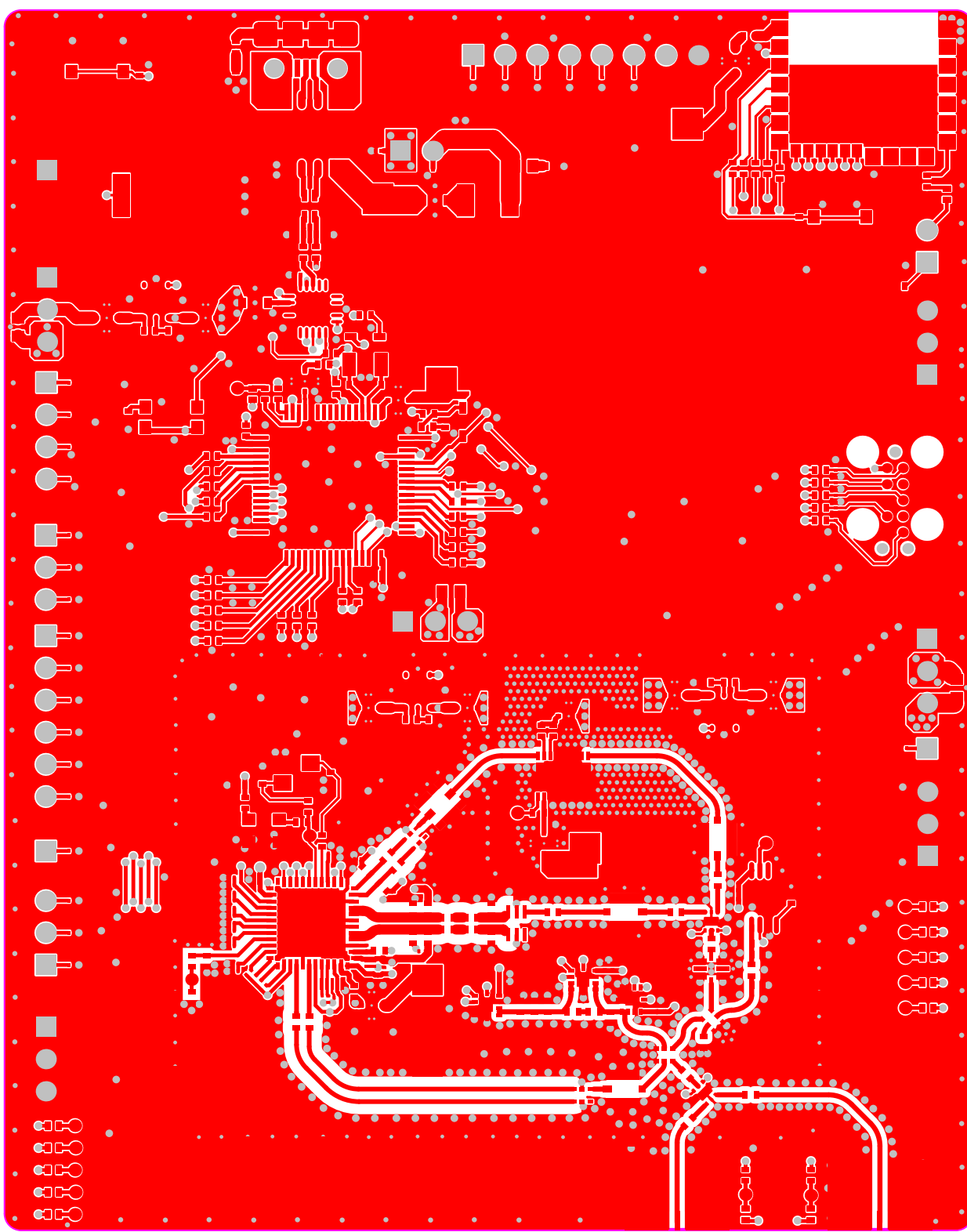


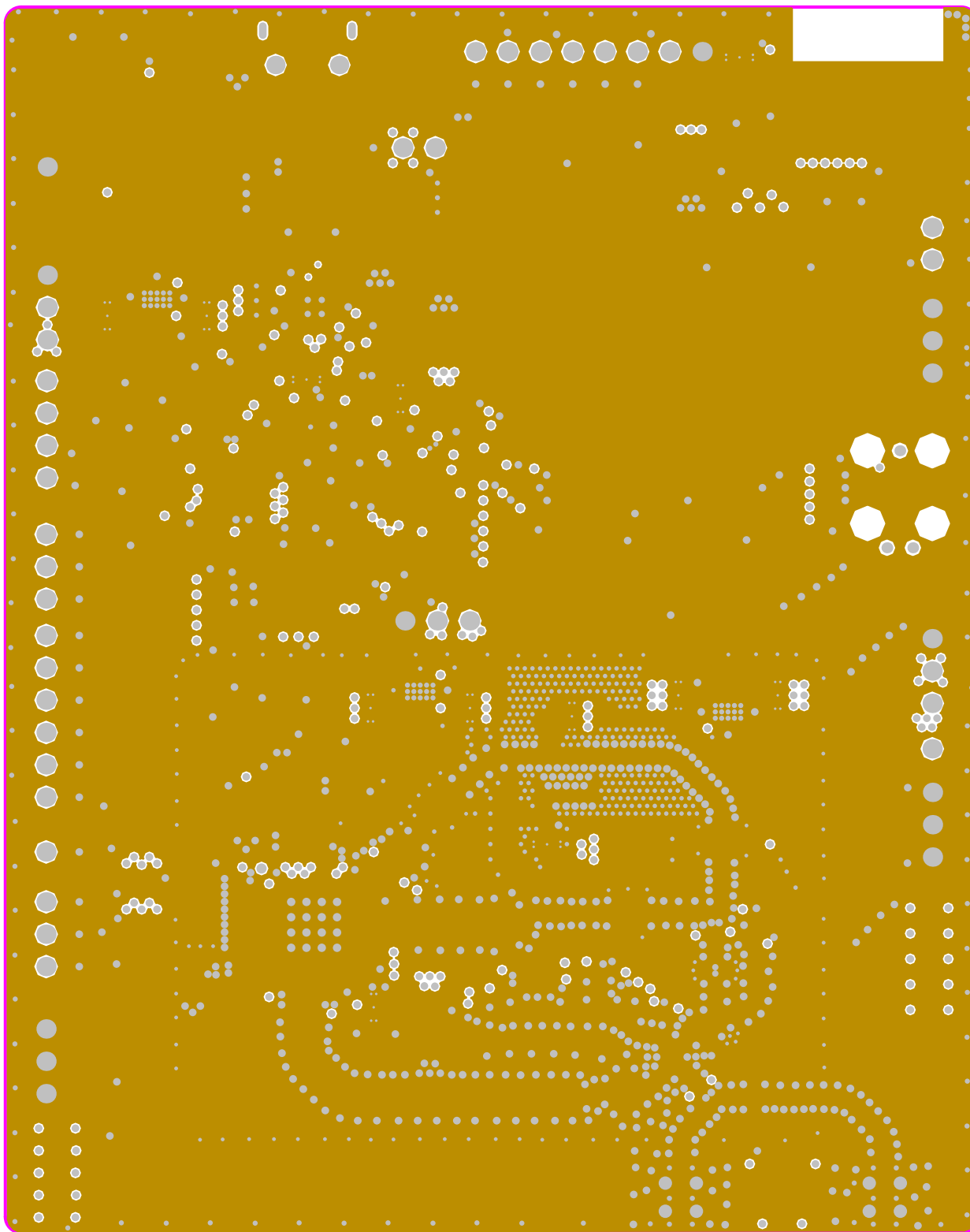
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