

Table 1: STEVAL-ETH001V1 bill of materials

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
1	2	C1 C10	2.2 μ F 1210 (3225 Metric) 100 V \pm 10% X7R	Ceramic capacitors	KEMET	C1210C225K1RACTU
2	2	C2 C11	0.1 μ F 0603 (1608 Metric) 100 V \pm 10% X7R	Ceramic capacitors	TDK Corporation	CGA3E3X7S2A104K080AB
3	4	C3 C6 C7 C9	10 nF 0402 (1005 Metric) 25 V \pm 10% SMD	Ceramic capacitors	Yageo	CC0402KRX7R9BB103
4	2	C4 C8	4.7 nF 0402 (1005 Metric) 25 V \pm 10% SMD	Ceramic capacitors (not mounted)	Any	
5	31	C5 C12 C38 C42 C44 C46 C47 C48 C49 C50 C54 C55 C56 C57 C58 C60 C63 C64 C65 C66 C69 C72 C73 C74 C75 C78 C80 C82 C83 C127 C131	100 nF 0402 (1005 Metric) 16 V \pm 10% X7R	Ceramic capacitors	Murata Electronics North America	GRM155R71C104KA88J
6	4	C13 C125 C132 C134	100 nF 0402 (1005 Metric) 25 V \pm 10% SMD	Ceramic capacitors	Murata Electronics	GRM155R61E104KA87D
7	3	C14 C133 C135	4.7 μ F 0402 (1005 Metric) 10 V \pm 10% SMD	Ceramic capacitors	TDK	C1005X5R1A475M050BC
8	3	C15 C16 C18	180 pF 0402 (1005 Metric) 25 V \pm 10% SMD	Ceramic capacitors	AVX	04025A181JAT2A
9	3	C17 C19 C20	16 pF 0402 (1005 Metric) 25 V \pm 10% SMD	Ceramic capacitors	Murata Electronics	GRM1555C1H160JA01D
10	1	C21	470 nF 0603 (1608 Metric) 25 V \pm 10%	Ceramic capacitor	Würth Electronics Inc.	885012206075
11	3	C23 C24 C31	1 μ F 0805 (2012 Metric) 50 V \pm 10% X7R	Ceramic capacitors	AVX	08055C105KAT2A
12	6	C25 C26 C27 C28 C29 C30	100 pF 0402 (1005 Metric) 25 V \pm 10% X7R	Ceramic capacitors	Würth Electronics Inc.	885012205038
13	5	C33 C34 C136 C137 C138	10 nF 0402 (1005 Metric) 25 V \pm 10% X7R	Ceramic capacitors	Yageo	CC0402KRX7R9BB103
14	2	C35 C36	4.7 nF 0402 (1005 Metric) 16 V \pm 10% SMD	Ceramic capacitors	Murata Electronics North America	GRM15XR71C472KA86D

