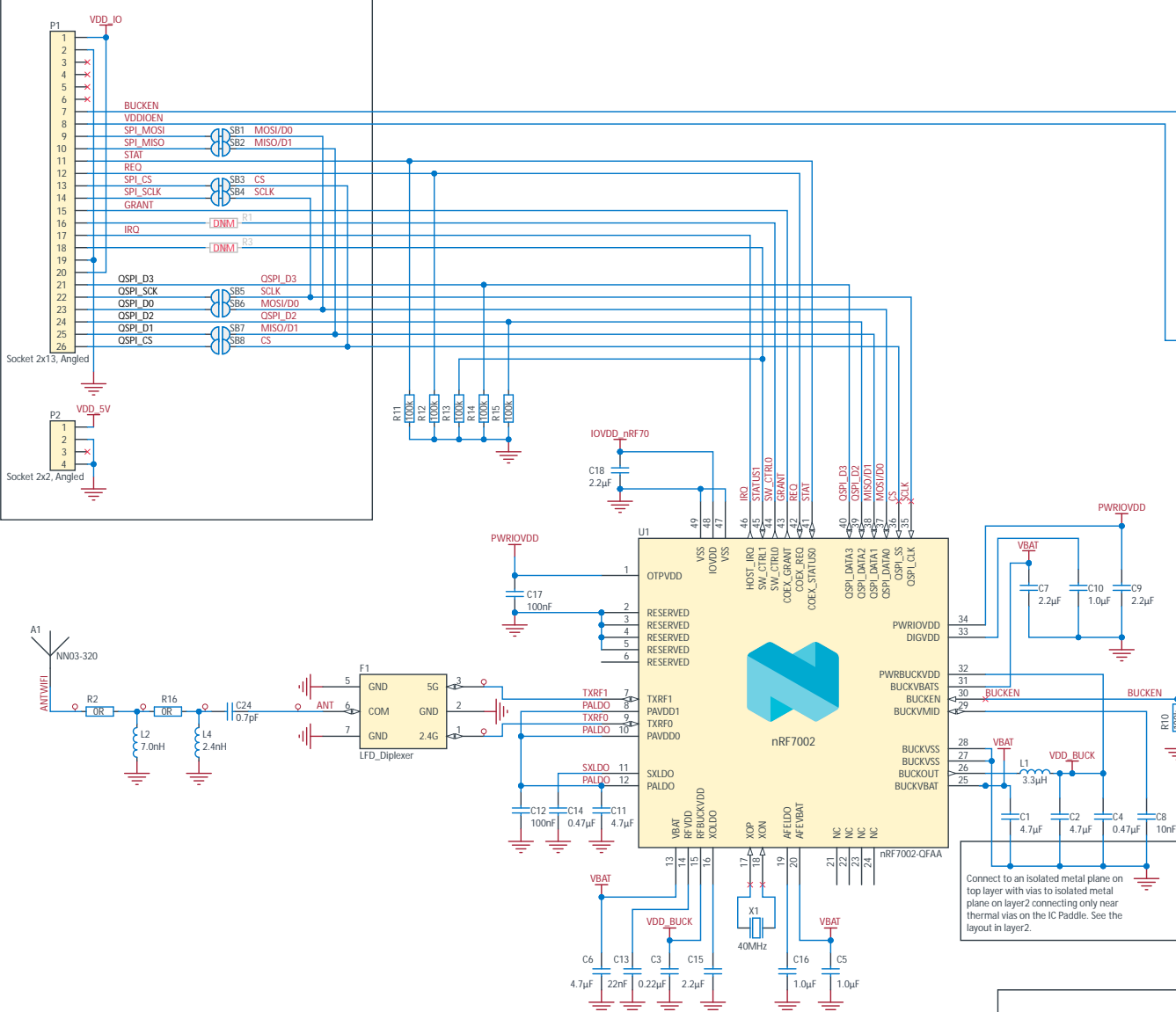


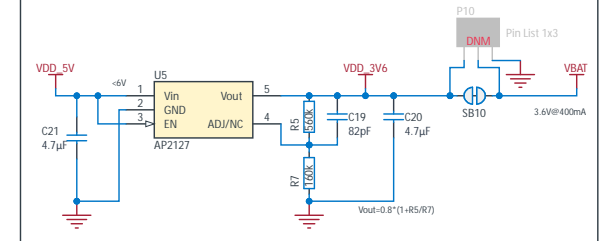
Nordic Semiconductor ASA

nRF7002 Expansion Board II (PCA63571)