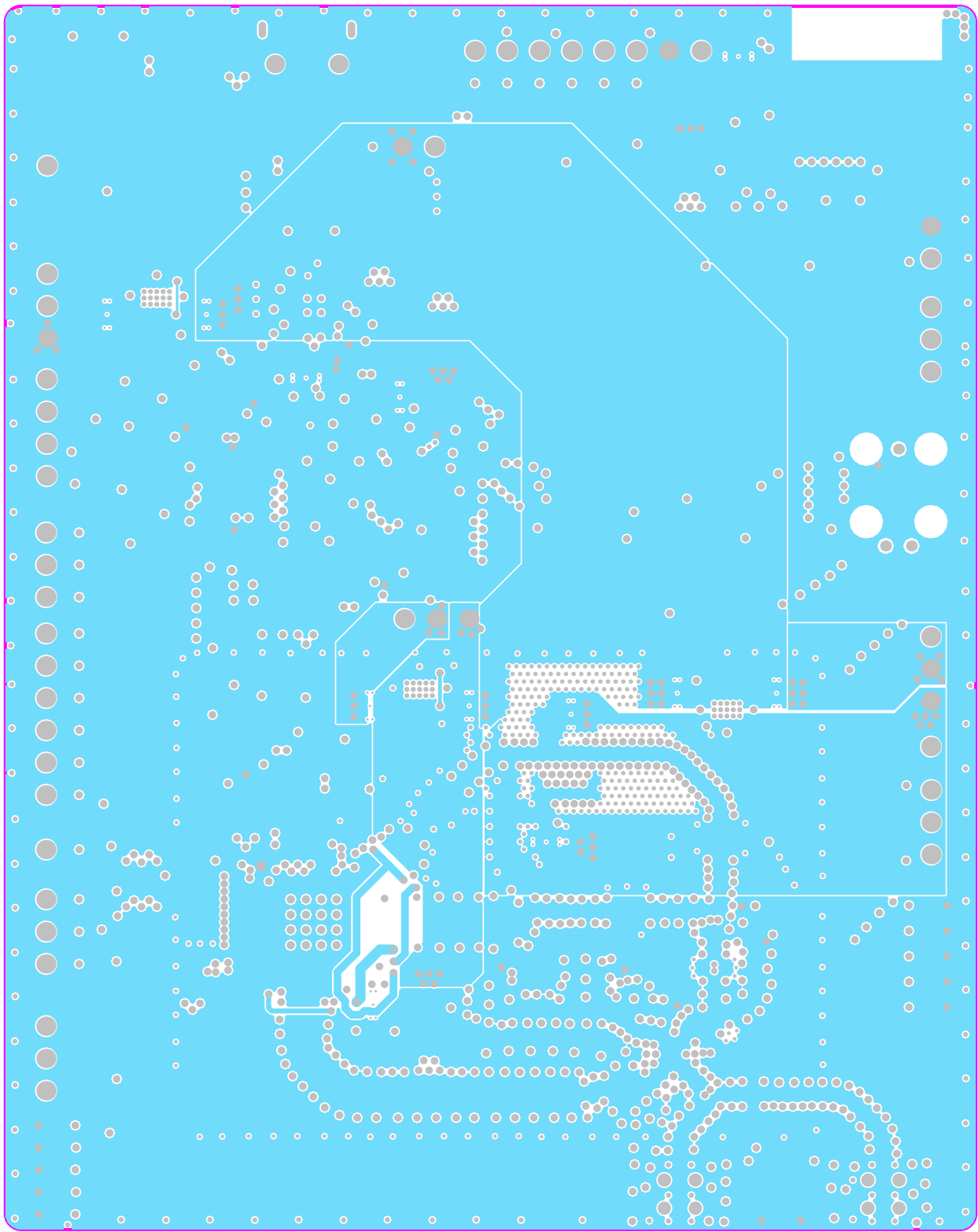
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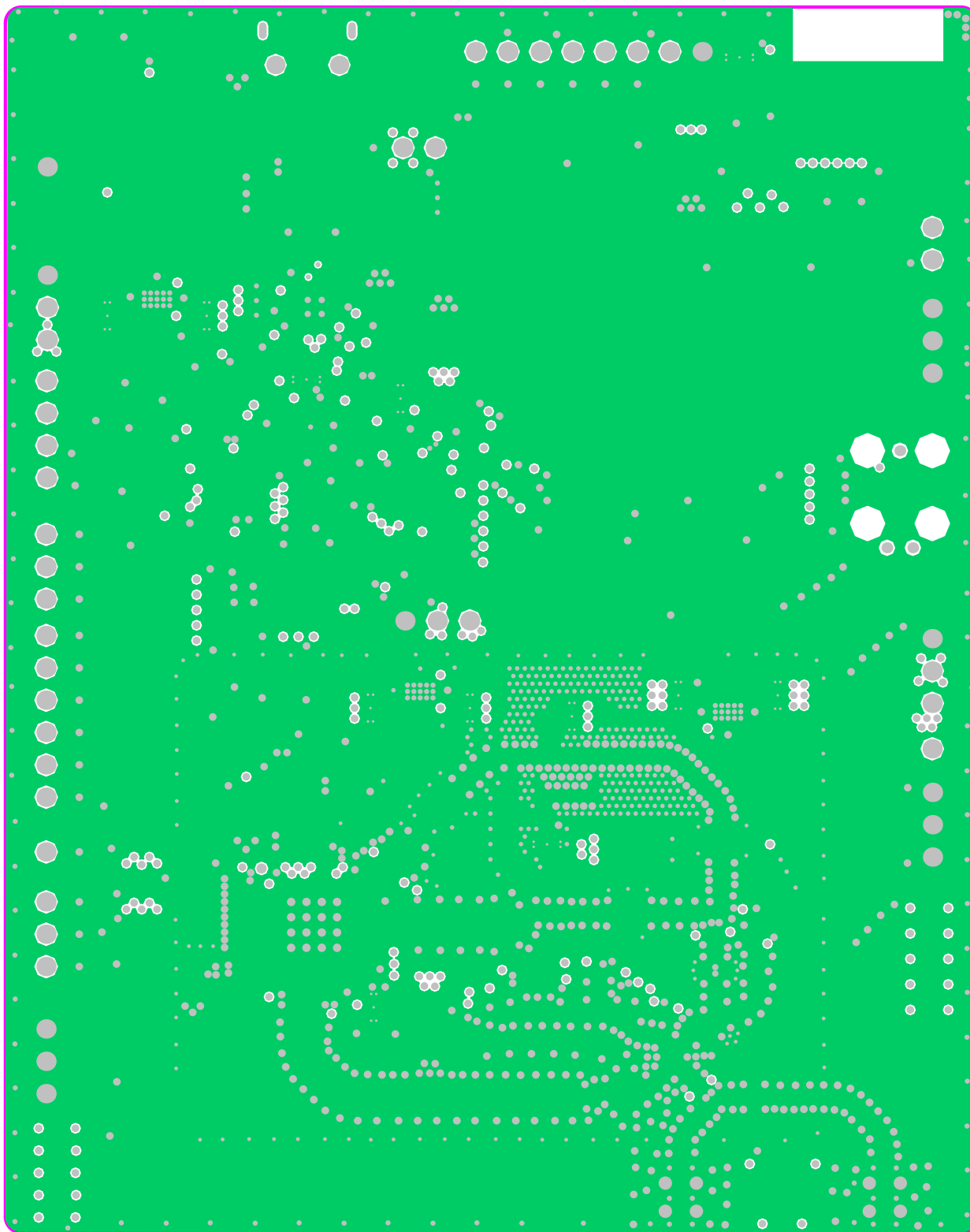
