

Table 1: Power board bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
1	6	C80, C83, C85, C88, C89, C92	0.033 μ F, 250V, \pm 20%	CAP CER, 1206 (3216 Metric)	TDK Corporation	CGA5L3X7R2E333M160AA
2	6	C81, C82, C86, C87, C90, C91	1 μ F, 250V, \pm 10%	CAP CER 1UF 250V X7R 2220, 2220 (5750 Metric)	TDK Corporation	CGA9N3X7R2E105K230KA
3	3	CON5, CON6, CON7	2X4 Pitch 2.54	Double Strip Line Male SMD	Molex. LLC	15-91-1088
4	3	CON5, CON6, CON7	2X4 Pitch 2.54	Double Strip Line Male SMD	Harvin	M20-8750442
5	1	J3	2X4 Pitch 2.54	Double Strip Line Male SMD	Molex. LLC	0015912040
6	36	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q30, Q31, Q32, Q33, Q34, Q35, Q36	STH315N10F7-6, 100V, 180A	MOSFET N-CH H2PAK-6, TO-263-7, D ² Pak (6 Leads + Tab)	ST	STH315N10F7-6
7	36	R71, R72, R73, R74, R75, R76, R84, R85, R87, R88, R89, R90, R107, R108, R109, R110, R111, R112, R120, R121, R122, R123, R124, R125, R133, R134, R135, R136, R137, R138, R146, R147, R148, R149, R150, R151	2.2, 1/4W, \pm 1%	1206 (3216 Metric)		-
8	36	R77, R78, R79, R80, R81, R82, R92, R93, R94, R95, R96, R97, R113, R114, R115, R116, R117, R118, R126, R127, R128, R129, R130, R131, R139, R140, R141, R142, R143, R144, R152, R153, R154, R155, R156, R157	10k, 1/10W, \pm 1%	RES SMD, 0603 (1608 Metric)	Yageo	RC0603FR-0710KL
9	6	R83, R98, R119, R132, R145, R158	not mounted	-	-	-

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
10	6	R173, R174, R175, R176, R177, R178	1mΩ, 7W, ±1%	RES SMD 2818	Vishay Dale	WSHM28181L000FEA
11	3	RT1, RT2, RT3	4.7k, ±5%	NTC THERMISTOR, 0805 (2012 Metric)	Murata Electronics North America	NCP21XM472J03RA
12	9	TW1, TW2, TW3, TW4, TW5, TW6, TW7, TW8, TW9, TW10, TW11	M5x10mm	Male-Femal Hexagonal Tower	RS PRO	806-6632
13	2	SP1, SP2	M3x10mm	Stainless Steel Spacer Studs, metric, internal/ external WA-SSSIE, standoff	KEYSTONE ELECTRONIC	24296
14	18	0	M3x8mm	Machine Screw with flat + spring lock washer	Ettinger	81,58,336
15	9 +9 +9	0	Size M5	Nut + Washer + shakeproof	RS PRO	483-0546 + 482 7720 + 526-833

Table 2: Capacitor board bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
1	22	C6, C7 ,C8 ,C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27	270μF, 100V, ±20%	CAPACITOR, ALUM, Radial	Rubycon	100ZLJ270M12.5X30

Table 3: Driver board bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
1	3	C1, C96, C120	47μF, 25, ±10%	CAPACITOR, TANT, 2917 (7343 Metric)	AVX Corporation	TAJD476K025RNJ
2	28	C2, C3, C4, C5, C6, C15, C19, C23, C24, C25, C30, C31, C36, C37, C41, C75, C76, C77, C78, C79, C93, C97, C103, C104, C112, C119, C121, C122	0.1μF, 50V, ±10%	CAPACITOR, CER, 0603 (1608 Metric)	KEMET	C0603C104K5RACTU
3	8	C7, C8, C9, C10, C11, C12, C13, C14	10pF, 50V, ±10%	CAPACITOR, CER, 0603 (1608 Metric)	TDK Corporation	CGA3E2C0G1H100D080AD
4	12	C16, C17, C20, C21, C26, C27, C32, C33, C38, C39, C42, C43	4.7μF, 25V, ±10%	CAPACITOR, CER, 0805 (2012 Metric)	TDK Corporation	C2012X5R1E475K125AB

