

Bill of materials

Table 1. STEVAL-NBIOTV1 bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
1	1	BATT1	Battery Connector	Battery Connector Amass	Molex	78171-0003
2	1	CN1	STDC14	STDC14 - ARM MIPI10 compatible	Samtec	FTSH-107-01-L-DV-K-P
3	1	CN2	CON34-Socket	CONN SOCKET 34POS SMD GOLD	Panasonic Electric Works	AXF5G3412A
4	12	C1,C3,C4,C5,C10,C20,C27,C38,C39,C41,C46,C47	10uF	CAP CER 10UF 10V X5R 0402	Samsung Electro-Mechanics America, Inc.	CL05A106MP8 NUB8
5	4	C2,C14,C23,C40	1uF	CAP CER 1UF 10V X5R 0201	Murata	GRM033R61A1 05ME44D
6	2	C6,C12	4.7uF	CAP CER 4.7UF 10V X5R 0402	Murata	GRM155R61A4 75MEAAD
7	16	C7,C8,C9,C11,C13,C19,C24,C25,C28,C29,C30,C31,C32,C34,C36,C42	100nF	CAP CER 0.1UF 16V X5R 0201	Taiyo Yuden	EMK063BJ104 KP-F
8	2	C15,C16	5.6pF	CAP CER 5.6PF 10V C0G/NP0 0201	Murata	GJM0335C1E5 R6BB01D
9	2	C17,C18	6.8pF	CAP CER 6.8PF 10V C0G/NP0 0201	Murata	GJM0335C1E6 R8BB01D
10	2	C21,C48	1nF	CAPACITOR SMD 0402 1nF 50V COG 5%	Murata	GRM1555C1H1 02JA01D
11	1	C22	33pF	CAPACITOR SMD 0402 33pF 50V COG 5%	Taiyo Yuden	UMK105CG330 JVHF
12	1	C26	100pF	CAP CER 100PF 50V C0G/NP0 0402	WURTH ELEKTRONIK	WE 885012005013
13	1	C33	10n/1kV	CHIP CAP.CER. 10nF 1000V 10% X7R 1206	WURTH ELEKTRONIK	WE 885342208021
14	1	C35	NC	CAP CER 330pF (not mounted)	Any	Any
15	1	C37	NC	CAP CER 0402 18pF COG (not mounted)	Murata	GRM1555C2A1 80GA01D

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16	1	C43	1pF	CAPACITOR SMD 0402 1pF 50V COG 5%	Murata	GJM1555C1H1 R0WB01
17	1	C44	0.6pF	CAPACITOR SMD 0402 0.6pF 50V COG 5%	Murata	GJM1555C1HR 60WB01
18	1	C45	0.7pF	CAPACITOR SMD 0402 0.7pF 50V COG 5%	Murata	GJM1555C1HR 70WB01
19	1	C49	NC	CAPACITOR SMD 0402 27pF COG (not mounted)	WURTH ELEKTRONIK	WE-885392005 116
20	2	C50,C51	NC	CAP CER 0402 (not mounted)	Any	Any
21	1	D2	STPS120M, Stmite	Power Schottky rectifier (1A)	ST	STPS120M
22	1	D3	ESDA25P35-1 U1M, QFN-2L	High power transient voltage suppressor	ST	ESDA25P35-1 U1M
23	1	D4	BAT30KFILM, SOD523	DIODO SCHOTTKY 0.3A 30V BAT30KFILM SOD523	ST	BAT30KFILM
24	1	E1	PCB ANTENNA	(not mounted)		
25	1	E2	NN03-320	Ignion Chip Antenna	Ignion	NN03-320
26	1	FB1	FERRITE	Ferrite WE-CBF 0603 550MHz 140Ohm 550mA	WURTH ELEKTRONIK	WE 742792621
27	3	J1,J2,J6	CON3	2.54 TH Jumper	Samtec	TSW-103-07-G- S
28	1	J3	NC	Battery SMD PAD (not mounted)		
29	1	J4	12401598E4#2 A	CONN. USB 3.0 F/90°	Amphenol ICC	12401598E4#2 A
30	1	J5	CON2	2.54 TH Jumper	Samtec	TSW-102-07-G- S
31	2	K1,K2	WE 6031220211451 4	SMA JACK PCB EDGE 1,6mm (not mounted)	WURTH ELEKTRONIK	WE 6031220211451 4
32	1	K3	SIM8060-6-0-1 4-00-A	Nano SIM Card Connector	GCT	SIM8060-6-0-1 4-00-A
33	1	LED1	KPHHS-1005M GCK	GREEN LED	Kingbright	KPHHS-1005M GCK
34	1	LED2	SML- P12DTT86R	ORANGE LED	Rohm Semiconductor	SML- P12DTT86R

