



Bill of materials

Table 1. AEK-POW-BMSCC bill of materials

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
1	18	C1 C8 C15 C19 C21 C29 C31 C33 C40 C42 C45 C48 C50 C57 C59 C71 C75 C76	47nF	0603 - 50V - X7R Class II	WE	885012206093
2	1	C10	220nF	0603 - 50V - X7R Class II	WE	885012206125
3	2	C11 C13	2.2uF	0805 - 25V - X7R Class II	WE	885012207079
4	4	C26 C34 C39 C22	22pF	0603 - 50V - NP0 Class I	WE	885012006053
5	3	C18 C25 C37	1uF	0805 - 50V - X7R Class II	WE	885012207103
6	1	C2	4.7uF	1206 - 50V - X7R Class II	WE	885012208094
7	1	C3	2.2uF	1210 - 100V - X7R Class II	WE	885012209071
8	8	C4 C6 C14 C52 C53 C54 C55 C56	100nF	0603 - 100V - X7R Class II	WE	885012206120
9	6	C44 C61 C62 C63 C64 C65	2.2nF	0603 - 50V - X7R Class II	WE	885012206085
10	6	C47 C66 C67 C68 C69 C70	6.8nF	0603 - 50V - X7R Class II	WE	885012206088
11	1	C5	100pF	0603 - 100V - X7R Class II	WE	885012206102
12	1	C72	10uF	0805 - 50V - X5R Class II	TDK	C2012X5R1H106K125AC
13	1	C73	68nF	0603 - 50V - X7R Class II	WE	885012206094
14	1	C74	33pF	0603 - 50V - NP0 Class I	WE	885012006054
15	17	C9 C17 C20 C23 C24 C30 C32 C35 C36 C41 C43 C46 C49 C51 C58 C60	10nF	0603 - 50V - X7R Class II	WE	885012206089
16	1	CGS	4.7nF	0603 - 50V - X7R Class II	WE	885012206087
17	1	D1	SMA6T68AY	Automotive 600 W, 68V TVS in SMA	ST	SMA6T68AY
18	1	D10	SMA6T68AY	Automotive 600 W, 68V TVS in SMA	ST	SMA6T68AY
19	1	D2	Green	LED_VERDE. SMA	WE	150120GS75000

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
20	1	D3	SZMM3Z4V7T1G	4.7V Zener Voltage Regulators, 300mW	Onsemi	SZMM3Z4V7T1G
21	16	FB1 FB2 FB3 FB4 FB5 FB6 FB7 FB8 FB9 FB10 FB11 FB12 FB13 FB14 FB15 FB16	1K@100MHz	Ferrite Beads Multi-Layer Power 1KOhm 25% 100MHz 1.5A 0.15Ohm DCR 0805	TDK	MPZ2012S102ATD25
22	1	P1		2.00mm - WR-WTB - Male Dual Row Horizontal Shrouded Header w. positive locking	WE	62403021722
23	1	P4		2.00mm - WR-WTB - Male Dual Row Horizontal Shrouded Header w. positive locking	WE	62402821722
24	1	Q1	STL8N10LF3	Automotive-grade N-channel 100 V, 25 mΩ typ., 7.8 A STripFET™ F3 Power MOSFET in a PowerFLAT™ 5x6 package. TR	ST	STL8N10LF3
25	1	Q2	STD105N10F7AG	Automotive-grade N-channel 100 V, 6.8 mΩ typ., 80 A, STripFET™ F7 Power MOSFET in a DPAK package. DPAK	ST	STD105N10F7AG
26	1	R1	10k	1206 - ±1% - 0.66W	Panasonic	ERJUP8F1002V
27	4	R15 R18 R25 R27	60R4	0603 - ±1% - 0.1W	Panasonic	ERJ3EKF60R4V
28	3	R20 R39 R43	10K	0603 - ±1% - 0.2W	Panasonic	ERJP03F1002V
29	2	R3 R7	10R	0603 - ±1% - 0.25W	Panasonic	ERJPA3F10R0V
30	1	R30	6.2K	0805 - ±1% - 0.5W	Panasonic	ERJP06F6201V
31	2	R90 R91	6.2K	0805 - ±1% - 0.5W	Panasonic	ERJP06F6201V
32	1	R32	18K	0603 - ±1% - 0.2W	Panasonic	ERJP03F1802V
33	6	R34 R45 R46 R47 R48 R49	10k	0805 - ±1% - 0.5W	Panasonic	ERJP6WF1002V
34	1	R35	NTC 10k	0603 - ±1% - 0.1W	TDK	NTCG163JH103HTDS
35	1	R37	3.9k	0603 - ±1% - 0.1W	Panasonic	ERJ3EKF3901V
36	15	R4 R8 R11 R14 R17 R21 R23 R26	100R	0603 - ±1% - 0.25W	Panasonic	ERJPA3F1000V

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
		R29 R33 R40 R44 R51 R56 R60				
37	1	R5	2.7k	0603 - $\pm 1\%$ - 0.125W	Vishay	MCT06030C2701FP500
38	5	R53 R54 R55 R57 R58	1.5K	2010 - $\pm 1\%$ - 2W	TE Connectivity	35021K5FT
39	14	R6 R9 R12 R16 R19 R22 R24 R28 R31 R38 R41 R50 R52 R59	39R	2010 - $\pm 1\%$ - 1.25W	TE Connectivity	CRGP2010F39R
40	1	RG	1K	0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJPA3F1001V
41	1	RHOT	47R	2512 - $\pm 5\%$ - 1W	TE Connectivity	352047RJT
42	1	RPD	100K	0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJP03F1003V
43	1	R92	2k	0603 - $\pm 1\%$ - 0.1W	WE	560112116091
44	1	T1	125uH	Pulse Transformers 125uH	WE	74941000
45	1	T3	125uH	Pulse Transformers 125uH	WE	74941000
46	1	U1	L9963E	Automotive chip for battery management applications with daisy chain up to 31 deviceS. TQFP 64 10x10x1.0	ST	L9963E
47	2	U2 U3	USBL6-2SC6Y	Automotive ESD protection for high speed interfaces. SOT23-6L	ST	USBL6-2SC6Y
48	1	U7	OPTO_PS2703-1- A		Renesas	PS2703-1-A
49	1	box		MC-530000342- RB - Scatolino ST CT6118 BOTTOM	Electronica	EH04-0237-A
50	1	cover		MC-530000342- RB - Coperchio ST CT6118	Electronica	EH04-0238-A
51	1	for blister	624028213322	WR-WTB 2.00 mm Female Dual Row Terminal Housing w. positive locking	WE	624028213322
52	1	for blister	624030213322	WR-WTB 2.00 mm Female Dual Row Terminal Housing w. positive locking	WE	624030213322
53	58	for blister	62400113722	WR-WTB 2.00 mm Female Dual Row Crimp Contact	WE	62400113722

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