

Variant: 001
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TIDA-020015 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC1	1		TIDA-020015	Any	Printed Circuit Board	
2	C1, C2	2	0.1uF	GRM21BR71H104KA01L	MuRata	CAP, CERM, 0.1 uF, 50 V,+/- 10%, X7R, 0805	0805
3	C3	1	1uF	GRM188R61H105KAALD	MuRata	CAP, CERM, 1 uF, 50 V,+/- 10%, X5R, 0603	0603
4	C5, C6, C22	3	10uF	C5750X7S2A106K230KB	TDK	CAP, CERM, 10 uF, 100 V,+/- 10%, X7S, 2220	2220
5	C7, C24	2	4.7uF	GCM32DC72A475KE02L	MuRata	CAP, CERM, 4.7 uF, 100 V,+/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
6	C8, C25	2	0.1uF	GRM21BR72A104KAC4L	MuRata	CAP, CERM, 0.1 uF, 100 V,+/- 10%, X7R, 0805	0805
7	C9, C26	2	220pF	GRM1885C2A221JA01D	MuRata	CAP, CERM, 220 pF, 100 V,+/- 5%, C0G/NP0, 0603	0603
8	C10, C11, C13, C14, C27, C28, C30, C31	8	22uF	GRM21BR61E226ME44L	MuRata	CAP, CERM, 22 uF, 25 V,+/- 20%, X5R, 0805	0805
9	C12, C15, C29, C32	4	0.22uF	GRM21BR71H224KA01L	MuRata	CAP, CERM, 0.22 uF, 50 V,+/- 10%, X7R, 0805	0805
10	C16	1	100pF	GRM1885C2A101JA01D	MuRata	CAP, CERM, 100 pF, 100 V,+/- 5%, C0G/NP0, 0603	0603
11	C18	1	0.1uF	GRM155R61A104KA01D	MuRata	CAP, CERM, 0.1 uF, 10 V,+/- 10%, X5R, 0402	0402
12	C20, C35	2	0.047uF	GRM188R71C473KA01D	MuRata	CAP, CERM, 0.047 uF, 16 V,+/- 10%, X7R, 0603	0603
13	D1	1	26V	SMBJ26A-13-F	Diodes Inc.	Diode, TVS, Uni, 26 V, 42.1 Vc, SMB	SMB
14	D2	1	14V	SMBJ14A-13-F	Diodes Inc.	Diode, TVS, Uni, 14 V, 23.2 Vc, SMB	SMB
15	D3, D11	2	24V	DFLZ24-7	Diodes Inc.	Diode, Zener, 24 V, 1 W, PowerDI123	PowerDI123
16	D4, D12	2	Green	150060GS75000	Würth Elektronik	LED, Green, SMD	LED_0603
17	D5, D13	2	200V	DFLU1200-7	Diodes Inc.	Diode, Superfast Rectifier, 200 V, 1 A, AEC-Q101, PowerDI123	PowerDI123
18	D6, D14	2	18V	BZT52C18-7-F	Diodes Inc.	Diode, Zener, 18 V, 500 mW, AEC-Q101, SOD-123	SOD-123
19	D7, D15	2	75V	CMDD4448	Central Semiconductor	Diode, Ultrafast, 75 V, 0.25 A, SOD-323	SOD-323
20	D8, D16	2	100V	PMEG10010ELRX	Nexperia	Diode, Schottky, 100 V, 1 A, AEC-Q101, SOD-123W	SOD-123W
21	D9, D17	2	8.2V	BZT52C8V2-7-F	Diodes Inc.	Diode, Zener, 8.2 V, 500 mW, SOD-123	SOD-123
22	D10	1	Super Red	150060SS75000	Würth Elektronik	LED, Super Red, SMD	LED_0603
23	FID4, FID5, FID6	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
24	J1	1		TSW-103-08-G-S	Samtec	Header, 2.54mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
25	J5, J6, J7, J8	4		TSW-102-08-G-S	Samtec	Header, 2.54mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
26	Q1	1	60V	CSD18543Q3A	Texas Instruments	MOSFET, N-CH, 60 V, 35 A, DNH0008A (VSONP-8)	DNH0008A
27	Q2	1	45 V	BC857C-7-F	Diodes Inc.	Transistor, NPN, 45 V, 0.1 A, SOT-23	SOT-23
28	R1, R16	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
29	R2, R17	2	100	CRCW0805100RFKEA	Vishay-Dale	RES, 100, 1%, 0.125 W, 0805	0805
30	R4	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
31	R5	1	240k	CRCW0402240KFKED	Vishay-Dale	RES, 240 k, 1%, 0.063 W, 0402	0402
32	R6	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
33	R7, R19	2	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
34	R8	1	1.82k	CRCW04021K82FKED	Vishay-Dale	RES, 1.82 k, 1%, 0.063 W, 0402	0402
35	R9	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, 0603	0603
36	R10, R20	2	154k	CRCW0603154KFKEA	Vishay-Dale	RES, 154 k, 1%, 0.1 W, 0603	0603
37	R11, R21	2	301k	CRCW0603301KFKEA	Vishay-Dale	RES, 301 k, 1%, 0.1 W, 0603	0603
38	R13	1	5.76k	CRCW04025K76FKED	Vishay-Dale	RES, 5.76 k, 1%, 0.063 W, 0402	0402
39	R15, R24	2	12.1k	CRCW080512K1FKEA	Vishay-Dale	RES, 12.1 k, 1%, 0.125 W, 0805	0805
40	R23	1	976k	CRCW0603976KFKEA	Vishay-Dale	RES, 976 k, 1%, 0.1 W, 0603	0603
41	T1, T2	2	30uH	YA8916-BL	Coilcraft	Transformer, 30 uH, SMT	9.3x10.2mm
42	TP1, TP3	2		5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
43	TP2	1		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
44	U1	1		LM74700QDBVTQ1	Texas Instruments	Low Iq Always ON Smart Diode Controller, DBV0006A (SOT-23-6)	DBV0006A
45	U2	1		TPS3700QDDCRQ1	Texas Instruments	Automotive, High-Voltage (18V) Window Comparator with Over- and Undervoltage Detection, DDC0006A (SOT-23-T-6)	DDC0006A
46	U3, U4	2		LM5180QNGURQ1	Texas Instruments	70-V PSR Flyback Converter With 100-V, 1.2-A Power Switch and Ultra-Low IQ, NGU0008C (WSON-8)	NGU0008C
47	C19, C34	0	1000pF	S102M59Z5U083L0R	Vishay-Bccomponents	CAP, CERM, 1000 pF, 6000 V,+/- 20%, Z5U, 15x8mm	15x8mm
48	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
49	R14	0	976k	CRCW0603976KFKEA	Vishay-Dale	RES, 976 k, 1%, 0.1 W, 0603	0603

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