

1. 只用电池供电，电池规格Li-3.7V
2. USB隔离，保护电源，降低工频
3. 5340内电源只用VDD，不使用VDDH

原理图参考手册P805

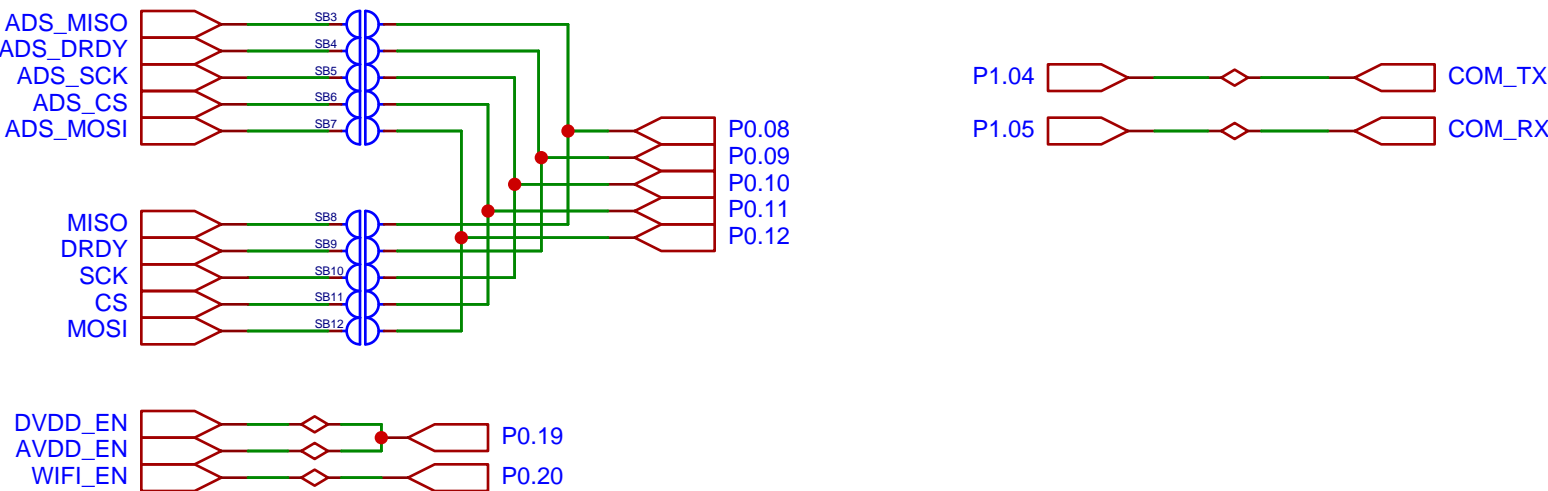
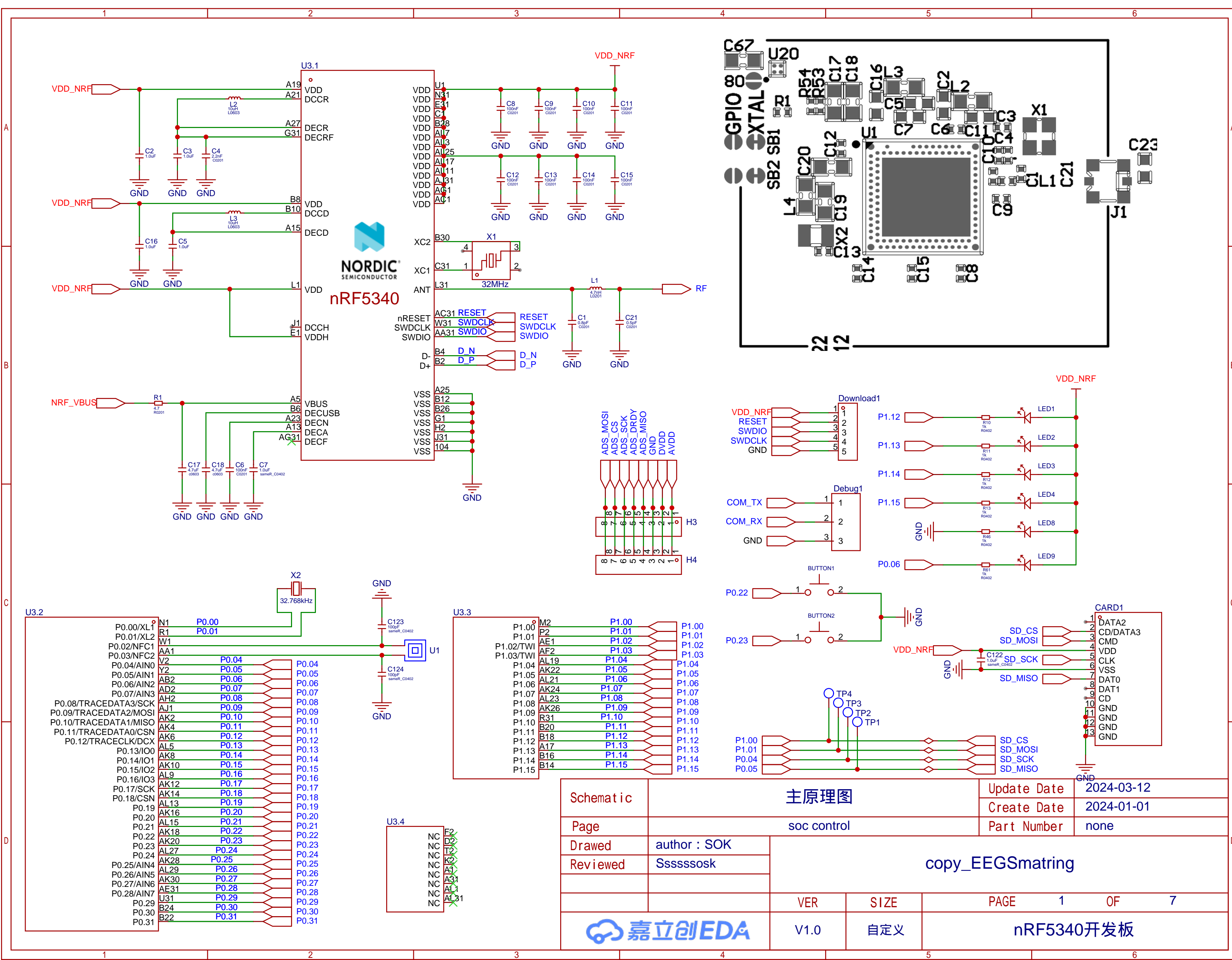
Circuit configuration number 2 for QKAA aQFN94 is showing the schematic and the bill of materials table.

Config no.	Supply configuration		Enabled features				
	VDDH	VDD	EXTSUPPLY	DCDC on VREGH	DCDC on VREGMAIN and VREGGRADIO	USB	NFC
Config. 2	N/A	Battery/Ext. regulator	No	No	Yes	Yes	Yes

