

Variant: 001
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 TID #: TIDA-010268



TIDA-010268 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB	1		TIDA-010268	Any	Printed Circuit Board	
2	C1, C6, C8, C9, C11, C12, C13, C18	8	0.22uF	GRM188R71H224KAC4D	MuRata	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0603	0603
3	C2, C4, C5, C7, C10, C16, C17, C19, C23, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C41	22	0.1uF	GRM188R72A104KA35J	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0603	0603
4	C3, C27	2	470pF	GRM188R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
5	C14, C15	2	1uF		Murata	1uF, 25V	
6	C20	1	1uF	GRM32CR72A105KA35L	MuRata	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, 1210	1210
7	C21, C22	2	2.2uF	GRM188C71E225KE11D	MuRata	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7S, 0603	0603
8	C24	1	1uF	GRM155R6YA105KE11D	MuRata	CAP, CERM, 1 uF, 35 V, +/- 10%, X5R, 0402	0402
9	C25, C26	2	22uF	GRM21BC81C226ME44L	MuRata	CAP, CERM, 22 uF, 16 V, +/- 20%, X6S, 0805	0805
10	D1, D2, D16	3	60V	1N6263W-7-F	Diodes Inc.	Diode, Schottky, 60 V, 0.015 A, SOD-123	SOD-123
11	D3	1	5.6V	MMSZ4690T1G	ON Semiconductor	Diode, Zener, 5.6 V, 500 mW, SOD-123	SOD-123
12	D4	1		MMSZ4685T1G	On Semiconductor	Zener Voltage Regulator 3.6v, 500 mW, 2-Pin SOD-123, Pb-Free, Tape and Reel	SOD-123-2-425-04
13	D5	1	30V	BAT42WS-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
14	D6	1	24V	NUP2105LT1G	ON Semiconductor	Diode, TVS, Bi, 24 V, SOT-23	SOT-23
15	D7	1	10V	PMEG1030EJ.115	Nexperia	Diode, Schottky, 10 V, 3 A, SOD-323F	SOD-323F
16	D8	1		MMSZ4678T1G	On Semiconductor	Zener Voltage Regulator, 500 mW, 2-Pin SOD-123, Pb-Free, Tape and Reel	SOD-123-2-425-04
17	D9, D10, D11	3	Red	150120RS75000	Würth Elektronik	LED, Red, SMD	3.2x1.6mm
18	D12, D14	2	30V	SMCJ30CA	Littelfuse	Diode, TVS, Bi, 30 V, 48.4 Vc, SMC	SMC
19	D13	1	100V	MURA110T3G	ON Semiconductor	Diode, Ultrafast, 100 V, 2 A, SMA	SMA
20	D15	1	16V	MMSZ5246B-7-F	Diodes Inc.	Diode, Zener, 16 V, 500 mW, SOD-123	SOD-123
21	F1	1		SFK-3045	Dexerials	Fuse, Self Control Protector, 45A, 6 to 7 cells, SMD	FUSE, SMT
22	J2, J3	2		SSQ-110-03-T-D	Samtec	Receptacle, 2.54mm, 10x2, Tin, TH	Receptacle, 2.54mm, 10x2, TH
23	J4, J5, J6, J7	4		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
24	J8	1		800-10-008-10-001000	Mill-Max	Header, 100mil, 8x1, TH	Header, 8x1, 100mil, TH
25	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch
26	Q1, Q2, Q3, Q4, Q5, Q6, Q7	7	40 V	BSR14	NXP Semiconductor	Transistor, NPN, 40 V, 0.8 A, SOT-23	SOT-23
27	Q8	1	60V	IRLML2060TRPBF	International Rectifier	MOSFET, N-CH, 60 V, 1.2 A, SOT-23	SOT-23
28	Q9, Q10, Q11, Q12	4	60V	CSD18540Q5B	Texas Instruments	MOSFET, N-CH, 60 V, 100 A, DNK0008A (VSON-CLIP-8)	DNK0008A
29	R1, R7, R11, R16, R20, R24, R28, R33, R54, R55	10	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
30	R2, R3, R8, R9, R12, R13, R17	7			Vishay Dale	RES, 80.6, 1%, 0.25 W, 1206	
31	R4, R6, R10, R14, R19, R23, R27, R30, R31, R45	10	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300, 5%, 0.1 W, 0603	0603
32	R5, R15, R22, R41, R43	5	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
33	R18, R34, R40, R44, R46, R47, R48, R49	8	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
34	R21	1	41.2k	CRCW040241K2FKED	Vishay-Dale	RES, 41.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
35	R25, R26, R29	3	470	CRCW0603470RJNEA	Vishay-Dale	RES, 470, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
36	R32, R36, R37, R39, R42	5	100	CRCW0603100RJNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
37	R35, R38	2	60.4	CRCW060360R4FKEA	Vishay-Dale	RES, 60.4, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
38	R56, R58, R59, R60	4	330	CRCW0603330RJNEA	Vishay-Dale	RES, 330, 5%, 0.1 W, 0603	0603
39	R57, R61	2	10Meg	CRCW060310M0JNEA	Vishay-Dale	RES, 10 M, 5%, 0.1 W, 0603	0603
40	R62, R63	2	0.002	CSNL2512FT2L00	Stackpole Electronics Inc	RES, 0.002, 1%, 2 W, 2512	2512
41	RT1, RT3	2	10k	103AT-2	SEMITEC Corporation	Thermistor NTC, 10.0k ohm, 1%, Disc, 5x8.4 mm	Disc, 5x8.4 mm
42	RT2	1		TMP6131DECR	Texas Instruments	Thermistor, DECO002A (X1SON-2)	DECO002A
43	S1	1		RS-032G05A3-SM RT	C&K Components	Switch, Tactile, SPST-NO, 0.05A, 12V, SMD	SPST, 6x3.5mm
44	U2	1		BQ7720700DSSR	Texas Instruments	Voltage and Temperature Protection for 3-Series to 7-Series Cell Li-Ion Batteries with Internal Delay Timer	WSON12
45	U3	1		BQ76907RGR	Texas Instruments	2-s to 7-s High Accuracy Battery Monitor and Protector for Li-Ion, LiPolymer, and LiFePO4 Battery Packs	RGR20
46	U4	1		TCAN1042HGVQD1	Texas Instruments	Automotive Fault Protected CAN Transceiver With Flexible Data-Rate, D0008A (SOIC-8)	D0008A
47	U5	1		TPSM365R6V5RDNR	Texas Instruments	3-V to 65-V Input, 1-V to 13-V Output, 600-mA Synchronous Buck Converter Power Module in a HotRod QFN Package	VQFN-HR9
48	U6	1		TLV70433DBVT	Texas Instruments	Single Output LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 24 V Input, with Ultra-Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
49	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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