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
5	6	C18, C22, C28, C34, C40, C44	100pF, 50V, ±5%	CAPACITOR, CER, 0603 (1608 Metric)	Murata Electronics North America	GRM1885C1H101JA01D
6	1	C29	1µF, 50V, ±10%	CAPACITOR, CER, 0603 (1608 Metric)	Samsung Electro-Mechanics America, Inc.	CL10A105KB8NNNC
7	1	C35	10µF, 10V, ±20%	CAPACITOR, TANT, 1206 (3216 Metric)	KEMET	T491A106M010AT
8	3	C45, C46, C47	10µF, 35V, ±10%	CAPACITOR, CER, 0805 (2012 Metric)	TDK Corporation	C2012X5R1V106K125AC
9	3	C48, C114, C115	1 µF, 100V, ±10%	CAPACITOR, CER, 0805 (2012 Metric)	TDK Corporation	C2012X7S2A105K125AB
10	3	C49, C50, C51	10pF, 50V, ±0.5pF	CAPACITOR, CER, 0603 (1608 Metric)	TDK Corporation	CGA3E2C0G1H100D080AD
11	3	C65, C67, C70	1000pF, 50V, ±10%	CAPACITOR, CER, 0603 (1608 Metric)	AVX Corporation	06035C102KAT2A
12	1	C94	2200pF, 50V, ±10%	CAPACITOR, CER, 0603 (1608 Metric)	TDK Corporation	CGA3E2X7R1H222K080AD
13	1	C95	10µF, 50V, ±20%	CAPACITOR, CER, 1206 (3216 Metric)	TDK Corporation	CGA5L3X5R1H106M160AB
14	1	C98	470pF, 50V, ±5%	CAPACITOR, CER, 0603 (1608 Metric)	TDK Corporation	CGA3E2C0G1H471J080AD
15	2	C99, C105	15nF, 50V, ±10%	CAPACITOR, CER, 0603 (1608 Metric)	Murata Electronics North America	GRM188R71H153KA01D
16	2	C100, C108	47µF, 10V, ±10%	CAPACITOR, TANT, 2917 (7343 Metric)	AVX Corporation	TAJD476K010RNJ
17	2	C101, C106	3.3µF, 50V, ±10%	CAPACITOR, CER, 0805 (2012 Metric)	TDK Corporation	C2012X5R1H335K125AB
18	1	C102	150pF, 100V, ±5%	CAPACITOR, CER, 0603 (1608 Metric)	TDK Corporation	CGA3E2C0G2A151J080AD
19	1	C107	120pF, 50V, ±5%	CAPACITOR, CER, 0603 (1608 Metric)	TDK Corporation	CGA3E2C0G1H121J080AD
20	1	C113	10nF, 50V, ±10%	CAPACITOR, CER, 0603 (1608 Metric)	Murata Electronics North America	GRM188R71H103KA01D
21	1	C116	0.1µF, 100V, ±10%	CAPACITOR, CER, 0603 (1608 Metric)	TDK Corporation	CGA3E3X7S2A104K080AB
22	1	C117	2.2µF, 100V, ±10%	CAPACITOR, CER, 1210 (3225 Metric)	KEMET	C1210C225K1RACTU
23	1	C118	100µF, 100V, ±20%	CAPACITOR, ALUM, Radial, Can - SMD	Vishay BC Components	MAL215099907E3
24	3	CON1, CON3, CON4	8 pin, 2.54mm	CONN HEADER FEMALE DL TIN	Sullins Connector Solutions	PPTC042LFBN-RC

