

Table 1: STEVAL-CTM010V1 bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
1	35	C6, C14, C18, C19, C20, C21, C24, C25, C27, C31, C36, C39, C41, C45, C49, C54, C56, C72, C73, C75, C77, C82, C88, C90, C91, C92, C94, C95, C96, C97, C98, C100, C101, C104, C142	100nF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
2	26	C22, C23, C28, C34, C37, C38, C42, C43, C46, C47, C50, C51, C60, C61, C63, C64, C66, C67, C71, C81, C83, C84, C85, C89, C99, C102	100pF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
3	7	C52, C55, C69, C105, C106, C110, C114	10nF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
4	1	C70	1nF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
5	2	C10, C68	2.2nF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
6	2	C78, C80	20pF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
7	3	C8, C111, C112	220nF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
8	2	C2, C108	22nF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
9	4	C74, C76, C79, C103	33pF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
10	1	C35	6.8nF, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805	Any	Any
11	1	C109	Not mounted, 50V, ±10%	X7R Ceramic Capacitor, SMD 0805, (NOT MOUNTED)	Any	Any
12	8	C26, C40, C44, C48, C58, C62, C65, C107	10µF, 50V, ±10%	X7R Ceramic Capacitor, SMD 1210	Any	Any

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
13	3	C1, C30, C59	0.1 μ F, 630Vdc, \pm 10%	Metallized polypropylene film capacitor, TH	KEMET	R463I310050M1K
14	4	C3, C15, C16, C29	1nF, 1000V, \pm 10%	High voltage ceramic capacitor, TH	Murata	DEHR33A102KN2A
15	1	C87	1nF, 1000V, \pm 10%	High voltage ceramic capacitor, TH, (NOT MOUNTED)	Murata	DEHR33A102KN2A
16	1	C7	100 μ F, 25V, \pm 20%	Electrolitic capacitor 6.3mm diameter, TH	Any	Any
17	4	C4, C5, C9, C113	470 μ F, 35V, \pm 20%	Electrolitic capacitor 10mm diameter, TH	Any	Any
18	3	C53, C57, C93	470 μ F, 35V, \pm 20%	Electrolitic capacitor 8mm diameter, TH	Any	Any
19	1	C86	470 μ F, 35V, \pm 20%	Electrolitic capacitor 8mm diameter, TH, (NOT MOUNTED)	Any	Any
20	2	C32, C33	680 μ F, 450V, \pm 20%	Electrolitic capacitor 35mm diameter, TH	EPCOS	B43508A5687M000
21	2	C12, C13	1 μ F, 305Vac, \pm 10%	X2 suppression capacitors in polypropylene, TH	EPCOS	B32924C3105K
22	2	C11, C17	2.2nF, 300Vac, \pm 20%	Y2 ceramic suppression capacitors, TH	KEMET	C907U222MZVDBA7317
23	1	OVCOMP1	-	Through-hole type shrouded header 2 pin connector, pitch 2.5mm, TH	JST (JAPAN SOLDERLESS TERMINALS)	B2B-XH-A (LF)(SN)
24	2	CN1, CN2	-	4 way stripline male, pitch 2.54mm, TH	Any	Any
25	1	J1	-	5 way connector, pitch 7.50mm, TH, (NOT MOUNTED)	Any	Any
26	1	J2	-	Through-hole type shrouded header 5 pin connector, pitch 2.5mm, TH, (NOT MOUNTED)	JST (JAPAN SOLDERLESS TERMINALS)	B5B-XH-A (LF)(SN)
27	1	OUTRM1	-	Through-hole type shrouded header 6 pin connector, pitch 2.5mm, TH	JST (JAPAN SOLDERLESS TERMINALS)	B6B-XH-A (LF)(SN)
28	1	J3	RS232	DB9 female connector, 90°, TH	Any	Any
29	1	BLDC	-	3 way straight PCB header connector, pitch 7.92mm, TH	Molex	10-63-4037
30	2	D1, D14	4753A	Zener diode, DO-213AB, (NOT MOUNTED)	Vishay	ZM4753A-GS08
31	2	D12, D13	-	Red LED, SMD 0805	Any	Any
32	1	BD1	GBJ1510	Bridge rectifiers, TH	HY Electronic Corp	GBJ1510