Table 218: Configuration summary for circuit configuration no. 2

Designator	Value	Description	Footprint
C1	0.7 pF	Capacitor, NP0, $\pm 0.05$ pF	0201
C2, C3, C5, C7, C16	1.0 $\mu$ F	Capacitor, X7S, $\pm 10\%$	0402
C4	2.2 nF	Capacitor, X7R, $\pm 10\%$	0201
C6, C8, C9, C10, C11, C12, C13, C14, C15	100 nF	Capacitor, X7S, $\pm 10\%$	0201
C17	4.7 $\mu$ F	Capacitor, X7S, $\pm 10\%$	0603
C18	4.7 $\mu$ F	Capacitor, X7R, $\pm 10\%$	0603
C21	N.C.	Not mounted	0201
CT1, CT2, CT3, CT4	Antenna dependent	Capacitor, NP0, $\pm 5\%$	0201
L1	2.2 nH	High frequency chip inductor, $\pm 5\%$	0201
L2, L3	10 $\mu$ H	Inductor, 50 mA, $\pm 20\%$	0603
R1	2.2 $\Omega$	Resistor, $\pm 1\%$ , 0.05 W	0201
U1	nRF5340-QKAA	Multiprotocol Bluetooth Low Energy, IEEE 802.15.4, ANT, and 2.4GHz proprietary System on Chip	AQFN-94
