

Table 1: AEK-USB-2TYPEC1 board bill of materials

Item	Q.ty	Ref.	Part/Value	Description	ManuFacterer	Order code
1	2	CN401, CN701	USB Type-C Receptacle	Type-C Receptacle	Würth Elektronik	632723300011
2	2	CN402, CN702	Alt. Mode Conn.	HEADER (not mounted)	Würth Elektronik	61301421121
3	5	C201, C402, C502, C702, C802	100nF	Ceramic X7R	Würth Elektronik	885012206071
4	2		100nF	Ceramic X7R	Würth Elektronik	885012206071
5	1	C202	100nF	Ceramic X7R (not mounted)	Würth Elektronik	885012206071
6	1	C203	10µF	Ceramic X5R (not mounted)	ANY	
7	5	C204, C205, C206, C207, C208	10µF	Ceramic X5R	ANY	
8	12	C301, C302, C303, C304, C501, C503, C601, C602, C603, C604, C801, C803	1µF	Ceramic X5R	ANY	
9	2	C401, C701	4.7µF	Ceramic X7R	Würth Elektronik	885012208094
10	3	D101, D104, D107	BLUE LED	LED	Kingbright	KP-2012PBC-A
11	2	D102, D105	GREEN LED	LED	Kingbright	KP-2012SGC
12	2	D103, D106	ORANGE LED	LED	Kingbright	KP-2012SEC
13	4	D201, D202, D401, D701	SM4T26AY	Automotive 400 W Transil	ST	SM4T26AY
14	2	D402, D702	ESDA25LY	Automotive dual Transil array for ESD protection	ST	ESDA25LY
15	2	JP101, JP102	USB_D	HEADER	Würth Elektronik	61300411121
16	2	JP201, JP202	VCONN	HEADER	Würth Elektronik	61300311121
17	2	JP203, JP204	VBUS_5V_nEN	HEADER	Würth Elektronik	61300211121

Item	Q.ty	Ref.	Part/Value	Description	ManuFacterer	Order code
18	1	J101	CONN_SPC5_AB20	HEADER	SAMTEC	ESQ-120-24-T-D
19	1	J102	CONN_SPC5_CD20	HEADER	SAMTEC	ESQ-120-24-T-D
20	1	J103	Power Connector 9x2	HEADER	Wurth Elektronik	61301821121
21	4	Q201, Q202, Q203, Q204	STL9P3LLH6	PMOS	ST	STL9P3LLH6
22	2	Q205, Q206	STL6N2VH5	NMOS	ST	STL6N2VH5
23	6	Q301, Q302, Q303, Q601, Q602, Q603	STD28P3LLH6AG	Automotive-grade P- channel -30 V, 0.027 Ohm, -12 A	ST	STD28P3LLH6AG
24	2	R1, R4	47k	RESISTOR (not mounted)	ANY	
25	2	R2, R3	47k	RESISTOR	ANY	
26	4	R101, R102, R306, R606	2.2k	RESISTOR	ANY	
27	22	R103, R104, R106, R107, R109, R111, R113, R118, R122, R125, R129, R130, R131, R132, R133, R134, R314, R315, R503, R614, R615, R803	0	RESISTOR	ANY	
28	1	R105	1k	RESISTOR	ANY	
29	5	R108, R110, R114, R117, R128	110	RESISTOR	ANY	
30	2	R112, R121	680	RESISTOR	ANY	



Item	Q.ty	Ref.	Part/Value	Description	ManuFacterer	Order code
31	12	R115, R116, R119, R120, R123, R124, R126, R127, R501, R504, R801, R804	0	RESISTOR (not mounted)	ANY	
32	20	R201, R202, R203, R204, R303, R304, R307, R309, R310, R311, R312, R313, R603, R604, R607, R609, R610, R611, R612, R613	10k	RESISTOR	ANY	
33	2	R205, R207	0	RESISTOR	ANY	
34	2	R206, R208	0	RESISTOR (not mounted)	ANY	
35	4	R301, R302, R601, R602	21k	RESISTOR	ANY	
36	2	R305, R605	820	RESISTOR	TE CONNECTIVITY	CRGS0805J820R
37	2	R308, R608	10k	RESISTOR (not mounted)	ANY	
38	2	R401, R701	0.01	RESISTOR	Panasonic	ERJM1WSF10MU
39	2	R402, R702	82k	RESISTOR	ANY	
40	2	R403, R703	15k	RESISTOR	ANY	
41	2	R502, R802	200	RESISTOR	ANY	
42	4	R505, R506, R805, R806	10	RESISTOR	ANY	

