Variant: 001
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TID #: TIDA-050039

TIDA-050039 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	150uF	T495D157K010ATE100	Kemet	CAP, TA, 150 uF, 10 V, +/- 10%, 0.1 ohm, SMD	7343-31
2	C2, C3	2	10uF	GRM188R60J106ME47D	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
3	C4, C5, C7, C18, C19, C20, C21	7	0.1uF	0603ZC104KAT2A	AVX	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0603	0603
4	C6	1	0.1uF	C0603C104K9PAC7867	Kemet	CAP, CERM, 0.1 µF, 6.3 V,+/- 10%, X5R, 0603	0603
5	C8, C10, C15	3	1uF	GRM185R61A105KE36D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0603	0603
6	C9	1	4.7uF	CGB3B1X5R1A475K055AC	TDK	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0603	0603
7	C11, C12	2	10uF	C0805C106K8PACTU	Kemet	CAP, CERM, 10 uF, 10 V, +/- 10%, X5R, 0805	0805
8	C16	1	0.039uF	GRM188R71H393KA61D	MuRata	CAP, CERM, 0.039 uF, 50 V, +/- 10%, X7R, 0603	0603
9	C17	1	470pF	GRM188R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
10	D1, D2, D3, D4	4	40V	RB751S40T5G	ON Semiconductor	Diode, Schottky, 40 V, 0.03 A, SOD-523	SOD-523
11	J1, J5	2		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
12	J2, J3, J4, J6	4		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
13	L1	1		XFL4030-202MEBC	Coilcraft	54 SERIES CBS SHIELD ASSEMBLY -	SMD2
14	Q1	1	-20V	CSD25480F3	Texas Instruments	MOSFET, P-CH, -20 V, -1.7 A, YJM0003A (PICOSTAR-3)	YJM0003A
15	R1	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
16	R2	1	332k	CRCW0603332KFKEA	Vishay-Dale	RES, 332 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
17	R3	1	499	CRCW0603499RFKEA	Vishay-Dale	RES, 499, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
18	R4, R9, R11	3	4.99Meg	CRCW06034M99FKEA	Vishay-Dale	RES, 4.99 M, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
19	R5	1	162k	CRCW0603162KFKEA	Vishay-Dale	RES, 162 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
20	R6	1	249k	CRCW0603249KFKEA	Vishay-Dale	RES, 249 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
21	R7	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
22	R8	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
23	R10	1	267k	CRCW0603267KFKEA	Vishay-Dale	RES, 267 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
24	R12, R18	2	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
25	R13, R20	2	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
26	R14	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
27	R15	1	2.61Meg	CRCW06032M61FKEA	Vishay-Dale	RES, 2.61 M, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
28	R16	1	200k	CRCW0603200KFKEA	Vishay-Dale	RES, 200 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
29	R17	1	887k	CRCW0603887KFKEA	Vishay-Dale	RES, 887 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
30	R19	1	422k	CRCW0603422KFKEA	Vishay-Dale	RES, 422 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
31	TP1	1		5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
32	U1	1		TPS61089RNRR	Texas Instruments	12.6-V, 7-A Fully-Integrated Synchronous Boost Converters in 2.0-mm x 2.5-mm VQFN Package, RNR0011A (VQFN-HR-11)	RNR0011A
33	U2	1		REF3312AIDBZR	Texas Instruments	30 ppm / degC Drift, 3.9 uA, Voltage Reference, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
34	U3	1		LPV321M7/NOPB	Texas Instruments	General Purpose, Low Voltage, Low Power, Rail-to-Rail Output Operational Amplifiers, 5-pin SC-70, Pb-Free	DCK0005A
35	U4	1		TLV7042DGKR	Texas Instruments	Small Size, Nanopower, Low-Voltage Comparator, DGK0008A (VSSOP-8)	DGK0008A
36	C13	0	300pF	GRM1885C1H301JA01D	MuRata	CAP, CERM, 300 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
37	C14	0	10pF	GRM1885C2A100JA01D	MuRata	CAP, CERM, 10 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
38	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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