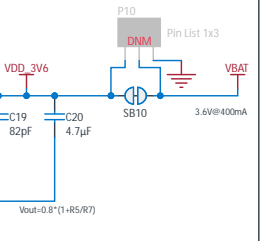
DK Connection



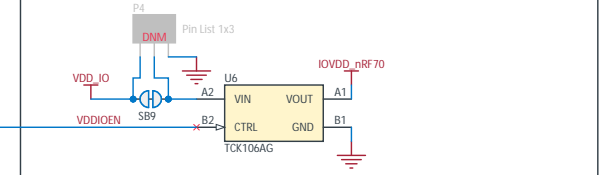
Power Supply Circuit



VBAT current measurement



IOVDD switch



✗ The No ERC object is a design directive.
This directive is placed on a node in the circuit to suppress harmless warnings and/or error violation conditions that are detected when the schematic project is compiled.

Logo's and markings

LABEL1
PCA63571
0.5.0
<year>, <week>
<U> B



WEE Symbol

Title
nRF7002-Expansion Board II

Size
A3

PCB Assembly Number
PCA63571

Date: 22.09.2025
File: pca63571_SchDoc
Classification: Public

Revision
0.5.0

Sheet 1 of 1
Drawn By: HANY

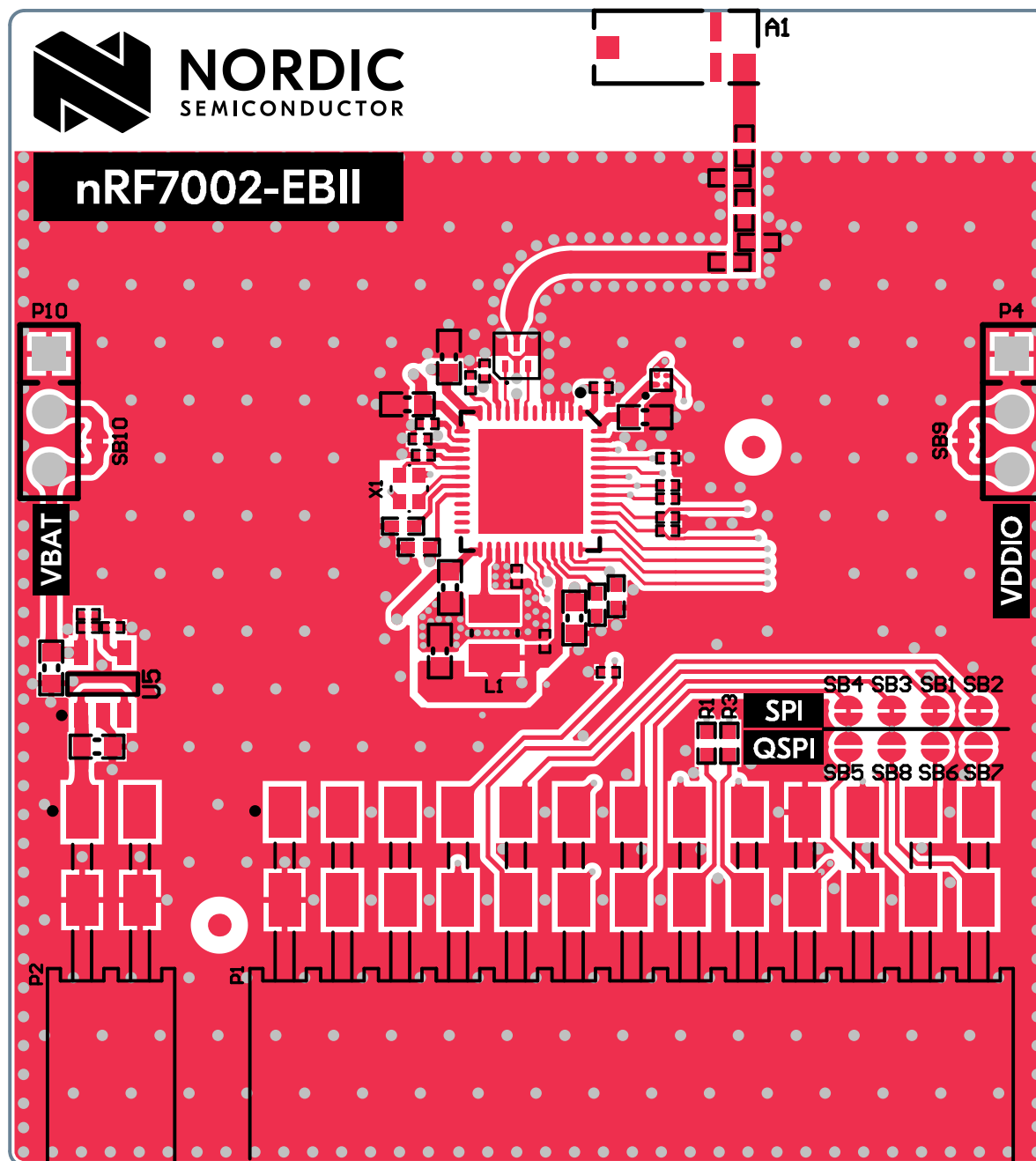


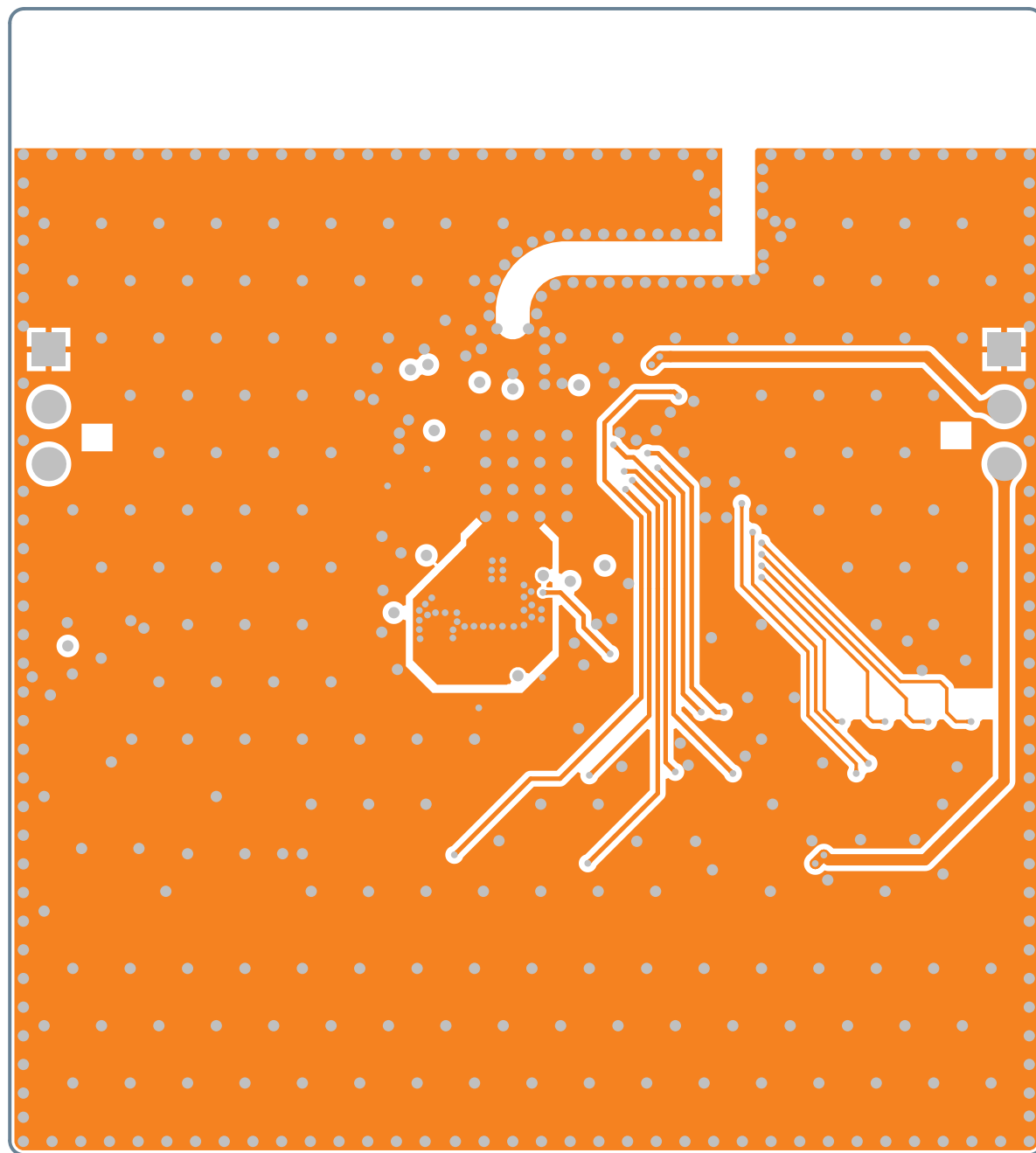
NORDIC
SEMICONDUCTOR

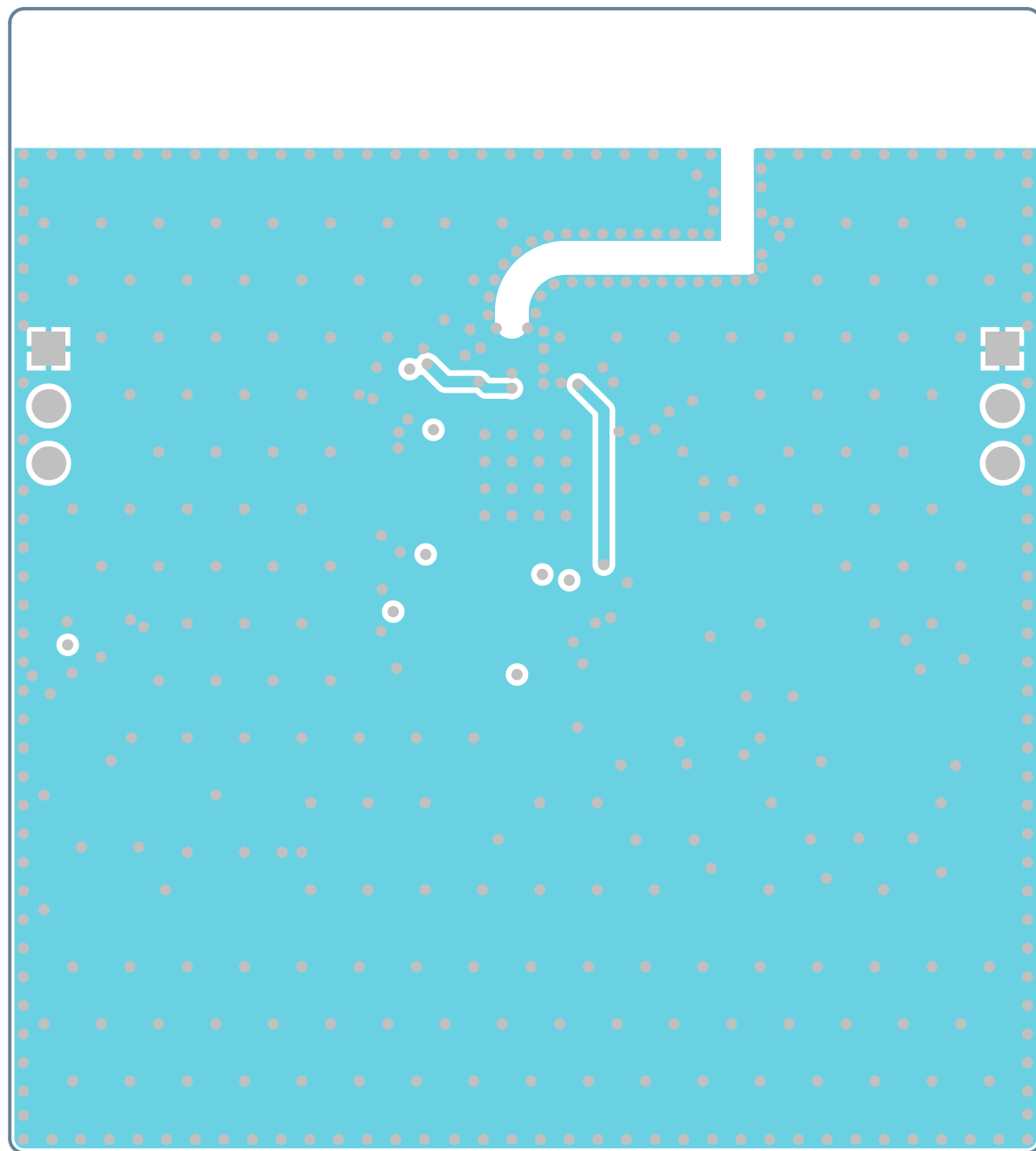


NORDIC
SEMICONDUCTOR

nRF7002-EBII









NORDIC
SEMICONDUCTOR

nRF7002-EBII

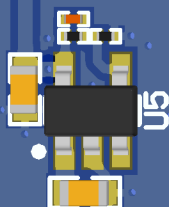


P10



SB10

VBAT



U5

X1

L1

P4



SB9

VDDIO



R1

R3

SPI

QSPI

SB4 SB3 SB1 SB2

SB5 SB8 SB6 SB7

P2

P1



GND

VDDIO

VDD

GND

VBAT

P3V6



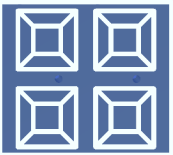
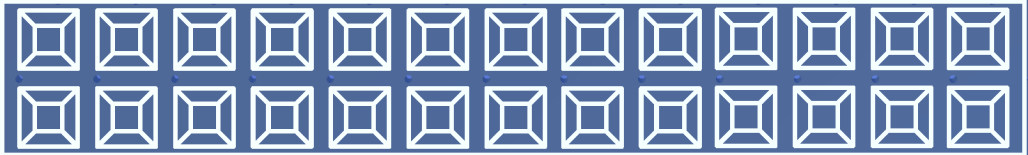
LABEL1