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
25	1	CON2	10 pin, 2.54 mm	CONN HEADER 2.54MM GOLD	Sullins Connector Solutions	SBH11-PBPC-D05-ST-BK
26	1	CON5	10 pin, 2.54 mm	CONN HEADER STR TIN MALE	Amphenol FCI	67997-410HLF
27	4	D1, D2, D3, D53	Green, 20mA	LED DIFFUSED 0603 SMD, 0603 (1608 Metric)	OSRAM Opto Semiconductor Inc.	LP L296-J2L2-25-Z
28	3	D4, D5, D6	530mV @ 300mA, (DC)	DIODE, SCHOTTKY, SC-79, SOD-523	ST	BAT30KFILM
29	3	D7, D8, D9	1A	DIODE, SCHOTTKY, DO-214AC, SMA	ST	STPS1H100A
30	7	D10, D16, D22, D28, D34, D40, D46	5A	DIODE, SCHOTTKY, SOD-128	ST	STPS5H100AFY
31	1	D11		TVS, DIODE, DO-214AC, SMA	ST	SM4T28AY
32	6	D12, D18, D24, D30, D36, D42		TVS, DIODE, DO-214AB, SMC	ST	SM15T12CAY
33	2	D47, D48	3A	DIODE, SCHOTTKY, SOD-128	ST	STPS360AFY
34	2	D50, D51	500mV @ 3A	DIODE, SCHOTTKY, DO-214AB, SMC	ST	STPS3L40SY
35	1	D52	2.7V, 1.5V @ 200mA, 10µA @ 1V, 500mW	DIODE, ZENER, DO-213AC, MINI- MELF, SOD-80	Vishay Semiconductor Diodes Division	TZMB2V7-GS08
36	1	D54	3.3V, 900mV @ 10mA, 7.5µA @ 1.5V, 500mW	DIODE, ZENER, SOD-123	ON Semiconductor	MMSZ4684T1G
37	1	D57	820mV @ 3A	DIODE, SCHOTTKY, DO-214AA, SMB	ST	STPS3150UY
38	2	D59, D60	Red, 624nm	Standard LEDs - SMD, 0603 (1608 metric)	OSRAM Opto Semiconductor	LR Q396-P1Q2-1
39	1	IC4	3A	IC REG BUCK ADJ 3A 8HSOP, 0.154", 3.90mm width, Exposed Pad	ST	A7986ATR
40	2	IC5, IC6	1A	IC REG BUCK ADJ 1A 8SOIC, 0.154", 3.90mm width	ST	A6902D13TR
41	1	J1	34 pin	CONN, Walcon, Vertical	HARTING	09185346324
42	1	J2	4 pin, 2.54mm	CONN HEADER FEMALE DL TIN	Sullins Connector Solutions	PPTC022LFBN-RC
43	1	J4	14Pin, 2.54mm	CONN HEADER GOLD	Sullins Connector Solutions	SBH11-PBPC-D07-ST-BK