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15	7	C37 C39 C43 C45 C59 C98 C108	1 μ F 0402 (1005 Metric) 25 V \pm 10% X5R	Ceramic capacitors	Murata Electronics North America	GRM155R61E105KA12D
16	2	C40 C128	18 pF 0402 (1005 Metric) 50 V \pm 5% C0G/NPO	Ceramic capacitors	Yageo	CC0402JRNPO9BN180
17	2	C52 C53	2.2 μ F 0402 (1005 Metric) 10 V \pm 20% X5R	Ceramic capacitors	Würth Electronics Inc.	885012105013
18	2	C61 C62	4 pF 0402 (1005 Metric) 10 V \pm 5% C0G SMD	Ceramic capacitors	TDK	C1005C0G1H040C050BA
19	7	C67 C68 C70 C76 C77 C79 C81	10 μ F 0603 (1608 Metric) 6.3 V \pm 20% X5R	Ceramic capacitors	TDK Corporation	C1608X5R0J106M080AB
20	7	C71 C85 C87 C88 C102 C115 C129	0.1 μ F 0603 (1608 Metric) 16 V \pm 10% X7R	Ceramic capacitors	Würth Electronics Inc.	885012206046
21	2	C86 C130	1 nF 1808 250 V _{AC} \pm 10% X7R	Ceramic capacitors	Murata Electronics North America	GA342QR7GD102KW01L
22	4	C90 C91 C92 C93	10 pF 0402 (1005 Metric) 10 V \pm 5% C0G/NPO	Ceramic capacitors	Würth Electronics Inc.	885012005007
23	2	C94 C96	330 μ F Radial, 16x25mm 100 V \pm 20%	Electrolytic capacitors	Nichicon	UPW2A331MHD
24	2	C95 C97	100 nF 0805 (2012 Metric) 100 V \pm 10% X7R	Ceramic capacitors	Würth Electronics Inc.	885012207128
25	2	C99 C109	820 pF 0402 (1005 Metric) 50 V \pm 5%	Ceramic capacitors	TDK	CGA2B2C0G1H821J050BA
26	1	C100	100 pF 0402 (1005 Metric) 10 V \pm 5% C0G/NPO	Ceramic capacitor	Würth Electronics Inc.	885012005013
27	2	C101 C106	22 nF 0402 (1005 metric) 25V 10%X7R	Ceramic capacitors	Würth Electronics Inc.	885012205052
28	1	C103	4.7 μ F 1210 (3225 Metric) 100 V \pm 10% X7R	Ceramic capacitor	Samsung Electro-Mechanics	CL32B475KCVZW6E
29	4	C104 C105 C118 C206	1 μ F 0805 (2012 Metric) 100 V \pm 10%	Ceramic capacitors	TDK Corporation	C2012X7S2A105K125AB
30	1	C107	47 μ F 1210 (3225 Metric) 16 V \pm 10%	Ceramic capacitor	Murata Electronics North America	GRM32ER61C476KE15K

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
31	2	C110 C210	0.1 μ F 0603 (1608 Metric) 50 V \pm 10%	Ceramic capacitors	Würth Electronics Inc.	885012206095
32	2	C111 C113	1 μ F 0603 (1608 Metric) 50 V \pm 10% X5R	Ceramic capacitor	Samsung Electro- Mechanics America, Inc.	CL10A105KB8NNNC
33	1	C112	180 pF 0402 (1005 Metric) 50 V \pm 10%	Ceramic capacitor	AVX	04025A181JAT2A
34	1	C114	27 nF 0402 (1005 Metric) 10 V \pm 10%	Ceramic capacitor	AVX	0402ZC273KAT2A
35	2	C116 C117	3.3 μ F 1210 (3225 Metric) 100 V \pm 10%	Ceramic capacitors	TDK Corporation	C3225X7S2A335K200AE
36	1	C119	0.1 μ F 0402 (1005 Metric) 25 V \pm 20%	Ceramic capacitor	Würth Electronics Inc.	885012105018
37	1	C120	10 μ F 1210 (3225 Metric) 35 V \pm 10%	Ceramic capacitor	Murata Electronics North America	GRM32ER6YA106KA12L
38	2	C121 C126	10 nF 0402 (1005 Metric) 10 V \pm 10%	Ceramic capacitors	Yageo	CC0402KRX7R9BB103
39	3	C122 C123 C124	10 pF 0402 (1005 Metric) 25 V \pm 10%	Ceramic capacitors	Murata Electronics	GRM1555C1E100JA01D
40	1	C156	1 μ F 0603 (1608 Metric) 16 V \pm 10%	Ceramic capacitor	Samsung Electro- Mechanics	CL10A105KB8NNNC
41	1	C168	2.2 μ F 0603 (1608 Metric) 25 V \pm 10%	Ceramic capacitor	Murata Electronics	GRM188B31E225KA12D
42	1	C172	10 nF 0402 (1005 Metric) 16 V \pm 10%	Ceramic capacitor	Würth Electronics Inc.	885012205031
43	1	C173	0.1 μ F 0402 (1005 Metric) 16 V \pm 10%	Ceramic capacitor	Würth Electronics Inc.	885012205037
44	1	C208	100 μ F Radial, Can - SMD 20%	Ceramic capacitor (not mounted)	Nichicon	UWT1E101MCL1GS
45	4	D1 D2 D12 D14	0402 (1005 Metric) 20 mA	Red LED	Würth Electronics Inc.	150040RS73240
46	7	D9 D34 D35 D36 D37 D38 D39	SC-79, SOD-523 530 mV @ 300 mA 300 mA (DC)	General purpose signal Schottky diodes	ST	BAT30KFILM
47	1	D10	0402 (1005 Metric) 20 mA	Yellow LED	Würth Electronics Inc.	150040AS73220
48	3	D11 D13 D15	0402 (1005 Metric) 20 mA	Green LED	Würth Electronics Inc.	150040VS73240