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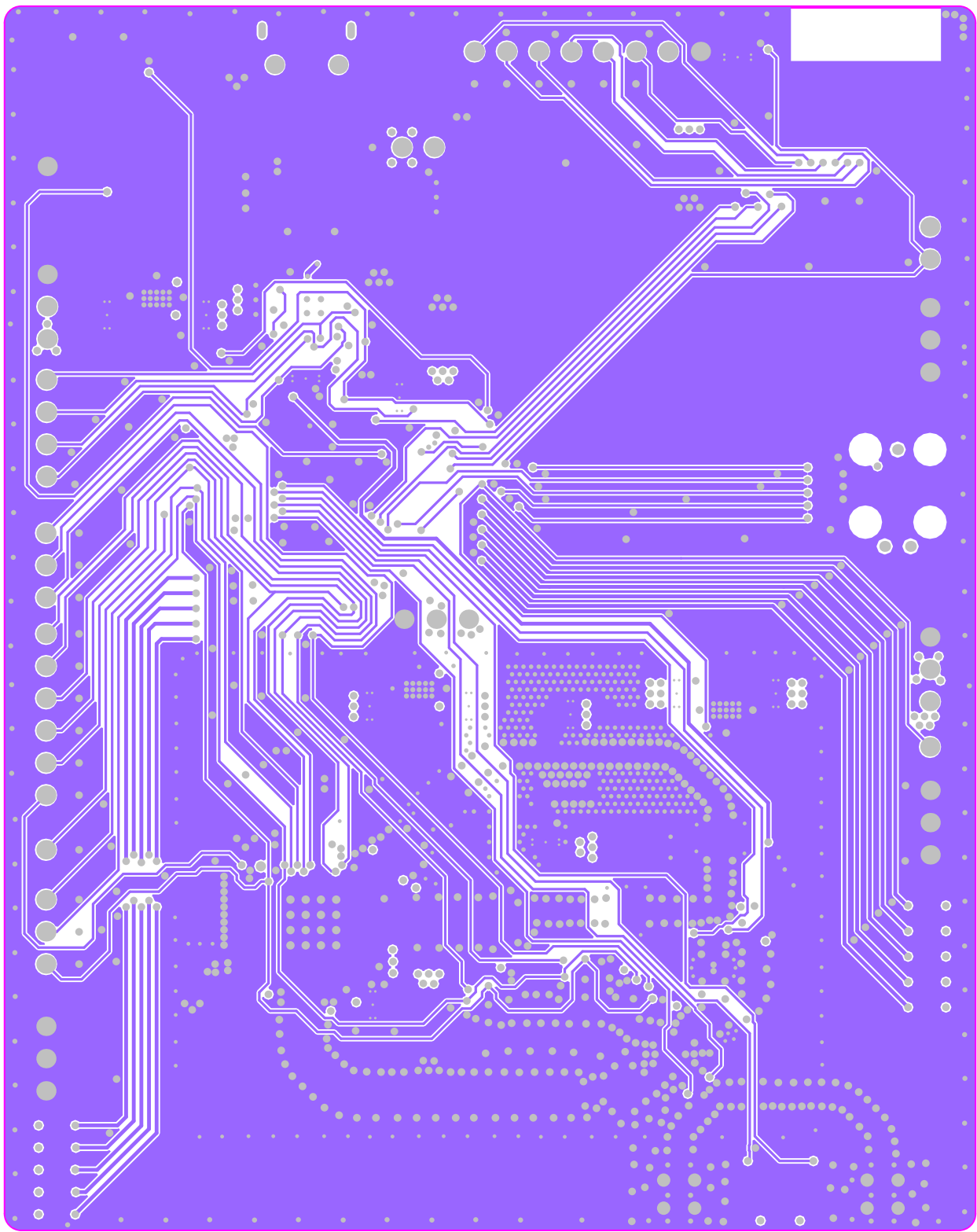
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