X1	32 MHz	Crystal SMD 2016, 32 MHz, CI=8 pF, Total Tol: $\pm 30$ ppm. For frequency tolerance requirements, see <a href="#">32 MHz crystal oscillator (HFXO)</a> on page 102.	XTAL_2016
X2	32.768 kHz	Crystal SMD 2012, 32.768 kHz, CI=9 pF, Total Tol: $\pm 50$ ppm	XTAL_2012

Table 219: Bill of material for circuit configuration no. 2



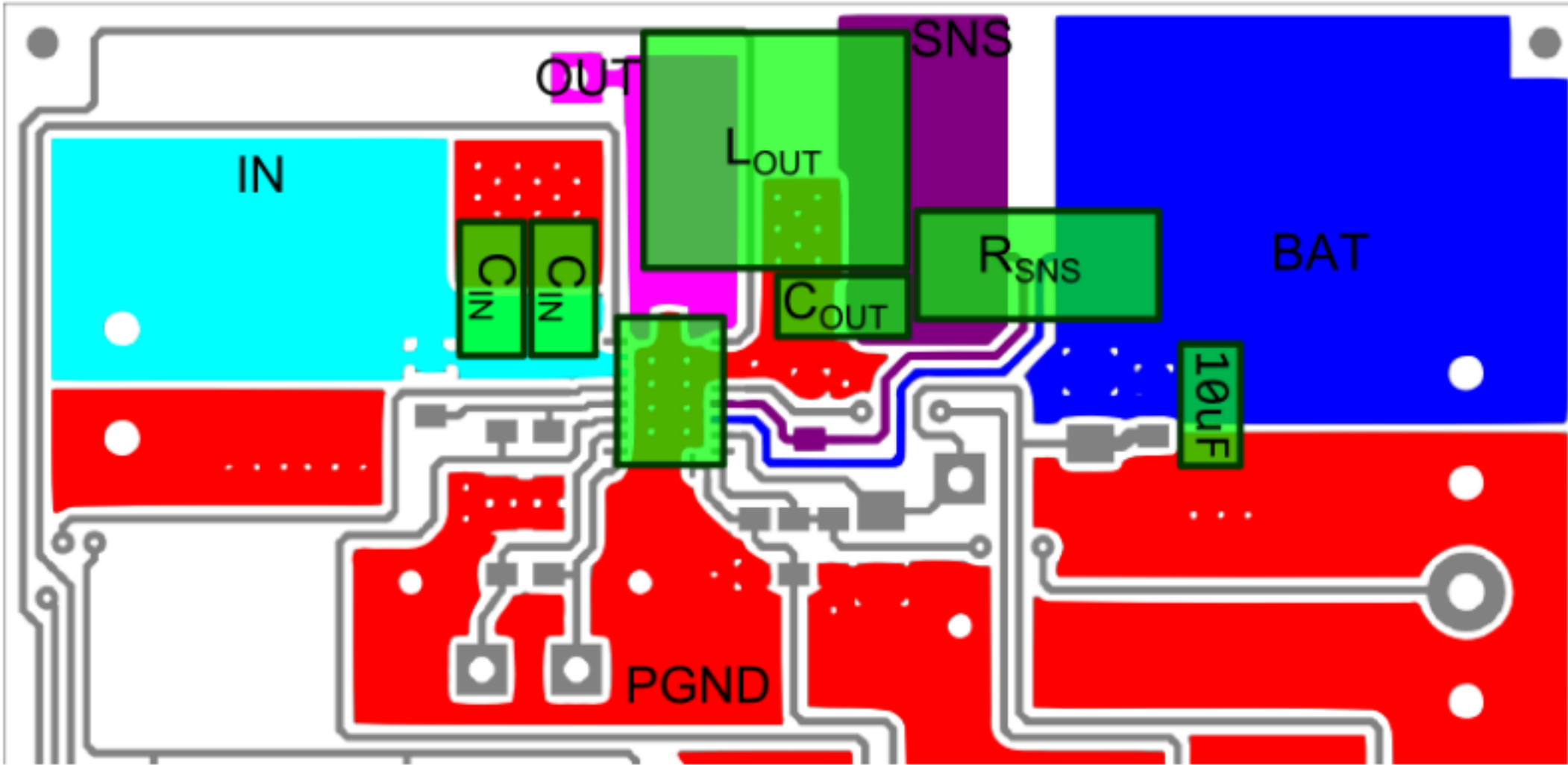
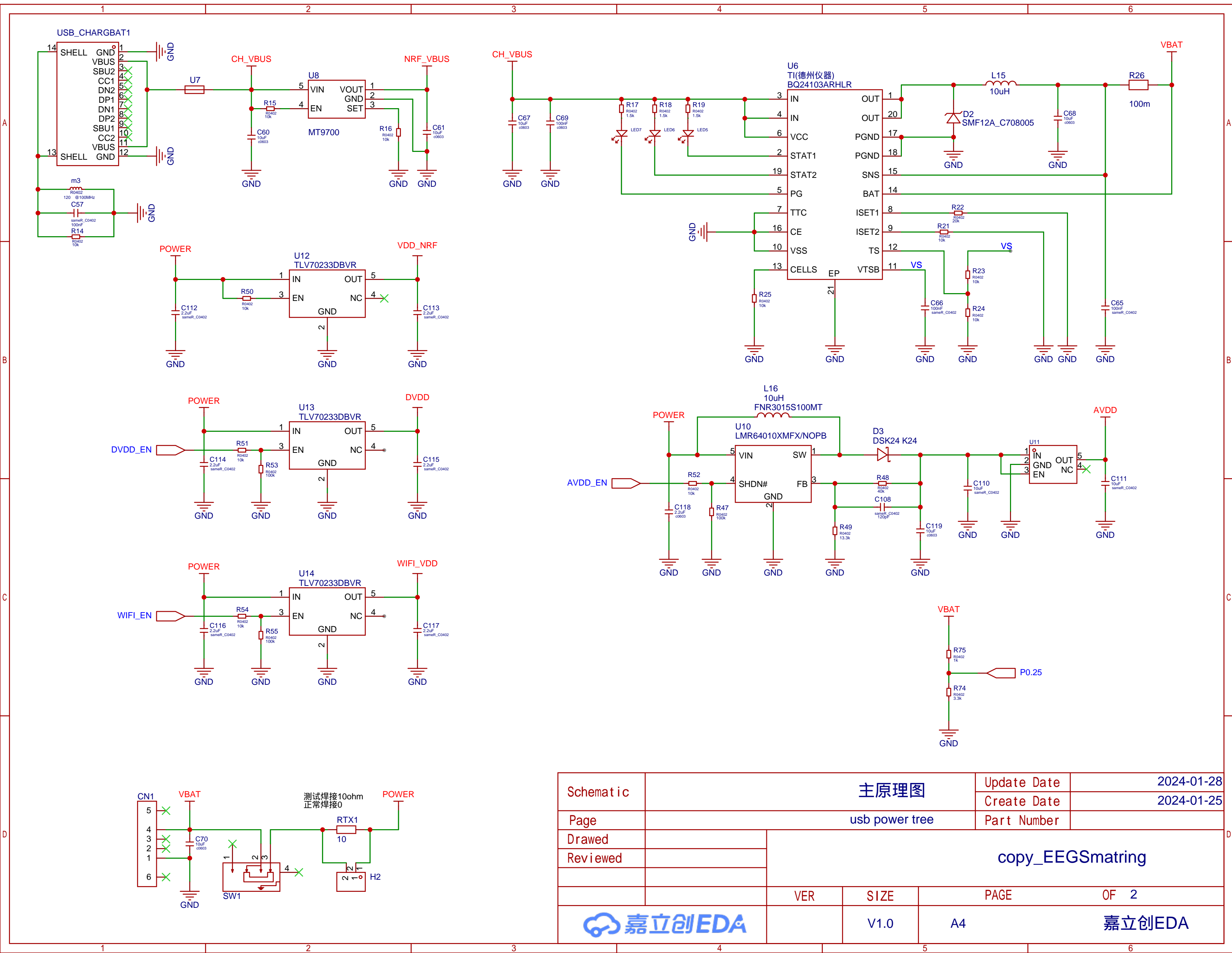
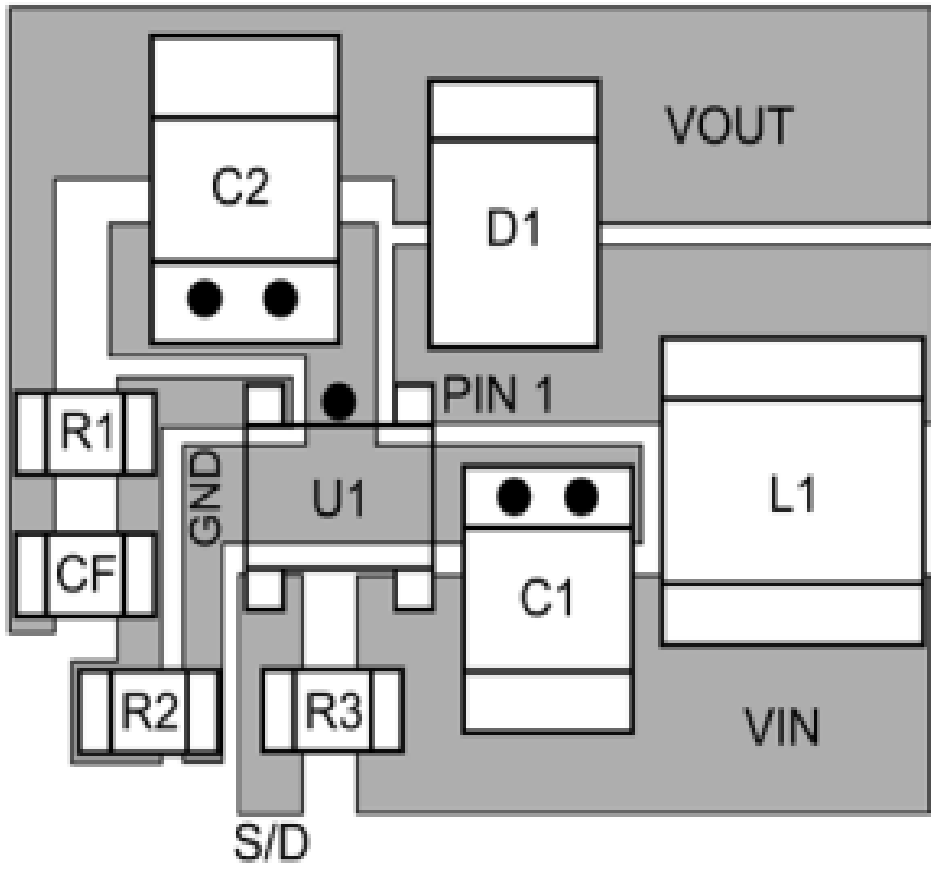
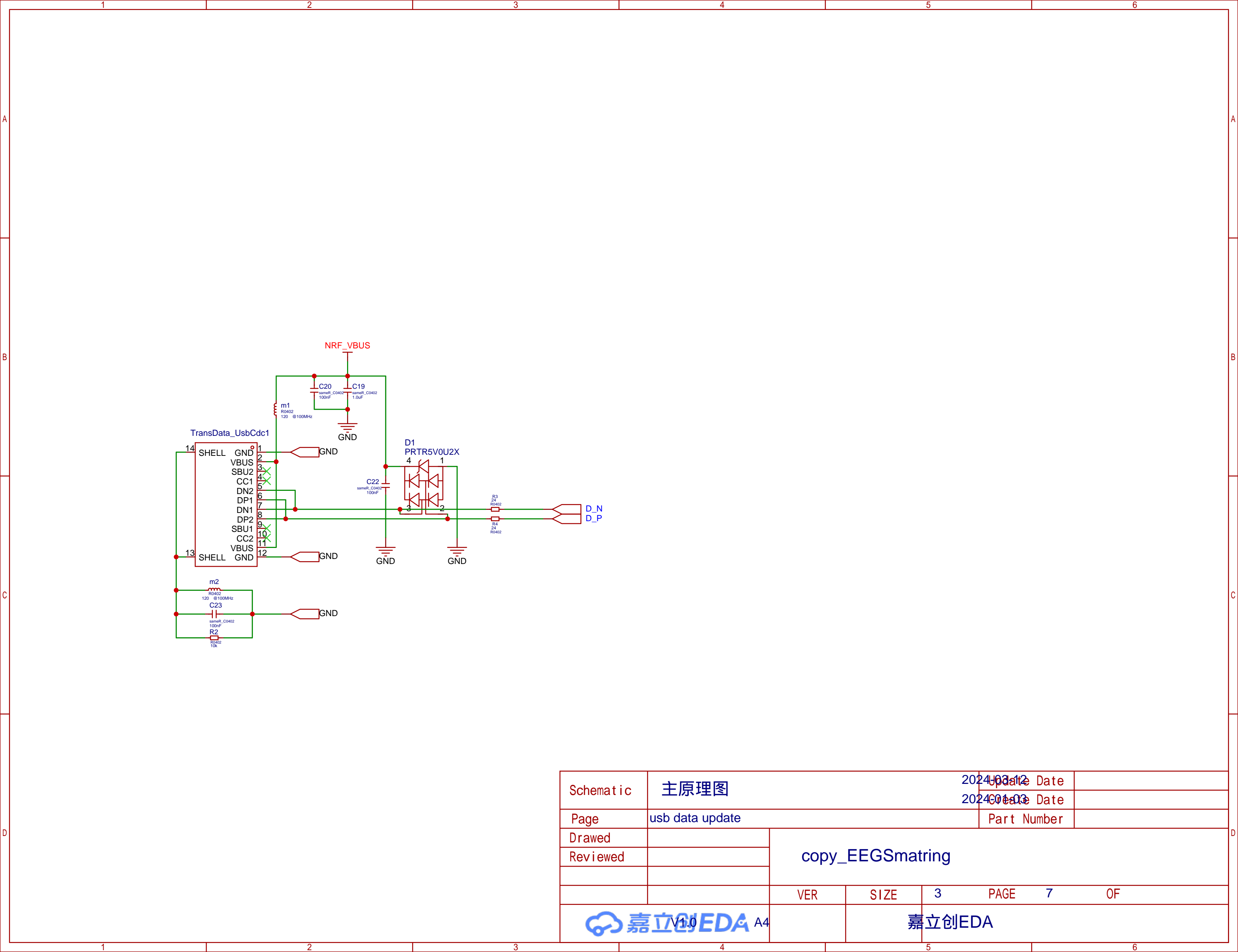