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49	1	D16	SMBJ48A-TR DO-214AA, SMB 600W	600 W TVS in SMB	ST	SMBJ48A-TR
50	2	D17 D18	DO-214AC, SMA 2A	Low drop power Schottky rectifier	ST	STPS2L60A
51	1	D19	SC-76, SOD-323 1A	General purpose signal Schottky diode	ST	BAT20JFILM
52	3	D20 D21 D22	SC-79, SOD-523 530 mV @ 300 mA 300 mA (DC)	General purpose signal Schottky diode (not mounted)	ST	BAT30KFILM
53	3	D31 D32 D33	TO-236-3, SC-59, SOT-23-3 1 V @ 250 mA 150 mA (DC)	General purpose signal Schottky diode (not mounted)	ST	BAR46FILM
54	1	J2	CON3	Terminal block	Phoenix Contact	1729131
55	1	J3		Motor terminal block	Würth Electronics Inc.	691311500103
56	2	J4 J14	Con2	Connector	Phoenix Contact	1729128
57	2	J5 J6	con2-strip-male	Connector header	AMTEK	PH1S25-140GB6.0/3.0L
58	1	J8	NETX_SPI	Connector header	AMTEK	PH1S25-140GB6.0/3.0L
59	1	J9	CON2	Terminal block	Würth Electronics Inc.	691253510002
60	1	J10		Encoder Hall sensor connector header	AMTEK	PH1S25-140GB6.0/3.0L
61	2	J11 J12	SOLDER JUMPER3 0603 (3pin drop)	Tin drop jumpers	Loctite	C 511 99C 5C
62	2	J19 J20	Jumper_Female	Micro shunt jumpers	AMTEK	MJ1B-BGB-L
63	1	L1	600 Ohms@100MHz 0402 (1005 Metric)	Tiny multilayer suppression bead	Würth Electronics Inc.	74269241601
64	1	L2	10 µH 1008 (2520 metric) 600 mA ±20%	Fixed inductor	Würth Electronics Inc.	74438323100
65	2	L3 L4	600 ohm@100 MHz 0805 (2012 Metric)	Ferrite beads	Würth Electronics Inc.	742792040