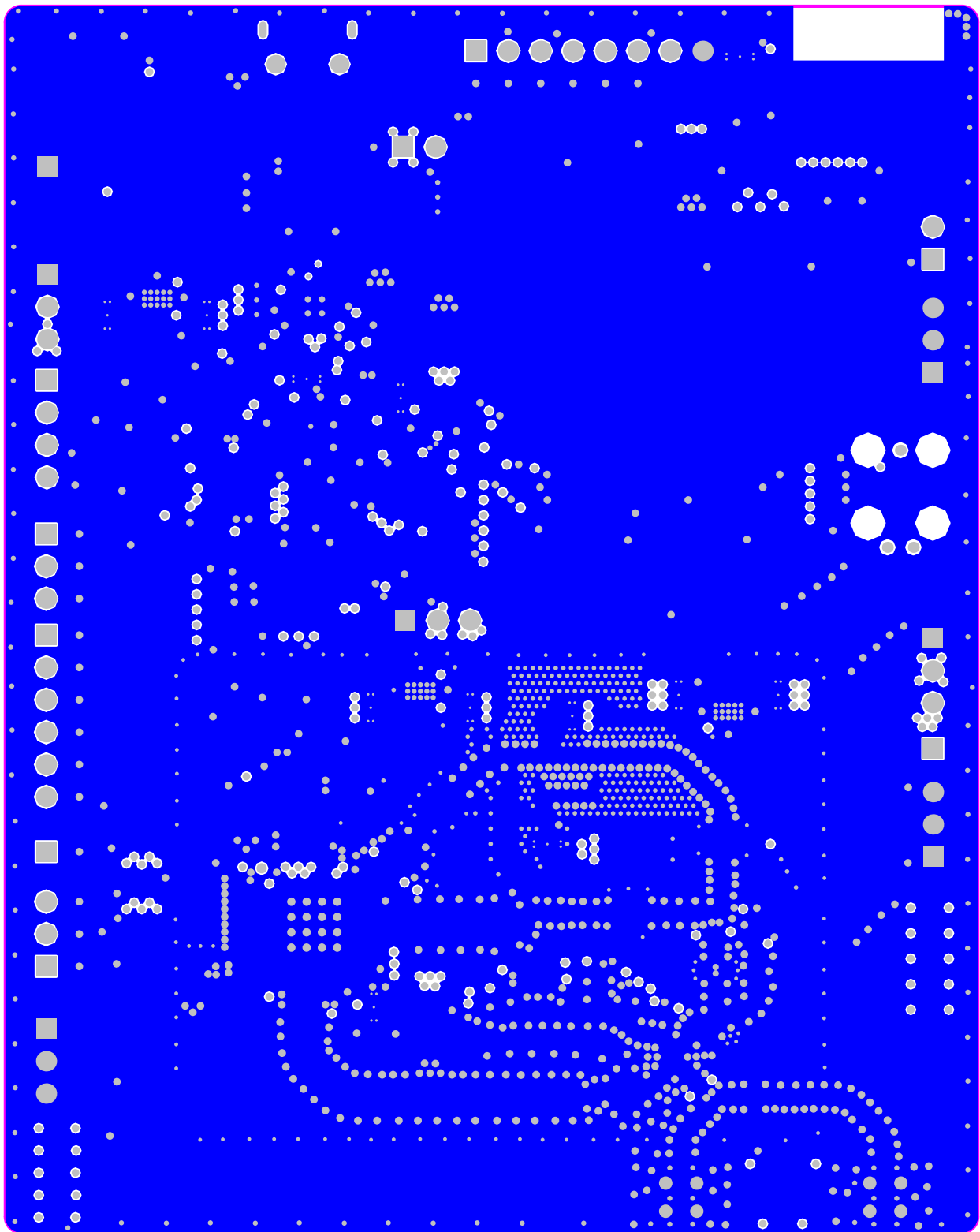


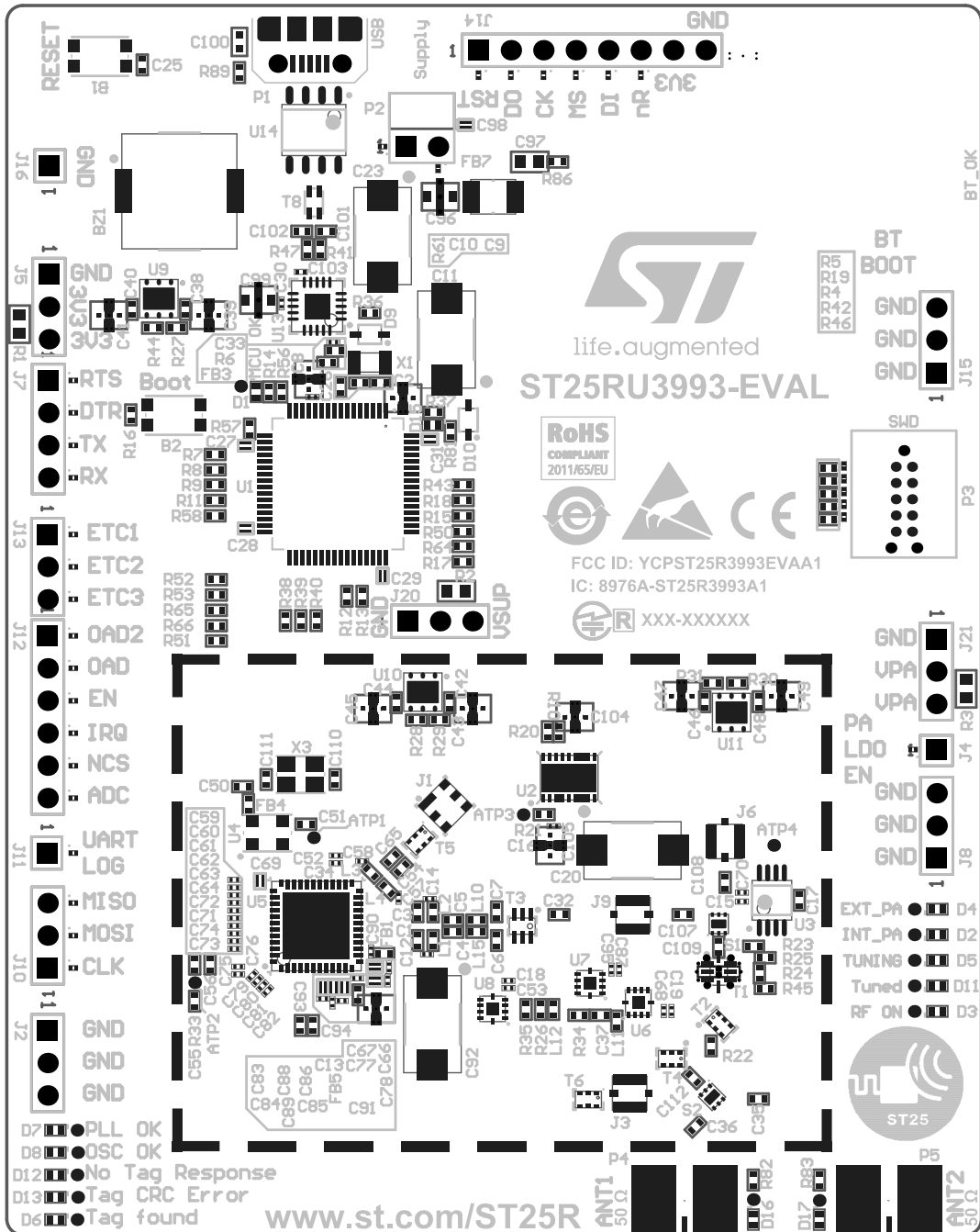












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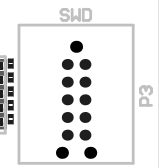
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- D7 ● PLL OK
- D8 ● OSC OK
- D12 ● No Tag Response
- D13 ● Tag CRC Error
- D6 ● Tag found

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- BT BOOT
- GND
- GND
- GND



- GND
- VPA
- VPA
- PA
- LDO
- EN
- GND
- GND
- GND

- EXT_PA ● D4
- INT_PA ● D2
- TUNING ● D5
- Tuned ● D11
- RF ON ● D3



- ANT1 50 Ω
- D16 R82
- D17 R83
- ANT2 50 Ω