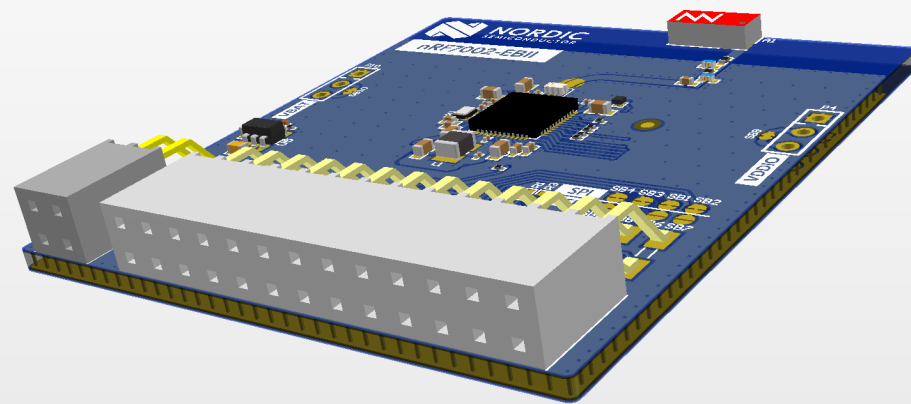
P1

P2

Q_CS	Q_D2	Q_SCK	VDD	N.C.	N.C.	SCLK	REQ	MISO	BCKEN	VIOEN	N.C.	N.C.	GND
Q_D1	Q_D0	Q_D3	GND	IRQ	GRNT	CS	STAT	MOSI	N.C.	N.C.	VDD		