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66	1	L5	10 μ H 4.05 A \pm 30%	Fixed inductor	Coilcraft	MSS1038-103NLB
67	1	L6	33 μ H 2.3 A \pm 20%	Fixed inductor	Coilcraft	MSS1038-333MLB
68	4	N1 N2 N3 N4	NUT M3	Nuts	Duratool	111003
69	7	Q1 Q2 Q3 Q4 Q5 Q6 Q7	TO-263-3, D ² Pak (2 leads + tab) Variant 80 V 180 A	StripFET F7 power MOSFETs	ST	STH270N8F7-2
70	1	Q8	6-Power WDFN	StripFET H6 power MOSFET	ST	STL6N3LLH6
71	8	R1 R4 R30 R50 R92 R153 R208 R209	10 k 0402 (1005 Metric) 0.063 W, 1/16 W \pm 1%	Chip resistors	Yageo	RC0402FR-0710KL
72	2	R2 R5	0 0402 (1005 Metric) 0.063 W, 1/16 W \pm 1%	Chip resistors	Yageo	RC0402JR-070RL
73	3	R7 R11 R14	13 k 0402 (1005 Metric) 0.063 W, 1/16 W \pm 1%	Chip resistors	Vishay	CRCW040213K0FKED
74	3	R8 R12 R15	536 0402 (1005 Metric) 0.063 W, 1/16 W \pm 1%	Chip resistors	Panasonic	ERJ-2RKF5360X
75	3	R9 R13 R17	1.96 k 0402 (1005 Metric) 0.063 W, 1/16 W \pm 1%	Chip resistors	Vishay	CRCW04021K96FKED
76	3	R10 R16 R18	22 k 0402 (1005 Metric) 0.063 W, 1/16 W \pm 1%	Chip resistors	Vishay	CRCW040222K0FKEDC
77	6	R20 R23 R28 R32 R36 R39	33 0603 (1608 Metric) 0.1 W, 1/10 W \pm 1%	Chip resistors	Vishay	CRCW060333R0FKEA
78	6	R21 R24 R29 R33 R37 R40	10 k 0603 (1608 Metric) 0.1 W, 1/10 W \pm 5%	Chip resistors (not mounted)	Any	
79	3	R25 R34 R41	3 mOhm 2512 (6432 Metric) 3 W \pm 1%	Resistors	Bourns Inc.	CRE2512-FZ-R003E-3
80	1	R42	169 k 0603 (1608 Metric) 0.1 W, 1/10 W \pm 1%	Resistor	Vishay	CRCW0603169KFKEA
81	1	R43	10 K 0402 (1005 metric) 100 mW	Thermistor	TDK Corporation	NTCG103JF103FT1
82	3	R44 R45 R46	2.2 k 0402 (1005 Metric) 0.063 W, 1/16 W \pm 1%	Chip resistors	Vishay	CRCW040222K20FKED
83	3	R47 R89 R162	4.7 k 0402 (1005 Metric) 0.063 W, 1/16 W \pm 1%	Chip resistors	Panasonic	ERJ2GEJ472X

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
84	1	R48	9.31k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistors	Vishay	CRCW04029K31FKED
85	1	R49	4.7k 0603 (1608 Metric) 0.1 W, 1/10 W ±1%	Chip resistors	TE Connectivity	CRG0603F4K7
86	3	R52 R54 R58	22 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistors	Vishay	CRCW040222R0FKED
87	26	R56 R57 R59 R60 R61 R62 R64 R65 R66 R68 R69 R70 R71 R72 R73 R76 R77 R79 R80 R81 R82 R83 R84 R85 R203 R204	100 0402 (1005 Metric) 0.063 W, 1/16 W ±5%	Resistors	Yageo	RC0402FR-07100R
88	1	R63	0 0603	Jumper (not mounted)	Panasonic	ERJ-3GEY0R00V
89	1	R74	0 0603	Jumper	Panasonic	ERJ-3GEY0R00V
90	3	R75 R78 R86	0 0402 (1005 Metric) 0.063 W, 1/16 W ±5%	Resistors	Yageo	RC0402JR-070RL
91	8	R87 R88 R112 R114 R116 R117 R118 R119	270 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistors	Yageo	RC0402FR-07270RL
92	1	R90	6.49 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistor	Yageo	RC0402FR-076K49L
93	1	R91	0R 0402 (1005 Metric) 0.063 W, 1/16 W ±5%	Resistor (not mounted)	Yageo	RC0402JR-070RL
94	4	R111 R158 R159 R163	2.7 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistors	Yageo	RC0402FR-072K7L
95	2	R113 R115	120 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistors	Yageo	RC0402FR-07120RL
96	4	R120 R121 R124 R125	0 R 0402 (1005 Metric) 0.063 W, 1/16 W ±5%	Chip resistors	Yageo	RC0402JR-070RL
97	4	R122 R123 R126 R127	0 R 0402 (1005 Metric) 0.063 W, 1/16 W ±5%	Chip resistors	Yageo	RC0402JR-070RL
98	2	R128 R136	0 0603 (1608 Metric) 0.1 W, 1/10 W Jumper	Resistors	Panasonic Electronic Components	ERJ-3GEY0R00V

