

Variant: 001
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 TID #: TIDA-010053



TIDA-010053 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC B1	1		TIDA-010053	Any	Printed Circuit Board	
2	BT1, BT2	2		1020	Keystone	HOLDER BATTERY AAA, SMT	HOLDER BATTERY AAA, SMT
3	BT3, BT4	2		1010	Keystone	Battery Holder, Nylon, CR2, SMT	Battery holder
4	C2	1	68uF	T495D686K020ATE150	Kemet	CAP, TA, 68 uF, 20 V, +/- 10%, 0.15 ohm, SMD	7343-31
5	C4	1	10uF	GRM188R60J106ME84	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
6	C5	1	22uF	GRM188R60J226MEA0D	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0603	0603
7	C8, C9, C10	3	10uF	GRM188Z71A106MA73D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X7R, 0603	0603
8	C13	1	47uF	GRM21BR61A476ME15L	MuRata	CAP, CERM, 47 uF, 10 V, +/- 20%, X5R, 0805	0805
9	C14, C17	2	4.7uF	GRM155R61A475MEAAD	MuRata	CAP, CERM, 4.7 uF, 10 V, +/- 20%, X5R, 0402	0402
10	C15, C16	2	10uF	GRM155R60G106ME44D	MuRata	CAP, CERM, 10 uF, 4 V, +/- 20%, X5R, 0402	0402
11	C18	1	4.7uF	GRM188R60J475ME19D	MuRata	CAP, CERM, 4.7 uF, 6.3 V, +/- 20%, X5R, 0603	0603
12	C19	1	10uF	GRM21BR70J106KE76L	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 10%, X7R, 0805	0805
13	H5, H6, H7, H8	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
14	J1, J2, J12, JP13	4		61300411121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
15	J3, J4, J5, J6, J7, J8, J9, JP4, JP14	9		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
16	J11, JP1, JP2, JP3, JP6, JP9, JP10, JP11, JP12	9		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
17	J14, J16	2		61301011821	Würth Elektronik	Receptacle, 2.54mm, 10x1, Gold, TH	Receptacle, 2.54mm, 10x1, TH
18	J15	1		61000821121	Würth Elektronik	Header, 2.54mm, 4x2, Gold, SMT	Header, 2.54mm, 4x2, SMT
19	L1	1	1uH	74438356010	Würth Elektronik	Inductor, Shielded, 1 uH, 7.2 A, 0.012 ohm, SMD	4.1x4.1mm
20	L2	1	2.2uH	74404024022	Würth Elektronik	Inductor, Wirewound, Ferrite, 2.2 uH, 1.8 A, 0.08 ohm, SMD	SMD, 2.5x2mm
21	L3	1	2.2uH	DFE201612E-2R2M=P2	MuRata	Inductor, Shielded, Metal Composite, 2.2 uH, 1.8 A, 0.116 ohm, SMD	2x1.6mm
22	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
23	Q1	1	12V	CSD13385F5	Texas Instruments	MOSFET, N-CH, 12 V, 4.3 A, YJK0003A (PICOSTAR-3)	YJK0003A
24	R1	1	511k	CRCW0402511KFKED	Vishay-Dale	RES, 511 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
25	R2, R6	2	90.9k	CRCW040290K9FKED	Vishay-Dale	RES, 90.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
26	R3	1	100k	RC0402FR-07100KL	Yageo America	RES, 100 k, 1%, 0.0625 W, 0402	0402
27	R4, R5	2	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
28	R7, R8	2	267k	ERJ-2RKF2673X	Panasonic	RES, 267 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
29	R9	1	102k	CRCW0402102KFKED	Vishay-Dale	RES, 102 k, 1%, 0.063 W, 0402	0402
30	R10, R13	2	0.1	ERJ-2BSFR10X	Panasonic	RES, 0.1, 1%, 0.125 W, AEC-Q200 Grade 0, 0402	0402
31	R11	1	71.5k	CRCW040271K5FKED	Vishay-Dale	RES, 71.5 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
32	R12	1	52.3k	CRCW040252K3FKED	Vishay-Dale	RES, 52.3 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
33	R15	1	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
34	U1	1		TPS63802DLAR	Texas Instruments	High Current, High Efficiency Single Inductor Buck-Boost Converter, DLA0010A (VQFN-HR-10)	DLA0010A
35	U2	1		TPS610995DRVR	Texas Instruments	Synchronous Boost Converter with 800 nA Ultra-Low Quiescent Current, DRV0006A (WSON-6)	DRV0006A
36	U3	1		TPS62840DLCR	Texas Instruments	Ultra low IQ Step Down Converter, DLC0008A (VSON-HR-8)	DLC0008A
37	C3	0	22uF	TMK316BJ226ML-T	Taiyo Yuden	CAP, CERM, 22 uF, 25 V, +/- 20%, X5R, 1206_190	1206_190
38	C11	0	10uF	GRM188Z71A106MA73D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X7R, 0603	0603
39	C12	0	22uF	TMK212B7225KG-TR	Taiyo Yuden	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 0805	0805
40	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
41	R14	0	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
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