

Variant: None
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 TID #: TIDA-050080

TIDA-050080 REV E1 Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB	1		TIDA-050080	Any	Printed Circuit Board	
2	ALM1_CMP, FLT1_CMP, nALM, nFLT, PGOOD	5		5012	Keystone Electronics	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
3	C1, C3	2	1uF	GCM188R71C105KA64J	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
4	C2, C6	2	0.1uF	EMK107B7104KA-T	Taiyo Yuden	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0603	0603
5	C4	1	0.33uF	C1608X7R1H334K080AC	TDK	CAP, CERM, 0.33 uF, 50 V, +/- 10%, X7R, 0603	0603
6	C5	1	0.1uF	GCM188R71C104KA37J	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
7	D1	1		UJ3D1220K2	Qorvo	Silicon Carbide Schottky Diode, Single, 1.2 kV, 20 A, 83 nC, TO-247, 2 Pins	TO247-2
8	EN_DSCHG, EN_PRCHG, VDDH, VDDM, VDDP, VDRV	6		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
9	FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
10	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
11	HV-, HV+, RPRE+, S1	4		5014	Keystone Electronics	Test Point, Multipurpose, Yellow, TH	Yellow Multipurpose Testpoint
12	J1, J2, J3, J4	4		1902547	Phoenix Contact	Terminal Block, 9.52mm, 2x1, R/A, TH	Terminal Block, 2x1, Pitch 9.52mm
13	J5, J6, J8	3		108-0902-001	Cinch Connectivity	Banana Jack Insul Nylon Red, TH	Banana Jack Insul Nylon Red, TH
14	J7	1		108-0903-001	Cinch Connectivity	Banana Jack Insul Nylon Black, TH	Banana Jack Insul Nylon Black, TH
15	MP1, MP2, MP3, MP4	4		2114-440-AL-7	RAF Electronic Hardware	Standoffs & Spacers 1/4 Hex Fem Stdoff 1-1/8" Alum 4-40	SPACER_4-40
16	Q1	1		E3M0075120D	Wolfspeed	N-Channel 1200 V 32A (Tc) 145W (Tc) Through Hole TO-247-3	TO-247-3
17	R1, R2, R3	3	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
18	R4	1	511k	CRCW0402511KFKED	Vishay-Dale	RES, 511 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
19	R5, R6	2	10.0k	ERJPA2F1002X	Panasonic	RES, 10.0 k, 1%, 0.2 W, AEC-Q200 Grade 0, 0402	0402
20	R7	1	22k	HSC10022KJ	TE Connectivity	22 kOhms ±5% 100W Wirewound Chassis Mount Resistor	CHAS_RES_65MM5 _47MM5
21	R9	1	1.2m	Y14830R00120F9R	Vishay Foil Resistors	1.2 mOhms ±1% 5W Chip Resistor 2512 (6432 Metric) Automotive AEC-Q200, Current Sense, Non-Inductive Metal Element	2512
22	U1	1		TPSI3100QDVXRQ1	Texas Instruments	Automotive Reinforced Isolated Switch Driver with Integrated 15-V Gate Supply and Fault/Alarm Indicators	SSOP16
23	U2	1		INA180A1QDBVRQ1	Texas Instruments	AEC-Q100, 26V, 350kHz current sense amplifier	SOT23-5
24	U3	1		TPSI2140QDWQRQ1	Texas Instruments	Isolated Solid State Relay	SOIC11
25	VSSP, VSSS	2		D3082-05	Harwin	1mm Uninsulated Shorting Plug, 10.16mm spacing, TH	Shorting Plug, 10.16mm spacing, TH

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