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99	1	R129	680 R 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistor	Vishay	CRCW0402680RFKED
100	1	R130	5.6 k 0402 (1005 Metric) 0.063 W, 1/16 W ±5%	Resistor	Vishay	CRCW04025K60FKEDHP
101	1	R131	40.2 k 0402 (1005 Metric) 0.1 W, 1/10 W ±1%	Resistor	Panasonic Electronic Components	ERJ-2RKF4022X
102	1	R132	33 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistor	TE Connectivity	CRG0402F33K
103	1	R133	68 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistor	Panasonic	ERJ2RKF6802X
104	1	R134	18 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistor	Yageo	RC0402FR-0718KL
105	1	R135	750 R 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistor	Vishay	CRCW0402750RFKED
106	1	R137	3.3 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistor	Vishay	CRCW04023K30FKED
107	1	R138	46.4 k 0402 (1005 Metric) 0.1 W, 1/10 W ±1%	Resistor	Panasonic Electronic Components	ERJ-2RKF4642X
108	2	R139 R140	39 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistors	Vishay	CRCW040239K0FKED
109	1	R141	2.2 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistor	Vishay	CRCW04022K20FKED
110	1	R142	0 R 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistor	Yageo	RC0402JR-070RL
111	4	R143 R149 R154 R156	510 R 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistors	Vishay	CRCW0402510RFKED
112	4	R144 R150 R155 R157	60.4 R 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Resistors	Stackpole Electronics Inc	RMCF0402FT60R4
113	3	R145 R146 R147	10 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistors (not mounted)	Yageo	RC0402FR-0710KL
114	3	R148 R151 R152	1.8 k 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistors	Vishay	CRCW04021K80FKEDHP
115	1	R160	1 K 0402 (1005 Metric) 0.063 W, 1/16 W ±1%	Chip resistor	Vishay	CRCW04021K00FKED

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
116	3	R200 R201 R202	22 0603 (1608 Metric) 0.1 W, 1/10 W ±1%	Resistors	Yageo	RC0603FR-0722RL
117	2	R206 R207	0 R 0402 (1005 Metric) 0.063 W, 1/16 W ±5%	Resistors	Yageo	RC0402JR-070RL
118	4	S1 S2 S3 S4	SPACER M3x20 + Nuts	Spacer and nuts	Keystone Electronics	25505 + 4688
119	2	SW1 SW2	1437566-3 6.00 mm x 3.50mm	Tactile switches	TE Connectivity ALCOSWITCH Switches	1437566-3
120	9	TP1 TP2 TP3 TP8 TP9 TP10 TP11 TP13 TP14	5001 0.100" x 0.180" (2.54 mm x 4.57 mm)	Test points	Keystone Electronics	5001
121	2	U1 U3	PowerSSO12 Exposed Pad	Intelligent power switch	ST	IPS160H
122	1	U2		Self powered digital input current limiter	ST	CLT03-2Q3
123	3	U4 U22 U23	SC-74A, SOT-753	IC OPAMP GP 20MHZ RRO SOT23-5	ST	TSV991ILT
124	2	U5 U6	Ethernet Connector	Modular connectors/ Ethernet connectors port RJ45 THT with LED	Würth Electronics Inc.	615008185221
125	1	U9	CONN,14Pin,Wal	Connector header	Samtec Inc.	FTSH-107-01-L-DV-K
126	1	U10	NETX90 10x10	Highly integrated industrial Ethernet node	Hilscher	NETX90
127	1	U11	Strip2X5	Low profile terminal	Samtec Inc.	FTS-105-01-L-DV-P
128	1	U12	CON20-BOXED- HEADER	Connector header	AMTEK	BH1S-20GB00A-L
129	2	U14 U15	16-TSSOP (0.173", 4.40mm Width) Exposed Pad	Asynchronous step-down switching regulator	ST	L7987LTR
130	1	U16	TO-263-3, D ² Pak (2 Leads + Tab), TO-263AB	Positive voltage regulator IC	ST	L7805CD2T-TR
131	2	U17 U19		RS-485 transceiver	ST	ST3485EIDT
132	1	U18		Encoder connector header	AMTEK	PH1S25-140GB6.0/3.0L