Figure 24. bq241xx PCB Layout

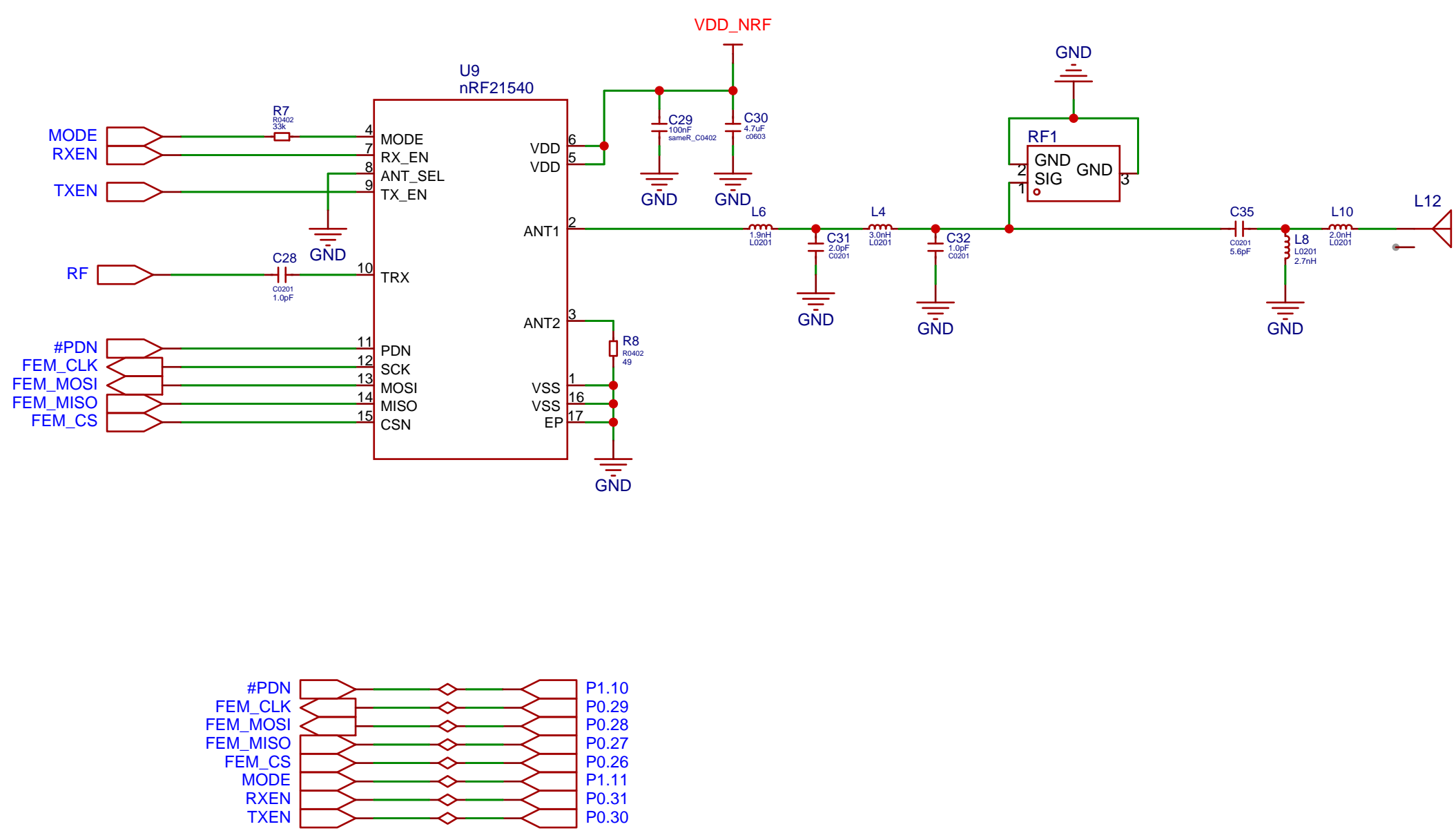



Schematic	主原理图		Update Date	2024-01-28
Page	usb power tree		Create Date	2024-01-25
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Schematic	主原理图	Update Date		
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Schematic	主原理图			Update 2024-01-31	
				Create 2024-01-03	
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The schematic diagram illustrates the main principle of the nRF7002 module. It features the nRF7002 chip at the center, with various power and signal pins connected to external components. The power supply section includes VDD, VSS, VDD\_BUCK, VDD\_BUCKEN, and VDD\_BUCKEN pins, which are connected to a USB1 module, a 2.4G/5G antenna, and various passive components (resistors, capacitors, inductors). The signal section includes pins for IRQ, COEX\_GRANT, COEX\_REQ, COEX\_STATUS, BUCK\_EN, QSPI\_D3, QSPI\_D2, QSPI\_D1, QSPI\_D0, QSPI\_CS, QSPI\_CLK, HOST\_IRQ, SW\_CTRL1, SW\_CTRL2, COEX\_GRANT, COEX\_REQ, COEX\_STATUS, QSPI\_DATA3, QSPI\_DATA2, QSPI\_DATA1, QSPI\_DATA0, and QSPI\_CLK. The diagram also shows a USB1 module, a 2.4G/5G antenna, and various passive components (resistors, capacitors, inductors).

Schematic	主原理图	Update Date	2024-01-30
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