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
33	1	D7	LL4148	Small Signal Diode, SOD-80, (NOT MOUNTED)	Any	Any
34	11	D9, D17, D18, D19, D20, D21, D22, D25, D30, D31, D32	LL4148	Small Signal Diode, SOD-80	Any	Any
35	1	F1	Fuse, 250V/15A	Quick acting fuse, 6.3x32mm	RS Pro	668-6051
36	2	F1-FUSE HOLDER-Cartridge Fuse	-	PCB Mount Fuse Clip for 6.3 x 32mm Cartridge Fuse, 6.3x32mm	KEYSTONE	2027689
37	1	L2	350µH, 10A	PFC inductor, TH	Yamaxi Electronics	43120137
38	1	L1	5mH, 20A	EMI filter-inductor, TH	Yamaxi Electronics	43120084
39	1	T1	EE20-8PA	Transformer, TH	Yamaxi Electronics	GB-EE20-02784
40	1	U11	LD1117S50TR	Adjustable and fixed low drop positive voltage regulator, SOT-223	ST	LD1117S50TR
41	2	U1, U9	LD1117S33TR	Adjustable low drop positive voltage regulator, SOT-223	ST	LD1117S33TR
42	1	U7	M24C08-R	8-Kbit serial I ² C bus EEPROM, PDIP8, (NOT MOUNTED)	ST	M24C08RBN6T
43	3	RV1, RV2, RV3	MOV-10D561K	Metal varistor, TH	Bourns	MOV-10D681K
44	1	RT1	47D-15	NTC, TH	AMETHERM	SL15 47003
45	1	Y1	8MHz	Crystal 8Mhz, TH	Any	Any
46	3	ISO3, ISO4, ISO5	PC817	Optocoupler, TH	Sharp	PC817X2NSZ0F
47	2	ISO1, ISO2	PC817	Optocoupler, TH, (NOT MOUNTED)	Sharp	PC817X2NSZ0F
48	7	AC_L1, CMP_U, CMP_V, CMP_W, COM1, N1, PE1	PIN2_CON2	Faston terminal for PCB, TH	Any	Any
49	1	U4	PM8841D	1 A low-side gate driver, SOT23-5	ST	PM8841D
50	1	Q1	-	BJT NPN transistor, SOT-23	Fairchild Semiconductor	MMBT3904
51	1	Q3	-	BJT NPN transistor, SOT-23, (NOT MOUNTED)	Fairchild Semiconductor	MMBT3904
52	1	Q4 (expected)	-	BJT PNP transistor, SOT-23	Fairchild Semiconductor	MMBT3906
53	4	R100, R101, R103, R115	0, 0.125W, ±1%	Resistor, SMD 0805	Any	Any

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
54	2	R27, R30	10, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
55	1	R32	33, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
56	1	R98	47, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
57	1	R116	82, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
58	1	R39,	680, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
59	14	R41, R42, R43, R44, R45, R46, R48, R50, R51, R52, R53, R54, R55, R97	100, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
60	4	R12, R21, R94, R99	220, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
61	1	R81	220, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
62	3	R102, R114, R118	470, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
63	1	R96	560, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
64	1	R89	560, 0.125W, $\pm 1\%$	Resistor, SMD 0805, (NOT MOUNTED)	Any	Any
65	1	R28	100K, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
66	1	R84	100K, 0.125W, $\pm 1\%$	Resistor, SMD 0805, (NOT MOUNTED)	Any	Any
67	22	R8, R9, R11, R19, R34, R47, R49, R56, R59, R65, R67, R69, R71, R73, R76, R77, R79, R80, R92, R104, R110, R112	10K, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
68	2	R111, R113	15K, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
69	14	R13, R14, R16, R17, R18, R20, R22, R31, R58, R61, R62, R68, R72, R78	1K, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
70	1	R87	1K, 0.125W, $\pm 1\%$	Resistor, SMD 0805, (NOT MOUNTED)	Any	Any
71	2	R66, R70	3.8K, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any
72	7	R25, R33, R57, R60, R64, , R74, R75	2.2K, 0.125W, $\pm 1\%$	Resistor, SMD 0805	Any	Any

