



Bill of materials

Table 1. AEK-POW-BMSCCTX 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	2	C16 C82	22pF	0603 - 50V - NP0 Class I	WE	885012006053
6	5	C18 C25 C37 C80	1uF	0805 - 50V - X7R Class II	WE	885012207103
7	2	C83 C84	1uF	0805 - 50V - X7R Class II	WE	885012207103
8	1	C2	4.7uF	1206 - 50V - X7R Class II	WE	885012208094
9	1	C3	2.2uF	1210 - 100V - X7R Class II	WE	885012209071
10	8	C4 C6 C14 C52 C53 C54 C55 C56	100nF	0603 - 100V - X7R Class II	WE	885012206120
11	2	C77 C78	100nF	0603 - 100V - X7R Class II	WE	885012206120
12	6	C44 C61 C62 C63 C64 C65	2.2nF	0603 - 50V - X7R Class II	WE	885012206085
13	6	C47 C66 C67 C68 C69 C70	6.8nF	0603 - 50V - X7R Class II	WE	885012206088
14	1	C5	100pF	0603 - 100V - X7R Class II	WE	885012206102
15	1	C72	10uF	0805 - 50V - X5R Class II	TDK	C2012X5R1H106K125AC
16	1	C73	68nF	0603 - 50V - X7R Class II	WE	885012206094
17	1	C74	33pF	0603 - 50V - NP0 Class I	WE	885012006054
18	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
19	1	C79	10nF	0603 - 50V - X7R Class II	WE	885012206089
20	1	CGS	4.7nF	0603 - 50V - X7R Class II	WE	885012206087

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
21	1	D1	SMA6T68AY	Automotive 600 W, 68V TVS in SMA	ST	SMA6T68AY
22	1	D4	SMA6T68AY	Automotive 600 W, 68V TVS in SMA	ST	SMA6T68AY
23	1	D2	Green	LED_VERDE	WE	150120GS75000
24	1	D9	Green	LED_VERDE	WE	150120GS75000
25	1	D3	SZMM3Z4V7T1G	4.7V Zener Voltage Regulators, 300mW	Onsemi	SZMM3Z4V7T1G
26	1	D5	Red	LED_ROSSO	WE	150120RS75000
27	1	D6	Amber	LED_AMBRA	WE	150120AS75000
28	1	D7	Yellow	LED_GIALLO	WE	150120YS75000
29	1	D8	Blue	LED_BLU	WE	150120BS75000
30	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
31	1	P1		2.00mm - WR-WTB - Male Dual Row Horizontal Shrouded Header w. positive locking	WE	62403021722
32	1	P4		2.00mm - WR-WTB - Male Dual Row Horizontal Shrouded Header w. positive locking	WE	62402821722
33	1	Q1	STL8N10LF3	Automotive-grade N-channel 100 V, 25 mΩ typ., 7.8 A STripFET™ F3 Power MOSFET in a PowerFLAT™ 5x6 package	ST	STL8N10LF3
34	1	Q2	STD105N10F7AG	Automotive-grade N-channel 100 V, 6.8 mΩ typ., 80 A, STripFET™ F7 Power MOSFET in a DPAK package	ST	STD105N10F7AG
35	4	Q3 Q4 Q5 Q6	BSS138Q	N-Channel Enhancement Mosfet	NEXPERIA	BSS138Q-7-F
36	1	R1	10k	1206 - ±1% - 0.66W	Panasonic	ERJUP8F1002V
37	4	R15 R18 R25 R27	60R4	0603 - ±1% - 0.1W	Panasonic	ERJ3EKF60R4V
38	2	R36 R42	60R4	0603 - ±1% - 0.1W	Panasonic	ERJ3EKF60R4V