Item	Q.ty	Ref.	Part/Value	Description	ManuFacterer	Order code
43	11	TP101, TP102, TP103, TP104, TP105, TP301, TP302, TP401, TP601, TP602, TP701	TEST POINT	TEST POINT	Vero Technologies	20-2137
44	4	TP303, TP304, TP603, TP604	TEST POINT	TEST POINT (not mounted)	Vero Technologies	20-2137
45	4	TP305, TP306, TP605, TP606	TEST POINT	TEST POINT (not mounted)	Würth Elektronik	61300111121
46	1	U201	LD1117A	Adjustable and fixed low drop positive voltage regulator	ST	LD1117AS33TR
47	2	U301, U601	STUSB1702Y	USB Type-C interface	ST	STUSB1702YQTR
48	2	U401, U701	USBLC6-2SC6Y	Automotive very low capacitance ESD protection	ST	USBLC6-2SC6Y
49	2	U501, U801	TSC1031IYPT	High-voltage, high-side current sense amplifier	ST	TSC1031IYPT

Table 2: SPC58EC-DISP board bill of materials

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
1	1	C1	47pF/16V	Capacitor	ANY	
2	1	C10	100nF/50V	Capacitor	ANY	
3	1	C100	100nF/50V	Capacitor	ANY	
4	1	C101	18pF/16V	Capacitor	ANY	
5	1	C102	18pF/16V	Capacitor	ANY	
6	1	C103	100nF/50V	Capacitor	ANY	
7	1	C104	100nF/50V	Capacitor	ANY	
8	1	C105	100nF/50V	Capacitor	ANY	
9	1	C106	10µF/16V	Capacitor	ANY	
10	1	C107	100nF/50V	Capacitor	ANY	
11	1	C108	4.7µF/16V	Capacitor	ANY	
12	1	C109	100nF/50V	Capacitor	ANY	
13	1	C11	4.7nF/16V	Capacitor	ANY	
14	1	C110	4.7µF/16V	Capacitor	ANY	
15	1	C111	100nF/50V	Capacitor	ANY	
16	1	C112	100nF/50V	Capacitor	ANY	
17	1	C113	100nF/50V	Capacitor	ANY	

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
18	1	C114	3.3µF/16V	Capacitor	ANY	
19	1	C115	100nF/50V	Capacitor	ANY	
20	1	C116	100nF/50V	Capacitor	ANY	
21	1	C117	100nF/50V	Capacitor	ANY	
22	1	C118	100nF/50V	Capacitor	ANY	
23	1	C119	100nF/50V	Capacitor	ANY	
24	1	C12	4.7nF/16V	Capacitor	ANY	
25	1	C120	100nF/50V	Capacitor	ANY	
26	1	C121	100nF/50V	Capacitor	ANY	
27	1	C122	100nF/50V	Capacitor	ANY	
28	1	C123	100nF/50V	Capacitor	ANY	
29	1	C124	100nF/50V	Capacitor	ANY	
30	1	C125	100nF/50V	Capacitor	ANY	
31	1	C126	100nF/50V	Capacitor	ANY	
32	1	C127	100nF/50V	Capacitor	ANY	
33	1	C128	100nF/50V	Capacitor	ANY	
34	1	C129	100nF/50V	Capacitor	ANY	
35	1	C13	1.5µF/16V	Capacitor	ANY	
36	1	C130	100nF/50V	Capacitor	ANY	
37	1	C131	100nF/50V	Capacitor	ANY	
38	1	C132	10µF/16V	Capacitor	ANY	
39	1	C133	100nF/50V	Capacitor	ANY	
40	1	C134	100nF/50V	Capacitor	ANY	
41	1	C14	100nF/50V	Capacitor	ANY	
42	1	C15	10nF/16V	Capacitor	ANY	
43	1	C16	1.5µF/16V	Capacitor	ANY	
44	1	C17	100nF/50V	Capacitor	ANY	
45	1	C18	10nF/16V	Capacitor	ANY	
46	1	C19	100nF/50V	Capacitor	ANY	
47	1	C2	47pF/16V	Capacitor	ANY	
48	1	C20	10nF/16V	Capacitor	ANY	
49	1	C21	100nF/50V	Capacitor	ANY	
50	1	C22	10nF/16V	Capacitor	ANY	
51	1	C23	100nF/50V	Capacitor	ANY	
52	1	C24	10nF/16V	Capacitor	ANY	
53	1	C25	100nF/50V	Capacitor	ANY	
54	1	C26	10nF/16V	Capacitor	ANY	
55	1	C27	100nF/50V	Capacitor	ANY	
56	1	C28	10nF/16V	Capacitor	ANY	
57	1	C29	100nF/50V	Capacitor	ANY	
58	1	C3	100nF/50V	Capacitor	ANY	



Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
59	1	C30	10nF/16V	Capacitor	ANY	
60	1	C31	10nF/16V	Capacitor	ANY	
61	1	C32	2.2µF/16V	Capacitor	ANY	
62	1	C33	100nF/50V	Capacitor	ANY	
63	1	C34	10nF/16V	Capacitor	ANY	
64	1	C35	47nF/16V	Capacitor	ANY	
65	1	C36	10nF/16V	Capacitor	ANY	
66	1	C37	47nF/16V	Capacitor	ANY	
67	1	C38	10nF/16V	Capacitor	ANY	
68	1	C39	47nF/16V	Capacitor	ANY	
69	1	C4	100nF/50V	Capacitor	ANY	
70	1	C40	10nF/16V	Capacitor	ANY	
71	1	C41	47nF/16V	Capacitor	ANY	
72	1	C42	10nF/16V	Capacitor	ANY	
73	1	C43	2.2µF/16V	Capacitor	ANY	
74	1	C44	100nF/50V	Capacitor	ANY	
75	1	C45	10nF/16V	Capacitor	ANY	
76	1	C46	2.2µF/16V	Capacitor	ANY	
77	1	C47	100nF/50V	Capacitor	ANY	
78	1	C48	10nF/16V	Capacitor	ANY	
79	1	C49	4.7µF/16V	Capacitor	ANY	
80	1	C5	4.7nF/16V	Capacitor	ANY	
81	1	C50	100nF/50V	Capacitor	ANY	
82	1	C51	10nF/16V	Capacitor	ANY	
83	1	C52	8pF/16V	C0G Ceramic Multilayer Capacitor	TDK	C1608C0G1H100D080AA
84	1	C53	8pF/16V	C0G Ceramic Multilayer Capacitor	TDK	C1608C0G1H100D080AA
85	1	C54	100nF/50V	Capacitor	ANY	
86	1	C55	100nF/50V	Capacitor	ANY	
87	1	C56	100nF/50V	Capacitor	ANY	
88	1	C57	100nF/50V	Capacitor	ANY	
89	1	C58	10µF/16V	Capacitor	ANY	
90	1	C59	100nF/50V	Capacitor	ANY	
91	1	C6	4.7nF/16V	Capacitor	ANY	
92	1	C60	10µF/16V	Capacitor	ANY	
93	1	C61	100nF/50V	Capacitor	ANY	
94	1	C62	100nF/50V	Capacitor	ANY	
95	1	C63	8pF/16V	C0G Ceramic Multilayer Capacitor	ANY	
96	1	C64	8pF/16V	C0G Ceramic Multilayer Capacitor	ANY	

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
97	1	C65	100nF/50V	Capacitor	ANY	
98	1	C66	100nF/50V	Capacitor	ANY	
99	1	C67	100nF/50V	Capacitor	ANY	
100	1	C68	10pF/16V	Capacitor	ANY	
101	1	C69	4.7nF/16V	Capacitor	ANY	
102	1	C7	47pF/16V	Capacitor	ANY	
103	1	C70	10pF/16V	Capacitor	ANY	
104	1	C71	100nF/50V	Capacitor	ANY	
105	1	C72	27pF/16V	Capacitor	ANY	
106	1	C73	47pF/16V	Capacitor (not mounted)	ANY	
107	1	C74	100nF/50V	Capacitor X7R - 0603	ANY	
108	1	C75	100nF/50V	Capacitor X7R - 0603	ANY	
109	1	C76	10µF/50V	Capacitor	ANY	
110	1	C77	100nF/50V	Capacitor	ANY	
111	1	C78	22nF/50V	Capacitor	ANY	
112	1	C79	330µF/10V	Polarized Capacitor (Radial)	PANASONIC	EEEFTA331XAP
113	1	C8	47pF/16V	Capacitor	ANY	
114	1	C80	100nF/50V	Capacitor	ANY	
115	1	C81	220pF/50V	Capacitor	ANY	
116	1	C82	10µF/50V	Capacitor	ANY	
117	1	C83	100nF/50V	Capacitor	ANY	
118	1	C84	22nF/50V	Capacitor	ANY	
119	1	C85	330µF/10V	Polarized Capacitor (Radial)	PANASONIC	EEEFTA331XAP
120	1	C86	100nF/50V	Capacitor	ANY	
121	1	C87	220pF/50V	Capacitor	ANY	
122	1	C88	100nF/50V	Capacitor	ANY	
123	1	C89	100nF/50V	Capacitor	ANY	
124	1	C9	100nF/50V	Capacitor	ANY	
125	1	C90	4.7µF/16V	Capacitor	ANY	
126	1	C91	100nF/50V	Capacitor	ANY	
127	1	C92	4.7µF/16V	Capacitor	ANY	
128	1	C93	100nF/50V	Capacitor	ANY	
129	1	C94	470nF/16V	Capacitor	ANY	
130	1	C95	470nF/16V	Capacitor	ANY	
131	1	C96	470nF/16V	Capacitor	ANY	
132	1	C97	100nF/50V	Capacitor	ANY	
133	1	C98	1nF/16V	Capacitor	ANY	
134	1	C99	220pF/16V	Capacitor	ANY	



Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
135	1	CN1	D-SUB 9 WAY FEMALE	Receptacle Assembly, 9 Position, Right Angle, Military	ANY	
136	1	D1	STPS340U	Default Diode	ANY	
137	1	D2	STPS340U	Default Diode	ANY	
138	1	D3	BAS40	Small Signal Schottky Diode, Single, 40 V, 120 mA, 1 V, 600 mA, 150 °C	NXP	BAS40
139	1	D4	LED - Green	Diodo LED	ANY	
140	1	D5	LED - Green	Diodo LED	ANY	
141	1	D6	LED - Green	Diodo LED	ANY	
142	1	D7	LED - GREEN	Diodo LED	ANY	
143	1	D8	LED - GREEN	Diodo LED	ANY	
144	1	F1	Fuse 1.5A	Fuse	Littelfuse Inc	0603SFF150F/32
145	1	J1	D-SUB 9 WAY FEMALE	Receptacle Assembly, 9 Position, Right Angle, Military	ANY	
146	1	J2	D-SUB 9 WAY FEMALE	Receptacle Assembly, 9 Position, Right Angle, Military	ANY	
147	1	J3	EDAC A63-113- 331P431	EDAC A63-113-331P431	EDAC	A63-113-331P431
148	1	JP1	Closed	Jumper 1x2.54_CLOSED	ANY	
149	1	JP2	Header 3x1	Header, 3-Pin	3M	929805-01-03-EU
150	1	JP27	Open	Jumper 1x2.54_OPEN	ANY	
151	1	JP28	Open	Jumper 1x2.54_CLOSED	ANY	
152	1	JP29	Open	Jumper 1x2.54_CLOSED	ANY	
153	1	JP3	Closed	Jumper 1x2.54_CLOSED	ANY	
154	1	JP30	Open	Jumper 1x2.54_CLOSED	ANY	
155	1	JP31	Open	Jumper 1x2.54_CLOSED	ANY	
156	1	JP32	Open	Jumper 1x2.54_OPEN	ANY	
157	1	JP33	Header 3x1	Header, 3-Pin	3M	929805-01-03-EU
158	1	JP34	Header 3x1	Header, 3-Pin	3M	929805-01-03-EU
159	1	JP35	Header 3x1	Header, 3-Pin	3M	929805-01-03-EU
160	1	JP36	Header 3x1	Header, 3-Pin	3M	929805-01-03-EU
161	1	JP37	Header 3x1	Header, 3-Pin	3M	929805-01-03-EU

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
162	1	JP38	LIN Master/Slave	Header, 3-Pin	3M	929805-01-03-EU
163	1	JP39	Open	Jumper 1x2.54_OPEN	ANY	
164	1	JP4	Header 3x1	Header, 3-Pin	3M	929805-01-03-EU
165	1	JP40	Close	Jumper Wire	ANY	
166	1	JP41	4 HEADER	4 Pin Header	3M	929805-01-04-EU
167	1	JP42	Closed	Jumper 1x2.54_CLOSED	ANY	
168	1	JP43	Closed	Jumper 1x2.54_CLOSED	ANY	
169	1	JP44	Closed	Jumper 1x2.54_CLOSED	ANY	
170	1	JP45	Closed	Jumper 1x2.54_CLOSED	ANY	
171	1	JP46	Closed	Jumper 1x2.54_CLOSED	ANY	
172	1	JP47	Closed	Jumper 1x2.54_CLOSED	ANY	
173	1	JP48	Closed	Jumper 1x2.54_CLOSED	ANY	
174	1	JP49	Closed	Jumper 1x2.54_CLOSED	ANY	
175	1	JP5	70246-4402	Terminali e capicorda 2.54mm CGrid Hdr Shr d /Slt .76AuLF 44Ck	MOLEX	70246-4402
176	1	JP50	Closed	Jumper 1x2.54_CLOSED	ANY	
177	1	JP6	SCI_RX_Sel	Header, 3-Pin	3M	929805-01-03-EU
178	1	JP7	SCI_RX_Sel	Header, 3-Pin	3M	929805-01-03-EU
179	1	L1	100uH/1MHz	COMMON MODE CHOKE, 100UH, 0.2A, SMD	MURATA	DLW43SH101XK2L
180	1	L2	15uH/2A	Fixed Inductors 15uH 0.086ohms 2.5A	TDK	VLP6045LT-150M
181	1	L3	33uH/1.5A	Fixed Inductors 33uH 0.155ohms 1,6A	TDK	VLP6045LT-330M
182	1	L4	60ohm-500m	Inductor	WURTH ELEKTRONIK	74279267
183	1	L5	60ohm-500m	Inductor	WURTH ELEKTRONIK	74279267
184	1	L6	60ohm-500m	Inductor	WURTH ELEKTRONIK	74279267
185	1	L7	60ohm-500m	Inductor	WURTH ELEKTRONIK	74279267
186	1	L8	60ohm-500m	Inductor	WURTH ELEKTRONIK	74279267
187	1	L9	60ohm-500m	Inductor	WURTH ELEKTRONIK	74279267



Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
188	1	LD1	Yellow	LED Green	Kingbright	
189	1	LD10	User_LED_2	LED Green	Kingbright	KP-1608SGC
190	1	LD11	User_LED_3	LED Green	Kingbright	KP-1608SGC
191	1	LD2	Green	LED Green	Kingbright	KP-1608SGC
192	1	LD3	Red	LED Red	Kingbright	KP-1608SRC-PRV
193	1	LD4	Red	LED Red	Kingbright	KP-1608SRC-PRV
194	1	LD5	3V3_LR	LED Green	Kingbright	KP-1608SGC
195	1	LD6	3V3	LED Green	Kingbright	KP-1608SGC
196	1	LD7	5V	LED Green	Kingbright	KP-1608SGC
197	1	LD8	V_Ext	LED Green	Kingbright	KP-1608SGC
198	1	LD9	User_LED_1	LED Green	Kingbright	KP-1608SGC
199	1	P1	Header 2	Header, 2-Pin (not mounted)	3M	929805-01-02-EU
200	1	P2	Header 2	Header, 2-Pin	3M	929805-01-02-EU
201	1	P3	USB_MINI_B	USB-MINI_B	ANY	
202	1	P4	SAMTEC TFC-110-31-F-D	Header, 10-Pin, Dual row	ANY	SAMTEC TFC-110-31-F-D
203	1	Q1	BCP68	NPN Bipolar Transistor	ANY	
204	1	R1	0O	Resistor	ANY	
205	1	R10	22O	Resistor	ANY	
206	1	R100	47O	Resistor	ANY	
207	1	R101	0O	Resistor	ANY	
208	1	R102	10kO	Potentiometer	Bourns	3386F-1-103LF
209	1	R103	10kO	Potentiometer	Bourns	3386F-1-103LF
210	1	R104	1kO	Resistor	ANY	
211	1	R105	10kO	Resistor	ANY	
212	1	R106	10kO	Resistor	ANY	
213	1	R107	10kO	Resistor	ANY	
214	1	R108	1kO	Resistor	ANY	
215	1	R109	1kO	Resistor	ANY	
216	1	R11	10kO	Resistor	ANY	
217	1	R110	2.2kO	Resistor	ANY	
218	1	R111	2.2kO	Resistor	ANY	
219	1	R112	2.2kO	Resistor	ANY	
220	1	R113	2.2kO	Resistor	ANY	
221	1	R114	2.2kO	Resistor	ANY	
222	1	R115	2.2kO	Resistor	ANY	
223	1	R116	2.2kO	Resistor	ANY	
224	1	R117	2.2kO	Resistor	ANY	
225	1	R118	22kO	Resistor	ANY	



Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
226	1	R119	2.2kO	Resistor	ANY	
227	1	R12	60.4O	Resistor	ANY	
228	1	R120	2.2kO	Resistor	ANY	
229	1	R121	2.2kO	Resistor	ANY	
230	1	R122	0R	Resistor	ANY	
231	1	R123	1k	Resistor (not mounted)	ANY	
232	1	R13	60.4O	Resistor	ANY	
233	1	R14	100O	Resistor	ANY	
234	1	R15	0O	Resistor	ANY	
235	1	R16	10kO	Resistor (not mounted)	ANY	
236	1	R17	4.7kO	Resistor	ANY	
237	1	R18	10kO	Resistor	ANY	
238	1	R19	220O	Resistor	ANY	
239	1	R2	22O	Resistor	ANY	
240	1	R20	220O	Resistor	ANY	
241	1	R21	220O	Resistor	ANY	
242	1	R22	2.2kO	Resistor	ANY	
243	1	R23	2.2kO	Resistor	ANY	
244	1	R24	2.2kO	Resistor	ANY	
245	1	R25	330O	Resistor	ANY	
246	1	R26	330O	Resistor	ANY	
247	1	R27	1.5kO	Resistor	ANY	
248	1	R28	4.7kO	Resistor	ANY	
249	1	R29	49.9O	Resistor	ANY	
250	1	R3	22O	Resistor	ANY	
251	1	R30	49.9O	Resistor	ANY	
252	1	R31	49.9O	Resistor	ANY	
253	1	R32	49.9O	Resistor	ANY	
254	1	R33	4.7kO	Resistor	ANY	
255	1	R34	0O	Resistor	ANY	
256	1	R35	0O	Resistor	ANY	
257	1	R36	22O	Resistor	ANY	
258	1	R37	22O	Resistor	ANY	
259	1	R38	22O	Resistor	ANY	
260	1	R39	22O	Resistor	ANY	
261	1	R4	10kO	Resistor	ANY	
262	1	R40	22O	Resistor	ANY	
263	1	R41	22O	Resistor	ANY	
264	1	R42	0O	Resistor	ANY	

