

Bill of materials
Table 1. STEVAL-WBC2TX70 BOM

Item	Qty	Ref.	Value	Package	Description	Manuf.	Part number
1	7	C100, C203, C241, C242, C243, C302, C309	100 nF	0402	CAPACITOR SMD 0402 100nF 50V X7R 10%	Wurth	885012205086
2	18	C101, C102, C103, C300, C301, C304, C305, C306, C307, C317, C318, C319, C401, C402, C404, C405, C410, C411	10 µF	1206	CAPACITOR SMD 1206 10uF 50V X7R 10% Derating	TDK	C3216X7R1H106KT0A0E
3	1	C106	33 nF	0603	CAPACITOR SMD 0603 33nF 50V X7R 10%	Wurth	885012206092
4	2	C201, C235	4.7 µF	0402	CAPACITOR SMD 0402 4.7UF 6.3V X5R 20%	Wurth	885012105008
5	1	C202	470 nF	0402	CAPACITOR SMD 0402 470nF 35V X5R 20%	KEMET	C1005X5R1V474M050BC
6	5	C204, C206, C229, C500, C504	10 µF	0603	CAPACITOR SMD 0603 10UF 16V X7R 20%	Wurth	885012106031
7	8	C207, C215, C217, C218, C223, C224, C230, C236	100 nF	0402	CAPACITOR SMD 0402 100nF 25V X7R 10%	Wurth	885012205085
8	3	C208, C310, C313, C505	1 nF	0402	CAPACITOR SMD 0402 1nF 50V C0G 5%	Wurth	885012005067
9	6	C210, C400, C403, C432, C433, C502	100 nF	0603	CAPACITOR SMD 0603 100nF 50V X7R 10%	Wurth	885012206095

Item	Qty	Ref.	Value	Package	Description	Manuf.	Part number
10	3	C211, C212, C213	330 nF	0603	CAPACITOR SMD 0603 330nF 50V X7R 10%	Wurth	885012206121
11	6	C214, C216, C225, C227, C314, C315	10 nF	0402	CAPACITOR SMD 0402 10nF 50V X7R 10%	Wurth	885012205067
12	1	C220	1 nF	0402	CAPACITOR SMD 0402 1nF 100V X7R 10%	Wurth	885012205080
13	2	C221, C222	N.A.	0402	Not populated capacitor SMD 0402	N.A.	N.A.
14	1	C228	33 pF	0402	CAPACITOR SMD 0402 33pF 50V C0G 5%	Wurth	885012005058
15	1	C238	1 µF	0402	CAPACITOR SMD 0402 1UF 6.3V X5R 10%	MURATA	GRT155R60J105KE01D
16	1	C240	2.2 nF	0402	CAPACITOR SMD 0402 2.2nF 50V X7R 5%	MURATA	GCM155R71H222JA37D
17	2	C303, C308	100 µF	CAPP_D6.3_PANA_ D8	100uF Aluminum Electrolytic Capacitors High temperature Lead- Free reflow	PANASONIC	EEEEFTH101XAP
18	2	C407, C408	100 nF	1812	CAPACITOR SMD 1812 100nF 100V C0G 5%	TDK	C4532C0G2A104J320KA
19	1	C409	47 nF	1812	CAPACITOR SMD 1812 47nF 100V C0G 5%	TDK	C4532C0G2A473J200KA
20	1	C412	5.6 nF	0402	CAPACITOR SMD 0402 5.6nF 50V X7R 10%	KEMET	C0402C562K5RACTU
21	1	C415	5.6 nF	1206	CAPACITOR SMD 1206 5.6nF 100V X7R 10%	KEMET	C1206X562K1RACTU
22	1	C503	220 pF	0402	CAPACITOR SMD 0402 220pnF 50V X7R 10%	Wurth	885012205057
23	1	C506	82 nF	0402	CAPACITOR SMD 0402 82nF 16V X7R 10%	YAGEO	CC0402KRX7R7BB823
24	1	C507	8.2 nF	0402	CAPACITOR SMD 0402 8.2nF 50V X7R 10%	KEMET	C0402C822K5RAC7867
25	1	C508	10 nF	0402	CAPACITOR SMD 0402 10nF 16V X7R 10%	Wurth	885012205031
26	1	D100	SMM4F24A	SMB	400 W, 24 V TVS in STmite Flat	ST	SMM4F24A-TR
27	1	D102	ECMF02-2AMX6	DIOD_UQFN-6L	COMMON MODE FILTER WITH ESD PROTECTION	ST	ECMF02-2AMX6
28	1	D103	ESDALC6V1M3	SOT883	VERY LOW CAPACITANCE LOW LEAKAGE CURRENT ESD PROTECTION	ST	ESDALC6V1M3
29	2	D200, D201	RB541VM-40	SOD323	SMT Schottky Diode, 40V 200mA, 2-Pin SOD-323	Rohm	RB541VM-40TE-17
30	1	D202	RED	0603	LED, 0603, Red	WURTH ELEKTRONIK	150060RS75000
31	1	D203	GREEN	0603	LED, 0603, Green	WURTH ELEKTRONIK	150060VS75000
32	3	D204, D205, D206	BAT54KFILM	SOD523	SMALL SIGNAL_40V_300mA	ST	BAT54KFILM
33	1	D400	10 V	SOD323	VOLTAGE_REGULATOR_0.3W	NXP OR OTHERS	BZX384-C10,115
34	1	D500	5 V	SOD882	TRANSIL ESD 5V UNI	LRC	LES8D5.0AT5G