GND	GND
N.C.	5V0

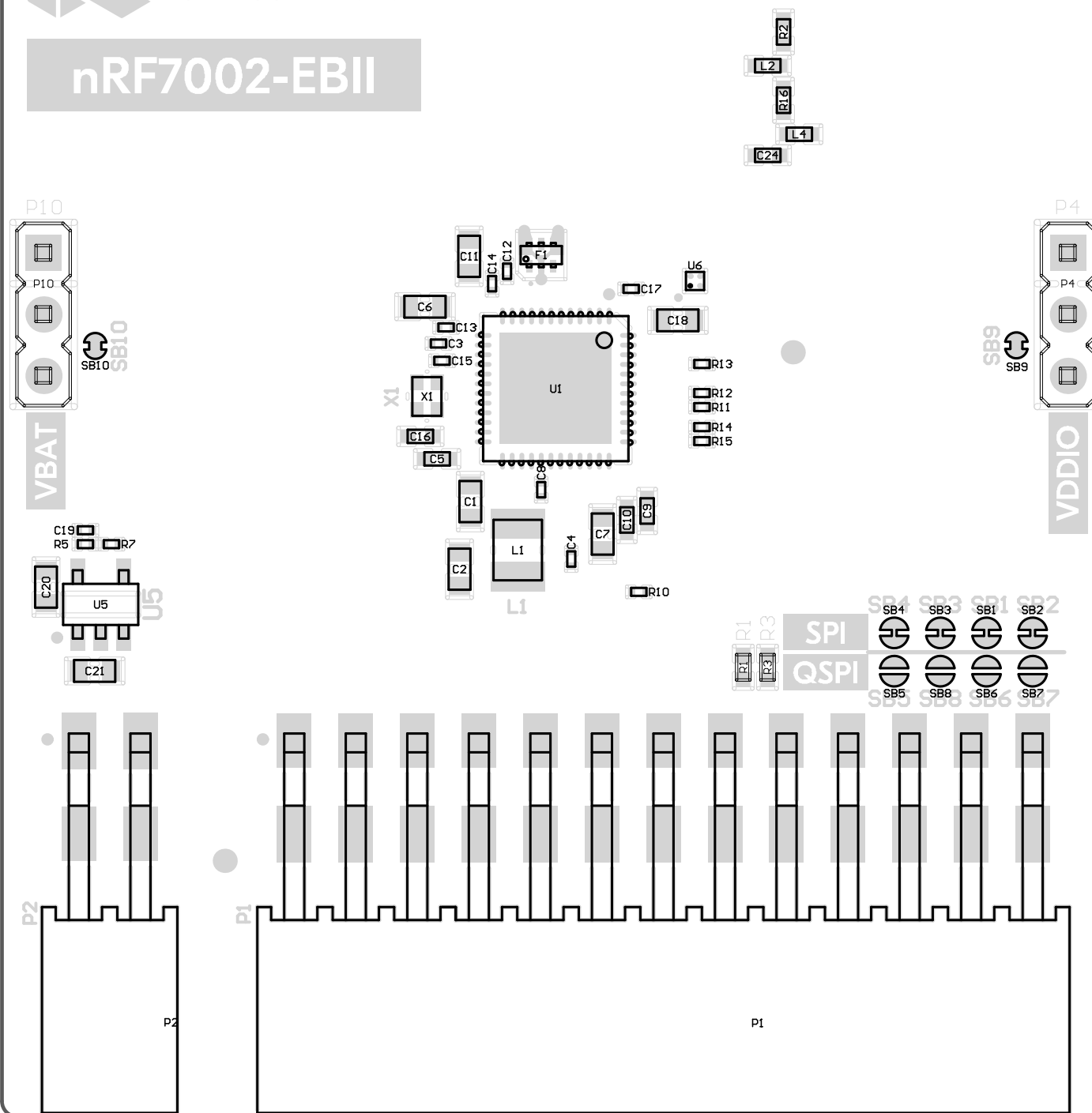






NORDIC
SEMICONDUCTOR

nRF7002-EBII





■ GND

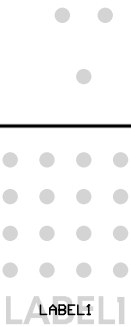
● VDDIO

● VDD

GND ■

VBAT ●

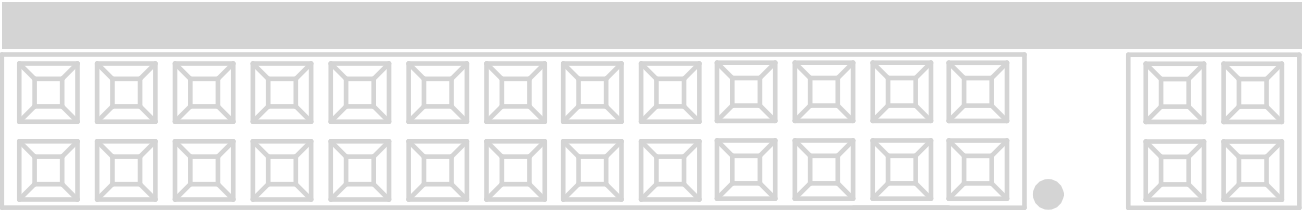
P3V6 ●



P1 P2

Q_CS	Q_D2	Q_SCK	VDD	N.C.	N.C.	SCLK	REQ	MISO	BCKEN	VIOEN	N.C.	N.C.	GND
Q_DI	Q_D0	Q_D3	GND	IRQ	GRNT	CS	STAT	MOSI	N.C.	N.C.	VDD		