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
265	1	R43	0O	Resistor	ANY	
266	1	R44	4.87kO	Resistor	ANY	
267	1	R45	22O	Resistor	ANY	
268	1	R46	22O	Resistor	ANY	
269	1	R47	22O	Resistor	ANY	
270	1	R48	22O	Resistor	ANY	
271	1	R49	22O	Resistor	ANY	
272	1	R5	60.4O	Resistor	ANY	
273	1	R50	22O	Resistor	ANY	
274	1	R51	22O	Resistor	ANY	
275	1	R52	2.2kO	Resistor	ANY	
276	1	R53	2.2kO	Resistor	ANY	
277	1	R54	22O	Resistor	ANY	
278	1	R55	22O	Resistor	ANY	
279	1	R56	47O	Resistor	ANY	
280	1	R57	3.3kO	Resistor	ANY	
281	1	R58	3.3kO	Resistor	ANY	
282	1	R59	3.3kO	Resistor	ANY	
283	1	R6	60.4O	Resistor	ANY	
284	1	R60	47O	Resistor	ANY	
285	1	R61	4.7kO	Resistor	ANY	
286	1	R62	0O	Resistor (not mounted)	ANY	
287	1	R63	0O	Resistor (not mounted)	ANY	
288	1	R64	4.7kO	Resistor	ANY	
289	1	R65	4.7kO	Resistor	ANY	
290	1	R66	10kO	Resistor (not mounted)	ANY	
291	1	R67	10kO	Resistor	ANY	
292	1	R68	1kO	Resistor 0603	ANY	
293	1	R69	2.2kO	Resistor 0603	ANY	
294	1	R7	100O	Resistor	ANY	
295	1	R70	5.6kO	Resistor	ANY	
296	1	R71	3.3kO	Resistor	ANY	
297	1	R72	4.7kO	Resistor	ANY	
298	1	R73	10kO	Resistor	ANY	
299	1	R74	3.3kO	Resistor	ANY	
300	1	R75	4.7kO	Resistor	ANY	
301	1	R76	47O	Resistor	ANY	
302	1	R77	47O	Resistor	ANY	
303	1	R78	1kO	Resistor	ANY	



Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
304	1	R79	2.2kO	Resistor	ANY	
305	1	R8	0O	Resistor	ANY	
306	1	R80	10kO	Resistor	ANY	
307	1	R81	10kO	Resistor	ANY	
308	1	R82	10kO	Resistor	ANY	
309	1	R83	12kO	Resistor	ANY	
310	1	R84	10O	Resistor	ANY	
311	1	R85	10O	Resistor	ANY	
312	1	R86	1kO	Resistor	ANY	
313	1	R87	0O	Resistor (not mounted)	ANY	
314	1	R88	470O	Resistor	ANY	
315	1	R89	4.7kO	Resistor	ANY	
316	1	R9	22O	Resistor	ANY	
317	1	R90	4.7kO	Resistor	ANY	
318	1	R91	470O	Resistor	ANY	
319	1	R92	2.2kO	Resistor	ANY	
320	1	R93	470O	Resistor	ANY	
321	1	R94	4.7kO	Resistor	ANY	
322	1	R95	0O	Resistor (not mounted)	ANY	
323	1	R96	0O	Resistor (not mounted)	ANY	
324	1	R97	4.7kO	Resistor	ANY	
325	1	R98	4.7kO	Resistor	ANY	
326	1	R99	470O	Resistor	ANY	
327	1	S1	SWITCH		ANY	
328	1	S2	SW_3	Switch	ANY	
329	1	S3	SW_2	Switch	ANY	
330	1	S4	SW_1	Switch	ANY	
331	1	SB1	Closed	Circuit Breaker 0603	ANY	
332	1	SB10	Closed	Circuit Breaker 0603	ANY	
333	1	SB11	Closed	Circuit Breaker 0603	ANY	
334	1	SB12	Closed	Circuit Breaker 0603	ANY	
335	1	SB13	Closed	Circuit Breaker 0603	ANY	
336	1	SB14	Closed	Circuit Breaker 0603	ANY	
337	1	SB15	Open	Circuit Breaker 0603	ANY	
338	1	SB16	Open	Circuit Breaker 0603	ANY	
339	1	SB17	Closed	Circuit Breaker 0603	ANY	
340	1	SB18	Open	Circuit Breaker 0603	ANY	
341	1	SB19	Closed	Circuit Breaker 0603	ANY	
342	1	SB2	Closed	Circuit Breaker 0603	ANY	