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35	1	LED3	RED	RED LED	Vishay Semiconductor Opto Division	VLMS1500-GS08
36	1	L1	100nH	INDUCTOR 100nH	Murata	LQW18ANR10J00
37	1	L2	9.1nH	INDUCTOR 9.1NH 540MA 0.14OHM	Murata	LQW15AN9N1G00D
38	3	USR,RESET,PWR	PUSHBUTTON	TACTILE SWITCH, SIDE ACTUATED, SMD	Omron Electronics	B3U-3000P-B
39	1	Q1	STR2N2VH5, SOT-23	Enhancement Mode Field Effect	ST	STR2N2VH5
40	1	Q2	STL6N3LLH6, PowerFLAT 2x2	MOSFET N-CH 30V PWRFLT2X2	ST	STL6N3LLH6
41	1	R2	NC	RES SMD 24.3k OHM 0402	Yageo	RT0402FRE0724K3L
42	3	R3,R5,R47	100k	RES SMD 100K OHM 0201	Yageo	RC0201FR-7D100KL
43	1	R4	NC	RES SMD 11.5k OHM 0402	Yageo	RT0402FRE0711K5L
44	1	R6	NC	RES SMD 10K OHM 1% 1/16W 0402	Yageo	RC0402FR-0710KL
45	9	R7,R12,R16,R18,R24,R29,R38,R40,R44	0R	RES SMD 0 OHM 0402	Vishay Dale	CRCW04020000Z0ED
46	2	R8,R9	4.02k	RES SMD 4.02k OHM 0201	Yageo	RC0201FR-074K02L
47	2	R10,R11	40.2k	RES SMD 40.2K OHM 0201	Yageo	RC0201FR-0740K2L
48	1	R13	27.4k	RES SMD 27.4k OHM 0402	Yageo	RT0402FRE0727K4L
49	1	R14	100k	RES SMD 100k OHM 0402	Yageo	AT0402FRE07100KL
50	2	R15,R37	10k	RES SMD 10K OHM 1% 1/20W 0201	Yageo	RT0201FRE0710KL
51	5	R17,R25,R28,R50,R51	NC	RES SMD 0 OHM 0402	Vishay Dale	CRCW04020000Z0ED
52	1	R19	0.5pF	Ceramic Capacitor 0.5pF	Murata	GJM1555C1HR50BB01D
53	1	R20	7.5nH	Inductor 7.5nH 1.7A	Murata	LQW15AN7N5G8ZD
54	1	R21	3.6pF	Ceramic Capacitor 3.6pF	Murata	GJM1555C1H3R6BB01D

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55	2	R22,R49	1k	RES SMD 1K OHM 1% 1/16W 0402	Yageo	RC0402FR-071 KL
56	1	R30	18k	RES SMD 18k OHM 0402	Vishay Dale	CRCW040218K 0FKEDC
57	1	R31	10k	RES SMD 10K OHM 1% 1/16W 0402	Yageo	RC0402FR-071 OKL
58	4	R32,R33,R35,R36	4.7k	RES SMD 4.7K OHM 1% 1/16W 0201	Yageo	RC0201FR-074 K7L
59	1	R34	1M	CHIP RES. 1M 0603 1/16W 1%	TE Connectivity Passive Product	CRGCQ0603J1 M0
60	1	R39	2.7k	RES SMD 2.7K OHM 1% 1/16W 0201	Yageo	RC0201FR-072 K7L
61	2	R45,R46	10k	RES SMD 10K OHM 1% 1/20W 0201	Yageo	RC0201FR-7D1 OKL
62	1	R48	330R	RES SMD 330 OHM 1% 1/16W 0402	Yageo	RC0402FR-073 30RL
63	11	SB1,SB2,SB3,SB7,SB8,SB9,SB10,SB11,SB14,SB15,SB18	0R	RES SMD 0 OHM 0402	Vishay Dale	CRCW0402000 0Z0ED
64	6	SB4,SB5,SB6,SB13,SB16,SB17	NC	RES SMD 0 OHM 0402	Vishay Dale	CRCW0402000 0Z0ED
65	18	TP1,TP2,TP3,TP4,TP5,TP6,TP7,TP8,TP9,TP10,TP11,TP12,TP13,TP14,TP15,TP16,TP17,TP18	TP	TEST POINT 1MM SMD PADSTASCK	Any	Any
66	3	TVS1,TVS2,TVS3	ESDALC6V1-1 M2, SOD882	DIODO TVS TRANSIL UNIDIIR	ST	ESDALC6V1-1 M2
67	1	U1	STBC02AJR, Chip Scale Package	Li-Ion Battery Charger	ST	STBC02AJR
68	1	U2	LD39100PU25 RY, DFN6	2.5V 1A low Iq and low noise LDO	ST	LD39100PU25 RY
69	1	U3	STM32U585RI T6, LQFP64	Ultra-low-power with FPU Arm Cortex-M33 MCU	ST	STM32U585RI T6
70	1	U5	ST87M01-1301, SMD MODULE	Ultra-compact, low-power NB- IoT and GNSS Module	ST	ST87M01-1301
71	1	U6	EMIF03- SIM02M8, QFN-8L	3-line EMI filter and ESD protection for SIM card	ST	EMIF03- SIM02M8
72	1	U7	LDK320M-R, SOT23-5L	ADJUSTABLE_ LDO	ST	LDK320M-R

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73	1	U8	SHT40-AD1B	Humidity, Temperature	Sensirion	SHT40-AD1B
74	1	U9	LIS2DUXS12TR, LGA12L	Ultralow-power 3-axis smart accelerometer	ST	LIS2DUXS12TR
75	1	U10	LPS22DFTR, HLGA-10L	260-1260 hPa absolute digital output barometer	ST	LPS22DFTR
76	1	U11	USBLC6-2P6, SOT666	USB Protection	ST	USBLC6-2P6
77	1	U12	TCP01-M12, QFN12	USB type-C port protection	ST	TCP01-M12
78	1	U13	M95P32-IXCSTEF,WLC SP8	Ultra low-power 32 Mbit Page EEPROM	ST	M95P32-IXCST/EF
79	1	U14	STLQ020J25R, Flip-Chip4	200 mA ultra-low quiescent current LDO	ST	STLQ020J25R
80	1	U15	AW5005EDNR	Ultra-Low Noise Amplifier for Global Navigation	AWINIC	AW5005EDNR
81	1	U16	SAW Filter	SAW Filter	Murata	SAFFB1G57KE0F0A
82	1	X1	32.768kHz	32.768KHz Crystal	NDK	NX2012SA 32.768KHz EXS00A-MU00527
83	1	X2	16MHz	16MHz Crystal	NDK	NX2016SA 16 MHz EXS00A-CS07826

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