GND	GND
N.C.	5V0



Bill of Materials



Product Name: nRF7002 Expansion Board II

Board: PCA63571

Version: 0.5.0

Creation Date: 28.11.2025

Designator	Value	Description	Footprint Doc	Manufacturer	Manufacturer Part Number	Fitted	Quantity
A1	NN03-320	Dual-Band GNSS and Wi-Fi/BluetoothAntenna	NN03-320	Ignion	NN03-320	Fitted	1
C1, C2, C6, C11	4.7μF	Capacitor, Ceramic, 4.7μF 25V X6S 0603,±10%	0603	Murata	GRM188C81E475KE11D	Fitted	4
C3	0.22μF	Capacitor, Ceramic, 0.22μF 10V X5R 0201, ±10%	0201	Murata	GRM033R61A224KE90D	Fitted	1
C4, C14	0.47μF	Capacitor, Ceramic, 0.47μF 6.3V X5R 0201,±10%	0201	Murata	GRM033R60J474KE90D	Fitted	2
C5	1.0μF	Capacitor, Ceramic, 1.0μF 35V X5R 0402,±10%	0402	Murata	GRM155R6YA105KE11D	Fitted	1
C7, C18	2.2μF	Capacitor, Ceramic, 2.2μF 16V X7S 0603,±10%	0603	Murata	GRM188C71C225KE11D	Fitted	2
C8	10nF	Capacitor, Ceramic, 10nF 16V X7R 0201,±10%	0201	Murata	GRM033R71C103KE14D	Fitted	1
C9	2.2μF	Capacitor, Ceramic, 2.2μF 25V X5R 0402,±10%	0402	Murata	GRM155R61E225KE11D	Fitted	1
C10	1.0μF	Capacitor, Ceramic, 1.0μF 16V X6S 0402,±10%	0402	Murata	GRM155C81C105KE11D	Fitted	1
C12, C17	100nF	Capacitor, Ceramic, 100nF 16V X7S 0201,±10%	0201	Murata	GRM033C71C104KE14D	Fitted	2
C13	22nF	Capacitor, Ceramic, 22nF 10V X5R 0201,±10%	0201	Murata	GRM033R61A223KE84D	Fitted	1
C15	2.2μF	Capacitor, Ceramic, 2.2μF 10V X5R 0201,±10%	0201	Murata	GRM033R61A225KE47D	Fitted	1
C16	1.0μF	Capacitor, Ceramic, 1.0μF 10V X7S 0402,±10%	0402	Murata	GRM155C71A105KE11D	Fitted	1
C19	82pF	Chip Cap 0201	0201	N.A.	N.A.	Fitted	1
C20, C21	4.7μF	Capacitor, MLCC	0603	Murata	GRM188Z71A475KE15J	Fitted	2
C24	0.7pF	Capacitor, COG/NP0, 50V, ±0.05pF, 0402	0402	Murata	GJM1555C1HR70WB01D	Fitted	1
F1	LFD182G45DCJD247	Signal Conditioning 2.4GHz and 5GHz Diplexer	CAF	Murata	LFD182G45DCJD247	Fitted	1
L1	3.3μH	Inductor, 1A, ±20%, 200mOhm	1008	Murata	LQM2HPN3R3MGCL	Fitted	1
L2	7.0nH	Inductor, 570mA, ±2%, 130mΩ	0402	Murata	LQW15AN7N0G00	Fitted	1
L4	2.4nH	Inductor, 2.53A, 2%, 22mΩ, Q=30	0402	Murata	LQW15AN2N4G80	Fitted	1
LABEL1	12x32mm	PCA version label, stick-on, 12x32mm	Label	Ellico Etikett	68616	Fitted	1
P1	Socket 2x13, Angled	Socket 2x13, 2.54mm (100mil), Right Angle, SMD	SOCKET_ANG_2x13_SMD-2.54r	WCON	2185-213ZG0CYNR3	Fitted	1
P2	Socket 2x2, Angled	Socket 2x2, 2.54mm (100mil), Right Angle, SMD	WCON_2185-202ZSxCYNRX	WCON	2185-202ZS0CYNR3	Fitted	1
P4, P10	Pin List 1x3	Pin List 1x3, 2.54mm (100mil)	LIST_1x3	N.A.	N.A.	Not Fitted	0
R1, R3	0R	Resistor, ±5%, 0.063W	0402	N.A.	N.A.	Not Fitted	0
R2, R16	0R	Resistor, ±5%, 0.063W	0402	N.A.	N.A.	Fitted	2
R5	560k	Resistor, ±1%, 0.05W	0201	N.A.	N.A.	Fitted	1
R7	160k	Resistor, ±1%, 0.05W	0201	N.A.	N.A.	Fitted	1
R10, R11, R12, R13, R14, R15	100k	Resistor, ±1%, 0.05W	0201	N.A.	N.A.	Fitted	6
U1	nRF7002-QFAA	Wi-fi Dual Band Companion chip	QFN-48	Nordic Semiconductor	nRF7002-QFAAB0	Fitted	1
U5	AP2127	IC REG LDO ADJ 0.3A SOT23-5	SOT23-5	Diodes Incorporated	AP2127K-ADJTRG1	Fitted	1
U6	TCK106AG	1.0 A Load Switch IC with Slew Rate Control Driver in Ultra Small Package	WLCSP-4	Toshiba	TCK106AG.LF	Fitted	1
X1	40MHz	XTAL SMD 1612, 40MHz, Cl=8pF, Total Tol: ±10ppm, -30 - 85C	XTAL_1612	Kyocera	CX1612DB40000D0WLLCC	Fitted	1