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
343	1	SB20	Closed	Circuit Breaker 0603	ANY	
344	1	SB21	Open	Circuit Breaker 0603	ANY	
345	1	SB22	Open	Circuit Breaker 0603	ANY	
346	1	SB23	Open	Circuit Breaker 0603	ANY	
347	1	SB24	Closed	Circuit Breaker 0603	ANY	
348	1	SB25	Closed	Circuit Breaker 0603	ANY	
349	1	SB26	Closed	Circuit Breaker 0603	ANY	
350	1	SB27	Closed	Circuit Breaker 0603	ANY	
351	1	SB28	Closed	Circuit Breaker 0603	ANY	
352	1	SB29	Closed	Circuit Breaker 0603	ANY	
353	1	SB3	Closed	Circuit Breaker 0603	ANY	
354	1	SB4	Closed	Circuit Breaker 0603	ANY	
355	1	SB5	Open	Circuit Breaker 0603	ANY	
356	1	SB6	Closed	Circuit Breaker 0603	ANY	
357	1	SB7	Closed	Circuit Breaker 0603	ANY	
358	1	SB8	Closed	Circuit Breaker 0603	ANY	
359	1	SB9	Closed	Circuit Breaker 0603	ANY	
360	1	SW1	RESET	Switch	ANY	
361	1	TP1	CAN_1_H	Test point	3M	929805-01-01-I
362	1	TP10	ETH_TX_CLK	Test point	3M	929805-01-01-I
363	1	TP11	25MHz	Test point	3M	929805-01-01-I
364	1	TP12	ETH_RX_CLK	Test point	3M	929805-01-01-I
365	1	TP13	BM	Test point	ANY	
366	1	TP14	GND	Test point	ANY	
367	1	TP15	BP	Test point	ANY	
368	1	TP16	Reset	Test point	3M	929805-01-01-I
369	1	TP17	GND	Test point	3M	929805-01-01-I
370	1	TP18	3V3	Test point	3M	929805-01-01-I
371	1	TP19	3V3	Test point	ANY	
372	1	TP2	CAN_1_L	Test point	3M	929805-01-01-I
373	1	TP20	5V	Test point	3M	929805-01-01-I
374	1	TP21	3V3	Test point	ANY	
375	1	TP22	3V3_LR	Test point	3M	929805-01-01-I
376	1	TP23	VDC_In	Test point	3M	929805-01-01-I
377	1	TP24	V_Ext	Test point	3M	929805-01-01-I
378	1	TP25	GND	Test point	3M	929805-01-01-I
379	1	TP26	Rx1	Test point	3M	929805-01-01-I
380	1	TP27	Tx1	Test point	3M	929805-01-01-I
381	1	TP28	Rx2	Test point	3M	929805-01-01-I
382	1	TP29	Tx2	Test point	3M	929805-01-01-I
383	1	TP3	CAN_4_H	Test point	3M	929805-01-01-I

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
384	1	TP30	GND	Test point	3M	929805-01-01-l
385	1	TP31	LIN	Test point	3M	929805-01-01-l
386	1	TP32	GND	Test point	3M	929805-01-01-l
387	1	TP33	RTCK_I	Test point	3M	929805-01-01-l
388	1	TP34	GND_USB	Test point	3M	929805-01-01-l
389	1	TP35	3V3_USB	Test point	3M	929805-01-01-l
390	1	TP36	ADC_2	Test point	3M	929805-01-01-l
391	1	TP37	ADC_1	Test point	3M	929805-01-01-l
392	1	TP38	LED_2	Test point	3M	929805-01-01-l
393	1	TP39	LED_1	Test point	3M	929805-01-01-l
394	1	TP4	CAN_4_L	Test point	3M	929805-01-01-l
395	1	TP40	LED_3	Test point	3M	929805-01-01-l
396	1	TP41	SW_2	Test point	3M	929805-01-01-l
397	1	TP42	SW_1	Test point	3M	929805-01-01-l
398	1	TP43	SW_3	Test point	3M	929805-01-01-l
399	1	TP5	VDD_HV_AD	Test point	ANY	
400	1	TP6	VDD_HV_IO	Test point	ANY	
401	1	TP7	VDD_HV_IO	Test point	ANY	
402	1	TP8	VDD_LV	Test point	ANY	
403	1	TP9	BCTRL	Test point	ANY	
404	1	U1	MCP2562FD	High-Speed CAN Transceiver, 8- Pin SOIC, Industrial Temperature	Microchip	
405	1	U10	ST3232EBTR	MAX232CEWE	ST	ST3232ECTR
406	1	U11	TJA1020/102		ANY	
407	1	U12	FT2232H		ANY	
408	1	U13	SN74LVC1T4	SN74LVC1T45DCK	TI	SN74LVC1T45DCKR
409	1	U14	SN74LVC1T4	SN74LVC1T45DCK	TI	SN74LVC1T45DCKR
410	1	U15	USBL6-2P6	Very low line capacitance ESD protection	ST	USBL6-2P6
411	1	U16	SN74LVC1T4	SN74LVC1T45DCK	TI	SN74LVC1T45DCKR
412	1	U17	SN74LVC1T4	SN74LVC1T45DCK	TI	SN74LVC1T45DCKR
413	1	U18	M93S46-WMN6TP	1K (x16) Serial Microwire Bus EEPROM With Block Protection	ST	M93S46-WMN6TP
414	1	U19	LD1117S33T	Adjustable and fixed low drop positive voltage regulator	ST	LD1117S33TR
415	1	U2	MCP2562FD	High-Speed CAN Transceiver, 8- Pin SOIC, Industrial Temperature	Microchip	
416	1	U20	SN74LVC1T4	SN74LVC1T45DCK	TI	SN74LVC1T45DCKR