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
73	2	R3, R93	20K, 0.125W, ±1%	Resistor, SMD 0805	Any	Any
74	3	R107, R109, R121	220K, 0.125W, ±1%	Resistor, SMD 0805	Any	Any
75	6	R36, R37, R38, R63, R95, R117	4.7K, 0.125W, ±1%	Resistor, SMD 0805	Any	Any
76	1	R2	56K, 0.125W, ±1%	Resistor, SMD 0805	Any	Any
77	15	R4, R5, R10, R15, R85, R86, R88, R90, R91, R105, R106, R108, R120, R122, R123	Not mounted, 0.125W, ±1%	Resistor, SMD 0805, (NOT MOUNTED)	Any	Any
78	1	R119	100, 0.75W, ±1%	Resistor, SMD 2010	Any	Any
79	12	R1, R6, R7, R23, R24, R26, R29, R35, R40, RS2, RS4, RS5	220K, 0.75W, ±1%	Resistor, SMD 2010	Any	Any
80	2	R82, R83	22K, 2W, ±5%	Axial resistor, TH, (NOT MOUNTED)	Any	Any
81	1	RS14	0.05, 5W, ±5%	Shunt resistor, TH	VISHAY	WSR5R0500FEA
82	3	RS8, RS9, RS10	0.03, 2W, ±1%	Shunt resistor, SMD	VISHAY	WSR2R0300FEA
83	1	RS11	0.5, 2W, ±1%	Shunt resistor, SMD 2512	INTERNATIONAL RESISTIVE	LRC-LR2512LF-01-R500-F
84	1	K1	G4A-1A-PE 12DC, 12V/20A	Power PCB Relay with DC coil, TH, (NOT MOUNTED)	Omron	G4A-1A-PE 12DC
85	2	K2, K3	G5NB1A	Relè, TH, (NOT MOUNTED)	Omron	G5NB1A412DC
86	1	U8	ST3232BDR	RS-232 drivers and receivers, SO16	ST	ST3232BDR
87	1	IPM1	STGIB10CH60TS-L	15 A, 600 V short-circuit rugged IGBT, SDIP2B-26L, (BOTTOM SIDE)	ST	STGIB10CH60TS-L
88	1	IPM2	STGIPQ3H60T-HZ	3A, 600 V, 3-phase IGBT inverter bridge, N2DIP-26L type Z	ST	STGIPQ3H60T-HZ
89	1	Q2	STGWT20H65FB	IGBT, HB series 650 V, 20 A high speed, TO-3P, (BOTTOM SIDE)	ST	STGWT20H65FB
90	1	U6	STM32F303RBT6	32b MCU, LQFP64	ST	STM32F303RBT7
91	3	D8, D28, D29	STPS1L30A	Low drop power schottky rectifier, SMA	ST	STPS1L30A
92	1	D2	STTH108A	High voltage ultrafast rectifier, SMA	ST	STTH108A

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
93	3	D23, D24, D26	STTH108A	High voltage ultrafast rectifier, SMA, (NOT MOUNTED)	ST	STTH108A
94	4	D3, D4, D5, D6	STTH1R02U	Ultrafast recovery diode, SMB	ST	STTH1R02U
95	1	D16	STTH30AC06CPF	Turbo 2 ultrafast high voltage rectifier, TO-3PF, (BOTTOM SIDE)	ST	STTH30AC06CPF
96	1	TR1	T1235T-8FP	12 A Snubberless™ Triac, TO-220FPAB, (BOTTOM SIDE)	ST	T1235T-8FP
97	2	U5, U10	TS391RILT	Low-power single voltage comparator, SOT23-5	ST	TS391RILT
98	1	TVS1	FA55-362	Transient voltage suppressor, TH, (NOT MOUNTED)	Mitsubishi	FA55-362
99	1	U3	ULN2003D1013TR	Seven Darlington array, SO16, (NOT MOUNTED)	ST	ULN2003D1013TR
100	1	U2	VIPER26LD	Fixed frequency VIPer™ plus family, SO16	ST	VIPER26LD
101	1	Heat Sink applied on bottom side	Profile 8286, Rth (°C/W) 1.5 (length 100mm)	extruded Heat , 162x140x25mm, (Length request 140mm, with 9 holes threaded 3 mm)	Pada engineering	Profile 8286
102	4	nylon spacer between Heatsink and PCB	length 5mm	Nylon / plastic, lenght-5mm-drill 3mm, (5mm)	ANY or Richco	469.09.05
103	2	nylon spacer	length 30 mm	Nylon / plastic, lenght 30mm-drill 3mm, (30mm)	ANY or Richco	HTSN-M4-30-8-1
104	6	Screw	10mm	Hex Socket Button Stainless Steel Plain Socket Screw, lenght 10mm- 3mm, (M3 x 10mm)	Any	Any
105	6	Plain Nylon Sealing Washer, 0.8mm Thick.	M3-0.8mm	Plain Nylon Sealing Washer, (M3)	Any	Any
106	1	IPM1 + DB1 Isolation Thermal Interface SHEET	CUSTOM CUTTING	Thermal Interface Sheet, Fibreglass, 1.6W/m·K	Any	Any
107	2	Q2+D16 Isolation Thermal Interface SHEET	-	TO247-Thermal Interface Sheet, Fibreglass	Any	Any