Item	Qty	Ref.	Value	Package	Description	Manuf.	Part number
35	1	D501	LMBR240ET1G	SOD323	SMT Schottky Diode, 40V 2A, 2-Pin SOD-323	LRC	LMBR240ET1G
36	1	F500	Fan Port		Fan Port, 4 PIN 1mm pitch wire to board connector	HDGC	HDGC1002WR-S-4P
37	1	J100	632723300011	CON_USB_C_632723300011	USB TYPE C_632723300011	WURTH ELEKTRONIK	632723300011
38	1	J101	POWER JACK DC	CON_JACK_21MM-PJ-002A	POWER JACK DC	WURTH ELEKTRONIK	694106301002
39	1	J201	4-pin	1X4P_2.54mm	Header, 1X4P, 2.54mm	Harwin	M20-9770446
40	1	J203	FTSH-107-01-L-DV-K-A	CON_FTSH-107-01-L-DV-K-A	SMD_HEADER_2x7_P1.27	SAMTEC	FTSH-107-01-L-DV-K-A
41	2	L200, L500	10 µH	L2.5_W2.0_H1.2	ISAT 1.3A / DCR max 0.540 Ohm	TDK	VLS252012HBX-100M-1
42	1	L300	3.3 µH	L17.3_W16.5	3.3uH, 30.9A, 0.0022Ohm, 10%, L17.3XW16.6	TDK	B82559B5332A016
43	1	L400	1 µH	L9.2_W8.5	ISAT14A - RDC=0.0046mohm max	WURTH ELEKTRONIK	74437358010
44	1	Q201	N-MOS	SOT23	Enhancement Mode Field Effect	ONSEMI	2N7002
45	6	Q300, Q301, Q400, Q401, Q402, Q403	STL20N6F7	PowerFLAT_3.3x3.3	60V_0.0054R_20A_N-Channel AlphaSGT	ST	STL20N6F7
46	1	Q500	LMBT2222AWT1G	SC323	NPN, 40V 600mA	LRC	LMBT2222AWT1G
47	1	Q404	STL42P6LLF6	POWERFLAT_5X6	60V_0.023R_42A_P-Channel	ST	STL42P6LLF6
48	1	Q405	PDTC114EU,135	SOT323	GENERAL PURPOSE_50V_100mA_205mW RB=RC=10K	NXP	PDTC114EU,135
49	1	Q406	STL6N3LLH6	PowerFLAT_2x2	30V_0.021R_6A_N-Channel	ST	STL6N3LLH6
50	6	R101, R102, R201, R219, R306, R307	10 R	0402	RESISTOR SMD 10 R_5%_0402_1/16W	YAGEO	RC0402JR-0710RL
51	14	R106, R107, R220, R236, R237, R301, R302, R400, R403, R404, R405, R407, R416, R417	0 R	0402	RESISTOR SMD 0R_5%_0402_1/16W	YAGEO	RC0402JR-070RL
52	1	R200	0.1 R	0402	RESISTOR SMD 0.1 R_5%_0402_1/16W	YAGEO	RL0402JR-070R1L
53	14	R202, R204, R208, R209, R229, R303, R304, R412, R413, R414,	10 K	0402	RESISTOR SMD 10 K_5%_0402_1/16W	YAGEO	RC0402JR-0710KL