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
39	3	R20 R39 R43	10K	0603 - $\pm 1\%$ - 0.2W	Panasonic	ERJP03F1002V
40	8	R63 R62 R65 R66 R85 R86 R87 R71	10K	0603 - $\pm 1\%$ - 0.2W	Panasonic	ERJP03F1002V
41	2	R3 R7	10R	0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJPA3F10R0V
42	1	R30	6.2K	0805 - $\pm 1\%$ - 0.5W	Panasonic	ERJP06F6201V
43	1	R67	6.2K	0805 - $\pm 1\%$ - 0.5W	Panasonic	ERJP06F6201V
44	1	R32	18K	0603 - $\pm 1\%$ - 0.2W	Panasonic	ERJP03F1802V
45	6	R34 R45 R46 R47 R48 R49	10k	0805 - $\pm 1\%$ - 0.5W	Panasonic	ERJP6WF1002V
46	1	R35	NTC 10k	0603 - $\pm 1\%$ - 0.1W	TDK	NTCG163JH103HTDS
47	1	R37	3.9k	0603 - $\pm 1\%$ - 0.1W	Panasonic	ERJ3EKF3901V
48	25	R4 R8 R11 R14 R17 R21 R23 R26 R29 R33 R40 R44 R51 R56 R60 R69 R70 R72 R73 R75 R76 R80 R82 R83 R84	100R	0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJPA3F1000V
49	1	R5	2.7k	0603 - $\pm 1\%$ - 0.125W	Vishay	MCT06030C2701FP500
50	5	R53 R54 R55 R57 R58	1.5K	2010 - $\pm 1\%$ - 2W	TE Connectivity	35021K5FT
51	14	R6 R9 R12 R16 R19 R22 R24 R28 R31 R38 R41 R50 R52 R59	39R	2010 - $\pm 1\%$ - 1.25W	TE Connectivity	CRGP2010F39R
52	1	R64	0	0603 - $\pm 1\%$ - 0.1W	Panasonic	ERJ3GEY0R00V
53	1	R89	750R	0603 - $\pm 0.5\%$ - 0.25W, 0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJUP3D7500V
54	1	R79	750R	0603 - $\pm 0.5\%$ - 0.25W, 0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJUP3D7500V
55	1	R68	750R	0603 - $\pm 0.5\%$ - 0.25W, 0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJUP3D7500V
56	3	R74 R77 R78	1.1k	0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJPA3F1101V
57	1	R81	110K	0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJPA3F1103V
58	1	RG	1K	0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJPA3F1001V
59	1	RHOT	47R	2512 - $\pm 5\%$ - 1W	TE Connectivity	352047RJT
60	1	RPD	100K	0603 - $\pm 1\%$ - 0.25W	Panasonic	ERJP03F1003V

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
61	1	T1	125uH	Pulse Transformers 125uH	WE	74941000
62	1	T2	125uH	Pulse Transformers 125uH	WE	74941000
63	1	U1	L9963E	Automotive chip for battery management applications with daisy chain up to 31 devices. TQFP 64 10x10x1.0	ST	L9963E
64	2	U2 U3	USBLC6-2SC6Y	Automotive ESD protection for high speed interfaces. SOT23-6L	ST	USBLC6-2SC6Y
65	1	U5	USBLC6-2SC6Y	Automotive ESD protection for high speed interfaces. SOT23-6L	ST	USBLC6-2SC6Y
66	1	U4	L9963T	Automotive general purpose SPI to isolated SPI transceiver. SO-16	ST	L9963T
67	1	U6	140357145300	WL-OCPT Optocoupler Phototransistor, SOP4, 1 Channel, DC, 35V, 60mA	WE	140357145300
68	1	box		MC-530000342-RB - Scatolino ST CT6118 BOTTOM	Electronica	EH04-0237-A
69	1	cover		MC-530000342-RB - Coperchio ST CT6118	Electronica	EH04-0238-A
70	1	for blister	624028213322	WR-WTB 2.00 mm Female Dual Row Terminal Housing w. positive locking	WE	624028213322
71	1	for blister	624030213322	WR-WTB 2.00 mm Female Dual Row Terminal Housing w. positive locking	WE	624030213322
72	58	for blister	62400113722	WR-WTB 2.00 mm Female Dual Row Crimp Contact	WE	62400113722

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