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
44	1	JP1	2pin, 3.81mm	TERM BLOCK HDR VERT	Phoenix Contact	1803426
45	3	JP2, JP3, SW2	Con3	SIL VERTICAL PC TAIL PIN HEADER	Harwin Inc.	M20-9990345
46	8	L1, L2, L3, L4, L18, L19, L20, L21	120Ω@100MHz	FERRITE BEAD 0603 1LN, 0603 (1608 Metric)	Wurth Electronics Inc.	742792625
47	1	L5	15μH, 1.45A, 125MΩ, ±20%	FIXED IND, Nonstandard	Wurth Electronics Inc.	74404063150
48	1	L6	70Ω@100MHz	FERRITE BEAD 0603 1LN, 0603 (1608 Metric)	Murata Electronics North America	BLM18SG700TN1D
49	1	L7	68μH, 1.9A, 132MΩ, ±20%	FIXED IND 1.9A SMD, WE_PD1050	Wurth Electronics Inc.	7447714680
50	5	L8, L9, L11, L12, L13	330Ω@100MHz	FERRITE BEAD 0603 1LN, 0603 (1608 Metric)	Murata Electronics North America	BLM18SG331TN1D
51	2	L10, L16	47μH, 1.8A, 190MΩ, ±10%	FIXED IND SMD, WE_PD4	Wurth Electronics Inc.	74456147
52	1	L17	3.3μH, 2A, 22MΩ, ±20%	FIXED IND SMD, Nonstandard	Wurth Electronics Inc.	74404042033
53	1	L22	30Ω@100MHz	FERRITE BEAD 0805 1LN, 0805 (2012 Metric)	Wurth Electronics Inc.	74279206
54	6	Q1, Q2, Q3, Q4, Q5, Q6	100V, 3A, 1.25W	TRANS NPN/PNP 8LPAK, SOT-1205	Nexperia USA Inc.	PHPT610030NPKX
55	1	Q37	60V, 4A, 3.3W (Tc)	MOSFET N-CH SOT-223, TO-261-4, TO-261AA	ST	STN4NF06L
56	1	R1	820Ω, 0.1W, 1/10W, ±1%	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-07820RL
57	1	R2	1.33k, 0.1W, 1/10W, ±1%	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-071K33L
58	1	R3	3.57k, 0.1W, 1/10W, ±1%	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-073K57L
59	20	R4, R6, R8, R9, R10, R11, R12, R13, R30, R72, R90, R91, R94, R95, R96, R97, R98, R104, R105, R106	0.0, 0.1W, 1/10W	RES SMD JUMPER 0603, 0603 (1608 Metric)	Yageo	RC0603JR-070RL
60	4	R7, R47, R81, R82	1.5k, 0.1W, 1/10W, ±1%	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-071K5L
61	6	R17, R20, R22, R25, R27, R31	24, 2W, ±5%	RES SMD 2512, 2512 (6432 Metric)	Stackpole Electronics Inc.	RMCF2512JT24R0
62	6	R18, R21, R23, R26, R28, R32	5, 1, 1W, ±5%	RES SMD 2512, 2512 (6332 metric)	Panasonic Electronic Components	ERJ-1TYJ5R1U

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
63	6	R19, R24, R29, R87, R101, R102	0.1, 1/2W, $\pm 5\%$	RES SMD 1210, 1210 (3225 Metric)	Yageo	RL1210FR-070R1L
64	4	R33, R34, R35, R36	15k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-0715KL
65	1	R37	10k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-0710KL
66	1	R38	11K, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-0711KL
67	3	R39, R109, R110	6.98k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-076K98L
68	3	R40, R41, R42	4.7k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-074K7L
69	6	R43, R70, R83, R85, R86, R88	1k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-071KL
70	1	R44	110k, 0.1W, 1/10W, $\pm 5\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603JR-07110KL
71	1	R45	47k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-0747KL
72	1	R46	220, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-07220RL
73	1	R48	2.49k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Stackpole Electronics Inc.	RMCF0603FT2K49
74	2	R49, R53	0.1, 0.333W, 1/3W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Panasonic Electronic Components	ERJ-3BWFR100V
75	1	R50	13k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-0713KL
76	1	R51	4.3k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-074K3L
77	3	R52, R54, R55	9.1k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-079K1L
78	1	R56	5.49k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-075K49L
79	3	R58, R59, R61	20k, 0.125W, 1/8W, $\pm 1\%$	RES SMD 0805, 0805 (2012 Metric)	Yageo	RC0805FR-0720KL
80	2	R60, R62	10k, 0.25W, 1/4W, $\pm 1\%$	RES SMD 1206, 1206 (3216 Metric)	Yageo	RC1206FR-0710KL
81	1	R63	3.9k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-073K9L
82	1	R64	39, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Panasonic Electronic Components	ERJ-3EKF39R0V
83	1	R65	2.7k, 0.1W, 1/10W, $\pm 1\%$	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-072K7L
84	1	R71	0, 0.1W, 1/10W, \pm Jumper	RES SMD 0603, 0603 (1608 Metric)	Panasonic Electronic Components	ERJ-3GEY0R00V
85	6	R74, R75, R76, R77, R78, R79	100, 0.1W, 1/10W, $\pm 1\%$	CHIP RESISTOR SMD 0603, 0603 (1608 Metric)		