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133	1	U20	144-LQFP	Arm Cortex-M7 MCU	ST	STM32F767ZIT6
134	1	U27	TO-252-3, DPak, SC-63	Ultra low drop BicMOS voltage regulator	ST	LD39150DT33-R
135	1	U28	24-VFQFN exposed Pad (4 mmX4 mm, pitch 0.5 mm)	Triple half-bridge gate driver	ST	STDRIVE101
136	1	Y1	26 MHz 4-SMD, No Lead (3.20mmx2.50mm)	Crystal	IQD Frequency Products	LFXTAL059643REEL
137	1	Y2	25MHz 4-SMD (2.00mm x 1.60mm)	Crystal	Abracon LLC	ABM11W-25.0000MHZ-4-D1X-T3

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The Evaluation Board meets the requirements of the Restriction of Hazardous Substances (RoHS 2 or RoHS recast) Directive 2011/65/EU, Annex II, as amended by Directive 2015/863/EU.

Notice applicable to Evaluation Boards not FCC-Approved

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- (2) Software developers to write software applications for use with the end product.

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For Evaluation Boards annotated as FEDERAL COMMUNICATIONS COMMISSION (FCC) Part 15 Compliant

- **FCC Interference Statement for Class A Evaluation Boards:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- **FCC Interference Statement for Class B Evaluation Boards:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WARRANTY

ST WARRANTS THAT IT HAS THE RIGHT TO PROVIDE THE EVALUATION BOARD TO YOU. THIS WARRANTY IS PROVIDED BY ST IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY, NON-INFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, OR UNINTERRUPTED OR ERROR-FREE OPERATION, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. THE EVALUATION BOARD IS PROVIDED "AS IS".

YOU WARRANT TO ST THAT YOU WILL ENSURE THE EVALUATION BOARD IS USED ONLY BY ELECTRONICS EXPERTS WHO UNDERSTAND THE DANGERS OF HANDLING AND USING SUCH ITEMS, YOU ASSUME ALL RESPONSIBILITY AND LIABILITY FOR ANY IMPROPER OR UNSAFE HANDLING OR USE OF THE EVALUATION BOARD BY YOU, YOUR EMPLOYEES, AFFILIATES, CONTRACTORS, AND DESIGNEES.

LIMITATION OF LIABILITIES

IN NO EVENT SHALL ST BE LIABLE TO YOU, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR ANY OTHER LEGAL THEORY, FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR EXEMPLARY DAMAGES WITH RESPECT TO ANY MATTERS RELATING TO THIS AGREEMENT, REGARDLESS OF WHETHER ST HAS BEEN ADVISED OF THE POSSIBILITY OF THE SAME. IN NO EVENT SHALL ST'S LIABILITY ARISING OUT OF THIS AGREEMENT IN THE AGGREGATE EXCEED THE AMOUNT PAID BY YOU UNDER THIS AGREEMENT FOR THE PURCHASE OF THE EVALUATION BOARD, OR TEN UNITED STATES DOLLARS (\$10.00) IF NO PURCHASE PRICE WAS PAID.

