

Bill of materials
Table 1. AEK-MOT-WINH92 bill of materials

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
1	6	C1, C3, C4, C5, C10, C11	220nF	0603 - 50V - X7R Class II	WE	885012206125
2	1	C2	22uF	1210 - 25V - X5R Class II	WE	885012109014
3	14	C6, C7, C9, C14, C15, C16, C25, C26, C27, C29, C30, C31, C32, C34	1uF	0603 - 50V - X7R Class II	WE	885012206126
4	4	C8, C19, C21, C28	100nF	0603 - 50V - X7R Class II	WE	885012206095
5	2	C12, C13	470uF	WCAP-ASLI Aluminum Electrolytic Capacitors - 63V - 16x17	WE	865080763016
6	5	C17, C18, C23, C24, C33	N.M.	0603	N.A.	N.A.
7	2	C20, C22	33nF	0603 - 50V - X7R Class II	WE	885012206092
8	2	CN1, CN4	Con 4P	2.54mm - 1 row - KK254 - Male	WE	61900411121
9	1	CN2	Con 5P	2.54mm - 1 row - KK254 - Male	WE	61900511121
10	1	CN3	Con 2P	2.54mm - 1 row - KK254 - Male	WE	61900211121
11	1	D1	Red	0805 - Led Red - 2V	WE	150080RS75000
12	1	D2	STPS2H100ZFY, SOD123Flat	Automotive 100 V - 2 A power Schottky diode	ST	STPS2H100ZFY
13	1	D3	SM30T33CAY, SMC	SMC TVS -28VDC - Bidirectional	ST	SM30T33CAY
14	1	D4	STTH102AY, SMA	Automotive high efficiency ultrafast diode	ST	STTH102AY
15	1	D5	Blue	0805 - Led Blue - 3.2V	WE	150080BS75000
16	5	J1, J2, J3, J4, J5	Con 2p 6.35_green	6.35mm - WR-TBL Series 2506 Horizontal Entry Modular w. Rising Cage Clamp	WE	691250610002
17	3	P1, P2, P3	Header 2p 2.54	2.54mm - WR-PHD Pin Header, THT, pitch	WE	61300211121

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
				2.54mm, Single Row, Vertical, 2p		
18	5	Q1, Q3, Q4, Q5, Q6	STL285N4F7AG, PowerFLAT 5x6 WF	Automotive-grade N-channel 40 V, 0.9 mΩ typ., 120 A STripFET™ F7 Power MOSFET in a PowerFLAT 5x6 package	ST	STL285N4F7AG
19	1	Q2	BC817	NPN Bipolar Transistor 45V 500mA	Nexperia	BC817
20	1	Q7	BSS84Q	P-Channel Enhancement Mosfet	DIODES	BSS84Q-7-F
21	2	R1, R4	2.7K	0603 - ±1% - 0.125W	Vishay	MCT06030C2701FP500
22	5	R2, R3, R47, R52, R55	10K	0603 - ±1% - 0.2W	Panasonic	ERJP03F1002V
23	2	R5, R6	100K	0603 - ±1% - 0.2W	Panasonic	ERJP03F1003V
24	11	R7, R42, R44, R45, R46, R48, R49, R50, R51, R53, R54	1K	0603 - ±1% - 0.25W	Panasonic	ERJPA3F1001V
25	9	R8, R9, R10, R19, R20, R22, R33, R34, R35	6m	2512 - ±1% -3W	Panasonic	ERJ-MS4HF6M0U
26	6	R11, R12, R24, R25, R38, R39	N.M.	0603	N.A.	N.A.
27	4	R13, R14, R26, R27	100	0603 - ±1% - 0.125W	Panasonic	ERJH3EF1000V
28	4	R15, R16, R28, R29	47K	0603 - ±1% - 0.25W	Panasonic	ERJPA3F4702V
29	6	R17, R18, R32, R36, R41, R43	10	0603 - ±1% - 0.25W	Panasonic	ERJPA3F10R0V
30	6	R21, R23, R30, R31, R37, R40	0	0603 - ±1% - 0.1W	Panasonic	ERJ3GEY0R00V
31	1	S1	ButtonSwitch	Switch	WE	430152043826
32	1	U1	L99H92QF, TQFP 32 7x7x1.0	Half-bridge pre-driver for automotive applications	ST	L99H92QF-TR
33	1	U2	TSC103IYPT, TSSOP-8L	High-voltage, high-side current sense amplifier	ST	TSC103IYPT
34	4	for blister	970150365	WA-SPAII Plastic Spacer Stud, metric, internal/ internal	WE	970150365
35	4	for blister	97790403211	WA-SCRW Pan Head Screw w. cross slot M3	WE	97790403211

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
36	1	for blister	61900511621	WR-WTB 2.54 mm Female Terminal Housing 5p	WE	61900511621
37	2	for blister	61900411621	WR-WTB 2.54 mm Female Terminal Housing 4p	WE	61900411621
38	1	for blister	61900211621	WR-WTB 2.54 mm Female Terminal Housing 2p	WE	61900211621
39	15	for blister	61900113722	WR-WTB 2.54 mm Female Crimp Contact	WE	61900113722

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