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
86	6	R80, R84, R89, R92, R99, R100	100, 0.1W, 1/10W, ±1%	RES SMD 0603, 0603 (1608 Metric)	Yageo	RC0603FR-07100RP
87	2	R107, R108	0.1W, 1/10W, ±1%	CHIP RESISTOR SMD 0603 (not mounted), 0603 (1608 Metric)	-	-
88	5	S1, S2, S3, S7, S54	2 pin	CONN HEADER VERT T/H	Amphenol FCI	77311-118-02LF
89	10	TP2, TP3, TP9, TP15, TP19, TP21, TP25, TP27, TP31, TP33	5000	TEST POINT PC MINI .040"D RED, 0.100" Dia x 0.180" L (2.54mm x 4.57mm)	Keystone Electronics	5000
90	18	TP17, TP20, TP23, TP26, TP29, TP32, TP34, TP35, TP36, TP37, TP38, TP39, TP40, TPCK1, TPCS1, TPMI1, TPMO1, TPSD1	5001	TEST POINT PC MINI .040"D BLACK, 0.100" Dia x 0.180" L (2.54mm x 4.57mm)	Keystone Electronics	5001
91	1	U1	400KHz	IC OPAMP ZRO-DRFT SOT23-5, SC-74A, SOT-753	ST	TSZ121IYLT
92	1	U3	12VWWM, 21VC	TVS DIODE SOT23-3L, TO-236-3, SC-59, SOT-23-3	ST	ESDA14V2LY
93	1	U4	5.2VWWM, 16VC	TVS DIODE SOT23-3L, TO-236-3, SC-59, SOT-23-3	ST	ESDA6V1LY
94	1	U5	3VWWM, 19VC	TVS DIODE SOT23-3L, TO-236-3, SC-59, SOT-23-3	ST	ESDA5V3LY
95	1	U6	-	IC GATE AND 4CH 2-INP, 14-TSSOP (0.173", 4.40mm Width)	Fairchild/ON Semiconductor	MM74HC08MTCX
96	1	U7	-	IC COMP QUAD LOW PWR, 14-SOIC (0.154", 3.90mm Width)	ST	LM2901HYDT
97	1	U8	-	Automotive Driver 3 phase BLDC	ST	L9907

Table 4: Current sensor board bill of materials

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
1	4	C1, C4, C7, C9	4.7nF, 25V, ±10%	CAP CER X7R, SMC 0603	ANY	-
2	8	C2, C3, C5, C6, C8, C10, C11, C12	47nF, 25V, ±10	CAP CER X7R, SMC 0603	ANY	-

Item	Q.ty	Ref.	Part / Value	Description	Manufacturer	Order code
3	2	ICS1, ICS2	Current Sensing, 200A	CURRENT SENSOR HALL, (NOT MOUNTED)	LEM	HTFS 200-P
4	1	ICS3	Current Sensing, 200A	CURRENT SENSOR HALL 200A	LEM	HTFS 200-P
5	1	ICS4	Current Sensing, 200A	CURRENT SENSOR HALL 200A	LEM	HTFS 200-P
6	1	J1	Connector male 10X2 pitch 2,54mm	Connector male 10X2 pitch 2,54mm, ampmode10	Wurth_Elektron	61201021621
7	4	R1, R3, R5, R7	3.6K, 1/10W, ±1%	RES SMD 3.6KΩ 1% 1/10W 0603, SMR 0603	ANY	-
8	4	R2, R4, R6, R8	1.8K, 1/10W, ±1%	RES SMD 1.8KΩ 1% 1/10W 0603, SMR 0603	ANY	-
9	1	Flat Cable	10 Position 0.500' (152.40mm 6.00")	Cable Assembly Rectangular Socket to Socket	TE Connectivity	A3AAH-1006G
10	4	S1, S2, S3, S4	2X2.54mm	Strip line male + Jumper, siptm2002	ANY	-
11	4	screw M3x12mm	M3x12mm	fixed in two point each current sensor	ANY	-
12	4	Nuts M3	Nuts M3	fixed in two point each current sensor	ANY	-

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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 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.