

Variant: None
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TIDA-050015 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	1.1V, 1.8V, 2.8V, 5V, GND1, GND2, GND3, IN+, IN-	9	Double	1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2
2	C15, C18, C20, C26	4	10uF	C2012X5R1A106M125AB	TDK	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0805	0805
3	C16, C17, C19, CO4	4	0.1uF	GCM188R71C104KA37J	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
4	C22	1	1uF	C0603C105K8PACTU	Kemet	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0603	0603
5	C23	1	1uF	GRM188R60J105KA01D	MuRata	CAP, CERM, 1 µF, 6.3 V, +/- 10%, X5R, 0603	0603
6	C24	1	10uF	C1608X5R1A106M080AC	TDK	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0603	0603
7	C25	1	10uF	CL05A106MP5NUNC	Samsung Electro-Mechanics	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0402	0402
8	C27	1	1uF	C1005JB1V105K050BC	TDK	CAP, CERM, 1 µF, 35 V, +/- 10%, JB, 0402	0402
9	CBOOT	1	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	0603
10	CF1, CF2, CF3, CF4	4	4.7uF	CGA6P3X7R1H475M250AB	TDK	CAP, CERM, 4.7 µF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	1210
11	CHF1, CHF2, CHF3, CHF4, CHF5	5	0.1uF	CGJ3E2X7R1C104K080AA	TDK	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
12	CI1, CI2	2	2.2uF	0805YD225KAT2A	AVX	CAP, CERM, 2.2 µF, 16 V, +/- 10%, X5R, 0805	0805
13	CI3, CI4	2	0.01uF	0402ZC103KAT2A	AVX	CAP, CERM, 0.01 µF, 10 V, +/- 10%, X7R, 0402	0402
14	CO1, CO2, CO3	3	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22 µF, 10 V, +/- 10%, X7R, 1206	1206
15	CVCC	1	1uF	06033C105KAT2A	AVX	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
16	D1	1	18V	MMSZ4705T1G	ON Semiconductor	Diode, Zener, 18 V, 500 mW, SOD-123	SOD-123
17	D2	1	30V	1SMB30CAT3G	ON Semiconductor	Diode, TVS, Bi, 30 V, 48.4 Vc, SMB	SMB
18	FB1	1	600 ohm	FBMH3225HM601NT	Taiyo Yuden	Ferrite Bead, 600 ohm @ 100 MHz, 3 A, 1210	1210
19	L1	1	2.2uH	XAL5030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2uH, 9.2A, 0.01 ohm, SMD	5.3x31.x5.5mm
20	L3, L4	2	2.2uH	LPS3015-222MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 2.2uH, 1.4A, 0.11 ohm, SMD	LPS3015
21	LF1	1	1uH	XAL4020-102MEB	Coilcraft	Inductor, Shielded, Composite, 1uH, 8.75A, 0.01 ohm, SMD	4x2.1x4mm
22	Q1	1	-40V	SQJ463EP-T1-GE3	Vishay-Siliconix	MOSFET, P-CH, -40 V, -30 A, PowerPAK_SO-8L	PowerPAK_SO-8L
23	R1, R2, R9	3	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
24	R3	1	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
25	R4	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
26	R5, R6, R7	3	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
27	RFBB	1	34.8k	CRCW060334K8FKEA	Vishay-Dale	RES, 34.8 k, 1%, 0.1 W, 0603	0603
28	RFBT, RPG	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
29	U1	1		LMR33630CQRNXRQ1	Texas Instruments	Automotive 3.8-V to 36-V 3-A Synchronous Step-Down Voltage Regulator, RNX0012B (VQFN-HR-12)	RNX0012B
30	U2	1		TPS62420QDRRCRQ1	Texas Instruments	Automotive 2.5V to 6V, 2.25MHz Fixed Frequency Dual (1A/600mA) Buck Converter with 1-Wire Interface, DRC0010J (VSON-10)	DRC0010J
31	U3	1		LP5907QMFx-2.8Q1	Texas Instruments	Automotive 250-mA, Ultra-Low-Noise, Low-IQ LDO, DBV0005A (SOT-23-5)	DBV0005A
32	U4	1		LM2775DSGR	Texas Instruments	Switched Capacitor 5V Boost Converter, DSG0008A (WSON-8)	DSG0008A

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