

Bill of Materials

Item	Quantity	Reference	Part	Note
1	4	C1, C17, C20, C22	1u_0402_X5R	VBAT & SMPS OUT filter cap
2	6	C2, C16, C18, C19, C21, C23	100n_0402_X7R	VBAT filtering
3	2	C3, C15	100p_0402_C0G	VBAT filtering
4	1	C4	150n_0402_X5R	VREG filtering
5	2	C5, C6	22p_0402_C0G	32 kHz XTAL load cap
6	1	C27	56p_0402_C0G	TX/RX balun cap
7	1	C24	56p_0402_C0G	TX/RX bypass cap
8	1	C25	TBD_0402_COG	Tuning cap
9	1	C26	TBD_0402_COG	Tuning cap
10	1	L4	TBD_0402	Tuning cap
11	2	C13, C14	15p_0402_C0G	16 MHz XTAL load cap
12 ⁽¹⁾	1	L1		LF-XTAL filtering ind
13	1	L2		HF-XTAL filtering ind
14	1	J1	THR 1.27 mm 2x5 pins	Test connector
15	1	J2	RF_IN/OUT	UFL jack assembly, End Launch
16	1	U4	BALF-NRG-01D3	Integrated balun for BlueNRG QFN32
17	1	CN5	Extra-long 10 pins female-male strip	Female side mounted to the top
18	2	CN6, CN9	Extra-long 8 pins female-male strip	Female side mounted to the top
19		CN8	Extra-long 6 pins female-male strip	Female side mounted to the top
20	1	Q1	XTAL	XTAL
21	1	Q2	XTAL	XTAL
22	5	R1, R3, R4, R5, R6		Connect to V _{DD} , pull-down
23	1	R2	10k_0402	Connect to ground
24	2	R7, R9	100k_0402	Pull-up and pull-down
25	4	R10, R12, R14, R15	0_0402	jumper-resistor
26	3	R11, R13, R16	0_0402	jumper-resistor
27	1	U1	BlueNRG	RF IC
28	1	U5	HEADER 1X2	Male strip 1X2, 100 mils
29	1	U3	EEPROM	Memory
30	3	TEST8, TEST11, TEST12	Test point	Test point

1. Not present on board market 14xx near U3.

Bill of Materials (additional columns)

Item	Package	Manufacturer	Manufacturer's ordering code / orderable part number	+8 dBm
1	SM/C_0402	Murata	GRM155R61A105KE15	1 µF
2	SM/C_0402	Murata	GRM155R71C104KA88	100 nF
3	SM/C_0402	Murata	GRM1555C1H101JZ01	100 pF
4	SM/C_0402	Murata	GRM155R61A154KE19	150 nF
5	SM/C_0402	Murata	GRM1555C1H220JZ01	22 pF
6	SM/C_0402	Murata	GRM1555C1H560JA01	56 pF
7	SM/C_0402	Murata		NE
8	SM/C_0402	Murata	GRM1555C1H120JZ01	1.2 pF
9	SM/C_0402			NE
10	SM/C_0402	Murata	GRM1555C1H180JZ01	1.8 pF
11	SM/C_0402	Murata	GRM1555C1H150JZ01	15 pF
12	SM/L_0402	Murata	LQG15HN2N0S02	2 nH
13	SM/L_0402	Tyco Electronics		0 Ohm
14		SAMTEC	FTSH-105-01-F-D-K	NE
15	SMT	Hirose	U.FL-R-SMT-1(10) Digikey H11891CT-ND	NE
16		STMicroelectronics	BALF-NRG-01D3	
17	2.54 mm pitch	4UCON	18688	
18	2.54 mm pitch	4UCON	18688	
19	2.54 mm pitch	4UCON	18688	
20	NX3215SA	NDK	NX3215SA-32.768kHz-EXS00A- MU00003	32.768 kHz
21 ⁽¹⁾	XTAL_32_25_REV2	NDK	NX3225SA -16.000MHz-EXS00A- CS05997	16 MHz
22	SM/R_0402	Tyco Electronics		NE
23	SM/R_0402	Tyco Electronics		10 k
24	SM/R_0402	Tyco Electronics		100 k
25	SM/R_0402	Tyco Electronics		0 Ohm
26	SM/R_0402	Tyco Electronics		NE
27	QFN32	STMicroelectronics		
28	WALCON.100/VH/TM2 OE/W.325/10/MOD			
29	SO8N	STMicroelectronics	M95640-RMN6TP	
30	TP			NE

1. First release of the board mount 16 MHz X'tal, however ST suggests to use 32 MHz to exploit at best all the functionalities of BlueNRG.