

Variant: 001
 Generated: 12/16/2022 6:17 PM
 TID #: TIDA-050063



TIDA-050063 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	1uF	GCM188R71E105KA64D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
2	C2	1	0.22uF	GRM155R71C224KA12D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0402	0402
3	C3, C4	2	10uF	GRM21BZ71E106KE15L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 0805	0805
4	C5	1	22uF	GRM21BR61E226ME44L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 20%, X5R, 0805	0805
5	C6	1	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	0402
6	C7	1	5600pF	GRM188R71H562KA01D	MuRata	CAP, CERM, 5600 pF, 50 V, +/- 10%, X7R, 0603	0603
7	D1, D2	2		FFSB10120A-F085	onsemi	Rectifier Diode Schottky SiC 1.2KV 21A Automotive 3-Pin(2+Tab) D2PAK T/R	D2PAK
8	D3	1	40V	XBS104S13R-G	Torex USA Corporation	Diode, Schottky, 40 V, 1 A, SOD-323	SOD-323
9	D4	1	40V	BAS40-7-F	Diodes Inc.	Diode, Schottky, 40 V, 0.2 A, SOT-23	SOT-23
10	H1, H2, H3, H4	4		4810	Keystone		250x1500 mil
11	J1, J2, J3, J4	4		691 101 710 002	Würth Elektronik	Terminal Block, 5 mm, 2x1, Tin, TH	Terminal Block, 5 mm, 2x1, TH
12	L1	1	560uH	1140-561K-RC	Bourns	Ind High Current RF Choke Bobbin Core 560uH 10% 1KHz Ferrite 7.2A RDL	RADIAL
13	MP1, MP2, MP3, MP4	4		14HTSP019	Essentra Components		STANDOFF_HEX_TH RD_4-40
14	Q1	1		E3M0075120K	Wolfspeed	N-Channel 1200 V 32A (Tc) 145W (Tc) Through Hole TO-247-4L	TO-247-4
15	R2	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
16	R4	1	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
17	R5	1	20.0k	ERJ-6ENF2002V	Panasonic	RES, 20.0 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
18	R6	1	0.1	GMR100HTCFAR100	ROHM	Res Current Sense Metal Plate 2512 0.1 Ohm 1% 3W ±20ppm/°C Molded Emboss T/R	2512
19	R7	1	200k	RT0603BRD07200KL	Yageo America	RES, 200 k, 0.1%, 0.1 W, 0603	0603
20	R8	1	13.3k	RT0603BRD0713K3L	Yageo America	RES, 13.3 k, 0.1%, 0.1 W, 0603	0603
21	R9	1	100	ESR03EZPJ101	Rohm	RES, 100, 5%, 0.25 W, AEC-Q200 Grade 0, 0603	0603
22	R10	1	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
23	R11	1	2.37k	RG1608P-2371-B-T5	Susumu Co Ltd	RES, 2.37 k, 0.1%, 0.1 W, 0603	0603
24	TP1, TP3	2		5013	Keystone Electronics	Test Point, Multipurpose, Orange, TH	Orange Multipurpose Testpoint
25	TP2, TP4	2		5128	Keystone Electronics	Test Point, Multipurpose, Grey, TH	Grey Multipurpose Testpoint
26	U1	1		TPSI3052QDWZRQ1	Texas Instruments	Automotive Reinforced Isolated Switch Driver With Integrated 15 V Gate Supply	SOIC8
27	U2	1		UCC27517AQDBVRQ1	Texas Instruments	Single-Channel High-Speed Low-Side Gate Driver with Negative Input Voltage Capability (with 4-A Peak Source and Sink)	SOT23-5
28	U3	1		TLV7011DBVR	Texas Instruments	Low power, small size comparator with push-pull output 5-SOT-23 -40 to 125	SOT23-5
29	C8	0	5600pF	GRM188R71H562KA01D	MuRata	CAP, CERM, 5600 pF, 50 V, +/- 10%, X7R, 0603	0603
30	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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