INDEMNIFICATION

You shall, at Your expense, defend ST and its Affiliates against a claim or action brought by a third party for infringement or misappropriation of any patent, copyright, trade secret or other intellectual property right of a third party to the extent resulting from (1) Your combination of the Evaluation Board with any other component, system, software, or firmware, (2) Your modification of the Evaluation Board, or (3) Your use of the Evaluation Board in a manner not permitted under this Agreement. You shall indemnify ST and its Affiliates against and pay any resulting costs and damages finally awarded against ST or its Affiliates or agreed to in any settlement, provided that You have sole control of the defense and settlement of the claim or action, and ST cooperates in the defense and furnishes all related evidence under its control at Your expense. ST will be entitled to participate in the defense of such claim or action and to employ counsel at its own expense.

"Affiliates" means any corporation or other entity directly or indirectly controlled by, controlling or under common control with the entity in question, for so long as such ownership exists. "Control" means the direct or indirect beneficial ownership of more than fifty (50%) percent of the stock or other equity interests entitled to vote for the election of directors or an equivalent governing body. Any such corporation or other legal entity shall be deemed to be an Affiliate of such Party only as long as such Control exists.

TERMINATION

ST may terminate this Agreement without notice if You breach this Agreement. Upon termination, You shall immediately destroy or return all copies of the software, firmware, and documentation of the Evaluation Board to ST and certify in writing to ST that You have done so.

APPLICABLE LAW AND JURISDICTION

This Agreement shall be governed, construed and enforced in accordance with the laws of Switzerland, without regard to its conflict of laws rules. The UN Convention on Contracts for the International Sale of Goods shall not apply to this Agreement. In case of dispute and in the absence of an amicable settlement, the only competent jurisdiction shall be the Courts of Geneva, Switzerland. Any breach of this Agreement by You may result in irreparable damage to ST for which ST will not have an

adequate remedy at law. Accordingly, in addition to any other remedies and damages available, You acknowledge and agree that ST may immediately seek enforcement of this Agreement in any jurisdiction by means of specific performance or injunction, without any requirement to post a bond or other security.

SEVERABILITY

If any provision of this agreement is or becomes, at any time or for any reason, unenforceable or invalid, no other provision of this agreement shall be affected thereby, and the remaining provisions of this agreement shall continue with the same force and effect as if such unenforceable or invalid provisions had not been inserted in this Agreement. In addition, any unenforceable or invalid provision shall be deemed replaced by a provision that is valid and enforceable and that comes closest to expressing the intention of the unenforceable or invalid provision.

WAIVER

The waiver by either party of any breach of any provision of this Agreement shall not operate or be construed as a waiver of any other or a subsequent breach of the same or a different provision.

RELATIONSHIP OF THE PARTIES

Nothing in this Agreement shall create, or be deemed to create, any joint venture, partnership, principal-agent, employer-employee or other relationship between the Parties, except that of independent contractors. Neither Party has the authority or power to bind, to contract in the name of, or to create a liability for the other in any way or for any purpose.

SURVIVAL

Any provision of this Agreement which imposes an obligation after termination of this Agreement shall survive the termination of this Agreement.

SECTION HEADINGS

Section headings are inserted for convenience only and shall not be used to interpret this Agreement.

WASTE AND RECYCLING

The Evaluation Board is not to be disposed of as urban waste. At the end of its life cycle, differentiated waste collection must be followed. Consult the local authorities for more information on the proper disposal channels. It is mandatory to separately collect the Evaluation Board and make sure it is delivered to the appropriate waste management and recycling centers.

As of 15 August 2018, in all the countries belonging to the European Union, the Evaluation Board is subject to the WEEE Directive 2012/19/EU requirement; therefore, it is forbidden to dispose of the Evaluation Board as undifferentiated waste or with other domestic wastes. Consult the local authorities for more information on the proper recycling centers.

Disposing of the Evaluation Board incorrectly may cause damage to the environment and may be subject to fines based on specific countries' rules.