Item	Qty	Ref.	Value	Package	Description	Manuf.	Part number
		R415, R505, R507, R509					
54	2	R203, R210	150 K	0402	RESISTOR SMD 150 K_5%_0402_1/16W	YAGEO	RC0402JR-07150KL
55	2	R206, R211	47 K	0402	NTC SMD 0402 47k 1%	MURATA	NCP15WB473F03RC
56	1	R207	100 K	0402	RESISTOR SMD 100 K_1%_0402_1/16W	YAGEO	RC0402FR-07100KL
57	3	R212, R225, R226	2.2 R	0402	RESISTOR SMD 2.2 R_5%_0402_1/16W	YAGEO	RC0402JR-072R2L
58	2	R213, R217	470 K	0402	RESISTOR SMD 470 K_5%_0402_1/16W	YAGEO	RC0402JR-07470KL
59	1	R218	3.3 K	0402	RESISTOR SMD 3.3 K_1%_0402_1/16W	YAGEO	RC0402FR-073K3L
60	2	R227, R228	4.7 K	0402	RESISTOR SMD 4.7 K_5%_0402_1/16W	YAGEO	RC0402JR-074K7L
61	2	R230, R234	180 K	0402	RESISTOR SMD 180 K_0.1%_0402_1/16W	YAGEO	RE0402BRE07180KL
62	1	R231	1.2 K	0402	RESISTOR SMD 1.2 K_0.1%_0402_1/16W	YAGEO	RE0402BRE071K2L
63	1	R232	9.1 K	0402	RESISTOR SMD 9.1 K_0.1%_0402_1/16W	YAGEO	RE0402BRE079K1L
64	1	R233	5.6 K	0402	RESISTOR SMD 5.6 K_0.1%_0402_1/16W	YAGEO	RE0402BRE075K6L
65	1	R235	100 R	0402	RESISTOR SMD 100 R_5%_0402_1/16W	YAGEO	RC0402JR-07100RL
66	1	R300	0.010 R 2W	2512	RESISTOR SMD 0.010 R_1%_2512_2W	Würth	580070763010
67	1	R305	10 R	1206	RESISTOR SMD 10 R_5%_1206_1/4W	YAGEO	RC1206JR-0710RL
68	1	R408	0.010 R 0.1% 1W	2512	RESISTOR SMD 0.010 R_0.1%_2512_1W	Vishay Precision Group Foil Resistors	Y14870R01000B9R
69	2	R410, R411	30 K	0402	RESISTOR SMD 30 K_5%_0402_1/16W	YAGEO	RC0402JR-0730KL
70	1	R500	576 R	0402	RESISTOR SMD 576 R_1%_0402_1/16W	YAGEO	RC0402FR-07576RL
71	1	R501	38.3 K	0402	RESISTOR SMD 38.3 K_1%_0402_1/16W	YAGEO	RC0402FR-0738K3L
72	1	R502	510 R	0402	RESISTOR SMD 510 R_1%_0402_1/16W	YAGEO	RC0402FR-07510RL
73	1	R503	160 R	0402	RESISTOR SMD 160 R_1%_0402_1/16W	YAGEO	RC0402FR-07160RL
74	1	R504	4.7 K	0402	RESISTOR SMD 4.7 K_1%_0402_1/16W	YAGEO	RC0402FR-074K7L
75	1	R506	47 K	0402	RESISTOR SMD 47 K_5%_0402_1/16W	YAGEO	RC0402JR-0747KL
76	1	R508	1 K	0402	RESISTOR SMD 1 K_5%_0402_1/16W	YAGEO	RC0402JR-071KL
77	1	R510	0 R	0805	RESISTOR SMD 0 R_5%_0805_1/8W	UNI-ROYAL	0805W8J0000T5E

Item	Qty	Ref.	Value	Package	Description	Manuf.	Part number
78	1	U200	STWBC2	VFQFPN68L_L8_W8_P0.4	FOR WIRELESS BATTERY CHARGER TRANSMITTERS Qi	ST	STWBC2
79	1	U201	STSAFE-A110	UFDFPN8	AUTHENTICATION, BRAND PROTECTION SECURE SOLUTION	ST	STSAFE-A110
80	1	U203	LMV321ILT	SOT23-5L	Rail-to-rail operational amplifier	ST	LMV321ILT
81	1	U500	L7986ATR	HSOP8	38V, 3 A step-down switching regulator	ST	L7986ATR
82	1	Y200	N.A.	L2.0_W1.6	Not populated SMD crystal	N.A.	N.A.
83	1	Solder on TP400-TP401	MP-A2		Coil, MP-A2	WURTH ELEKTRONIK	760308103102
84	7	R100, R103, R205, R238, R401, R402, R406	N.A.	0402	Not populated resistor SMD 0402	N.A.	N.A.
85	2	C200, C239	N.A.	0603	Not populated capacitor SMD 0603	N.A.	N.A.
86	5	C312, C406, C413, C414, C416	N.A.	0402	Not populated capacitor SMD 0402	N.A.	N.A.



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