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
417	1	U21	SN74LVC1T4	SN74LVC1T45DCK	TI	SN74LVC1T45DCKR
418	1	U22	SN74LVC1T4	SN74LVC1T45DCK	TI	SN74LVC1T45DCKR
419	1	U23	SN74LVC1T4	SN74LVC1T45DCK	TI	SN74LVC1T45DCKR
420	1	U3	SPC584xx_14	Power architecture MCU for automotive general purpose applications	ST	SPC584xx_144
421	1	U4	DP83848CVV	PHYTER [®] Commercial Temperature Single Port 10/100 Mb/s Ethernet Physical Layer Transceiver, 48-pin LQFP	National Semiconductor	
422	1	U5	TJA1080A		ANY	
423	1	U6	STM6315RDV	Open drain microprocessor reset	ST	STM6315RDW13F
424	1	U7	A5973AD	Up to 1.5 A step down switching regulator for automotive applications	ST	A5973ADTR
425	1	U8	A5973AD	Up to 1.5 A step down switching regulator for automotive applications	ST	A5973ADTR
426	1	U9	LD1117A3V3	Low drop fixed and adjustable positive voltage regulators	ST	LD1117ADT33TR
427	1	X1	40 MHz	Crystal	ANY	
428	1	X2	NX3225SA-25-STD-CSR-3	25MHz ±15ppm Cristalli 8pF 50 Ohm -10°C ~ 75°C Montaggio superficiale (SMD, SMT) 4-SMD, senza piombo (DFN, LCC)	NDK	NX3225SA-25.000M-STD-CSR-3
429	1	X3	Header 4 pins	Header, 4-Pin	3M	
430	1	X4	JTAG 14-PIN (male)	Header	3M	30314-6002HB
431	1	X5	DC-10A	Header	CLIFF ELECTRONIC COMPONENTS	DC-10A (FC68148)
432	1	X6	HEADER 4X2	Header	3M	30308-6002HB
433	1	X7	HEADER 4X2	Header	3M	30308-6002HB
434	1	X8	JTAG 14-PIN (male)	Header	3M	30314-6002HB
435	1	X9	GPIO_4x36	Header	ANY	
436	1	Y1	7B-12.000MAAJ-T	TXC - 7B-12.000MAAJ-T - XTAL, 12.000MHZ, 18PF, SMD, 5,0X3,2	TXC	7B-12.000MAAJ-T

**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.

EVALUATION BOARD STATUS

The Evaluation Board offers limited features allowing You only to evaluate and test the ST products. The Evaluation Board is not intended for consumer or household use. You are not authorized to use the Evaluation Board in any production system, and it may not be offered for sale or lease, or sold, leased or otherwise distributed for commercial purposes. If the Evaluation Board is incorporated in an evaluation system, the evaluation system may be used by You solely for Your evaluation and testing purposes. Such evaluation system may not be offered for sale or lease or sold, leased or otherwise distributed for commercial purposes and must be accompanied by a conspicuous notice as follows: "This device is not, and may not be, offered for sale or lease, or sold or leased or otherwise distributed for commercial purposes".

OWNERSHIP AND COPYRIGHT

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, and Regulation (EC) 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Annex XVII, as amended by Regulation (EU) 207/2011.

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.

RECYCLING

The Evaluation Board is not to be disposed as an urban waste. At the end of its life cycle, differentiated waste collection must be followed, as stated in the Waste of Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU. In all the countries belonging to the European Union and those following differentiated recycling, the Evaluation Board is subject to differentiated recycling at the end of its life cycle, therefore: It is forbidden to dispose the Evaluation Board as an undifferentiated waste or with other domestic wastes. Consult the local authorities for more information on the proper disposal channels. It is mandatory to sort the Evaluation Board and deliver it to the appropriate collection centers, or, when possible, return the Evaluation Board to the seller. An incorrect Evaluation Board disposal may cause damage to the environment and is punishable by the law.

If this Evaluation Board is available only on a business-to-business basis and You are a business, please note the following limited exception to the WEEE Directive: The Evaluation Board is "equipment specifically designed solely for the purposes of research and development". Therefore, as of 15 August 2018, Article 2(4)(f) of the WEEE Directive provides that the Evaluation Board may not be subject to the WEEE Directive.