STMicroelectronics**EVALUATION BOARD LICENSE AGREEMENT**

By using this evaluation board or kit (together with all related software, firmware, components, and documentation provided by ST, "Evaluation Board"), You ("You") are agreeing to be bound by the terms and conditions of this Evaluation Board License Agreement ("Agreement"). Do not use the Evaluation Board until You have read and agreed to this Agreement. Your use of the Evaluation Board constitutes Your acceptance of this Agreement.

LICENSE

STMicroelectronics ("ST") grants You the right to use the enclosed Evaluation Board offering limited features only to evaluate and test ST products solely for Your evaluation and testing purposes in a research and development setting. The Evaluation Board shall not be, in any case, directly or indirectly assembled as a part in any production of Yours as it is solely developed to serve evaluation purposes and has no direct function and is not a finished product. If software and/or firmware is accompanied by a separate end user license agreement ("EULA"), then such software and/or firmware shall be governed by such EULA.

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Title to the Evaluation Board remains with ST and/or its licensors. You may not remove any copyright or other proprietary rights notices without prior written authorization from ST. You may make one copy of the software and/or firmware of the Evaluation Board for back up or archival purposes provided that You reproduce and apply to such copy any copyright or other proprietary rights notices included on or embedded in the software and/or firmware. You agree to prevent any unauthorized copying in whole or in part of the Evaluation Board.

RESTRICTIONS AND WARNINGS

Before You handle or use the Evaluation Board, You must carefully review any related documentation provided by ST. Such documentation may contain important warnings. You shall comply with all such warnings and other instructions and employ reasonable safety precautions in using the Evaluation Board. Failure to do so may result in death, personal injury, or property damage. If You have any questions regarding the safe usage of the Evaluation Board, You should contact ST for guidance. You may not sell, assign, sublicense, lease, rent or otherwise distribute the Evaluation Board for commercial purposes, in whole or in part, or use Evaluation Board in a production system, with the exception that if You are an authorized ST distributor, You may resell the Evaluation Board in compliance with the applicable terms and conditions. Except as provided in this Agreement or as explicitly permitted in the documentation of the Evaluation Board, You may not reproduce the Evaluation Board or modify, reverse engineer, de-compile or disassemble its software and/or firmware, in whole or in part. You shall not use the Evaluation Board in any safety critical or functional safety testing, including but not limited to testing of life supporting, military or nuclear applications. ST expressly disclaims any responsibility for such usage which shall be made at Your sole risk, even if ST has been informed in writing of such usage. Unless expressly designated in writing by ST as suitable for use in testing automotive or aerospace applications, You shall not use the Evaluation Board in such testing.

Notice applicable to Evaluation Boards according to European Regulation

For the European Regulation of the Evaluation Board, the applicable EU directives are considered, with a particular attention to the Low Voltage Directive (LVD) 2014/35/EU, the Electromagnetic Compatibility (EMC) Directive 2014/30/EU, and the Radio Equipment Directive (RED) 2014/53/EU. If the Evaluation Board is outside the scope of the foregoing Directives, then the General Product Safety Directive (GPSD) 2001/95/EC and Council Directive 93/68/EEC, amending Directive 73/23/EEC on electrical equipment designed for use within certain voltage limits, are applicable.

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

This kit is designed to allow:

- (1) Product developers to evaluate electronic components, circuitry, or software associated with the kit to determine whether to incorporate such items in a finished product and
- (2) Software developers to write software applications for use with the end product.

This kit is not a finished product and when assembled may not be resold or otherwise marketed unless all required FCC equipment authorizations are first obtained. Operation is subject to the condition that this product not cause harmful interference to licensed radio stations and that this product accept harmful interference. Unless the assembled kit is designed to operate under part 15, part 18 or part 95 of 47 CFR, Chapter I ("FCC Rules"), the operator of the kit must operate under the authority of an FCC license holder or must secure an experimental authorization under part 5 of this chapter.

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 it 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.