

Variant: 001  
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 TID #: TIDA-00688



TIDA-00688 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-00688	Any	Printed Circuit Board	
2	C1	1	1.5uF	GRM21BR71E155KA88L	MuRata	CAP, CERM, 1.5 µF, 25 V, +/- 10%, X7R, 0805	0805
3	C2, C18, C19, C28, C29, C30	6	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
4	C3, C14	2	2.2uF	UMK316B7225KD-T	Taiyo Yuden	CAP, CERM, 2.2 µF, 50 V, +/- 10%, X7R, 1206	1206
5	C4, C20, C21, C22, C23	5	0.01uF	C0603C103J5RACTU	Kemet	CAP, CERM, 0.01 µF, 50 V, +/- 5%, X7R, 0603	0603
6	C5	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
7	C6	1	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
8	C7	1	0.022uF	GRM188R71H223KA01D	MuRata	CAP, CERM, 0.022 µF, 50 V, +/- 10%, X7R, 0603	0603
9	C8, C9	2	4.7uF	GRM31CR71E475KA88L	MuRata	CAP, CERM, 4.7 µF, 25 V, +/- 10%, X7R, 1206	1206
10	C10	1	470pF	C0603C471K5RACTU	Kemet	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
11	C11	1	1000pF	202R18W102KV4E	Johanson Technology	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1206_190	1206_190
12	C15, C16	2	1uF	C0603C105K3RACTU	Kemet	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
13	C17	1	2.2uF	C2012X7R1V225K085AC	TDK	CAP, CERM, 2.2 µF, 35 V, +/- 10%, X7R, 0805	0805
14	C24	1	1000pF	GRM188R71E102KA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0603	0603
15	C25, C26	2	4.7uF	C3216X7R1E475K085AB	TDK	CAP, CERM, 4.7 µF, 25 V, +/- 10%, X7R, 1206	1206
16	C27	1	10uF	C3216X7R1A106M085AC	TDK	CAP, CERM, 10 µF, 10 V, +/- 20%, X7R, 1206	1206
17	D1	1	45V	CDBU0245	Comchip Technology	Diode, Schottky, 45 V, 0.2 A, SOD-523F	SOD-523F
18	D2, D3	2	200V	RF081M2STR	Rohm	Diode, Fast Rectifier, 200 V, 0.8 A, SOD-123	SOD-123
19	D4	1	24V	BZT52C24T-7	Diodes Inc.	Diode, Zener, 24 V, 300 mW, SOD-523	SOD-523
20	FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
21	H1, H4	2		B66284F2204X	TDK	CLAMP ELP 18X4X10 I 18X2X10	
22	H2	1	2.9 uH	B66283PX187	TDK	FERRITE CORE ELP 2.9UH N87	
23	H3	1	2.6uH	B66283GX187	TDK	Ferrite Core, ELP, 2.6uH, N87	
24	J1, J2, J3, J4	4	2x1	1751248	Phoenix Contact	Conn Term Block, 2POS, 3.5mm, TH	11x8.5x7.3mm
25	L1	1	2.2uH	LQM18PN2R2MFH	MuRata	Inductor, Ferrite, 2.2 µH, 0.35 A, 0.38 ohm, SMD	0603
26	L2, L3, L4, L6, L7, L8	6	600 ohm	BLM18KG601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 1.3 A, 0603	0603
27	L5	1	22uH	VLS3010ET-220M	TDK	Inductor, Shielded, Ferrite, 22 µH, 0.38 A, 0.9 ohm, SMD	Inductor, 3x1x3mm
28	R1, R10	2	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, 0603	0603
29	R2	1	16.9k	CRCW060316K9FKEA	Vishay-Dale	RES, 16.9 k, 1%, 0.1 W, 0603	0603
30	R3, R6, R15, R16	4	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
31	R4	1	453k	CRCW0603453KFKEA	Vishay-Dale	RES, 453 k, 1%, 0.1 W, 0603	0603
32	R5	1	27.4k	CRCW060327K4FKEA	Vishay-Dale	RES, 27.4 k, 1%, 0.1 W, 0603	0603
33	R7	1	42.2	CRCW060342R2FKEA	Vishay-Dale	RES, 42.2, 1%, 0.1 W, 0603	0603
34	R8	1	11.8k	CRCW060311K8FKEA	Vishay-Dale	RES, 11.8 k, 1%, 0.1 W, 0603	0603
35	R9, R13, R14	3	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
36	R12	1	0	CRCW0603000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
37	R17	1	23.2k	CRCW060323K2FKEA	Vishay-Dale	RES, 23.2 k, 1%, 0.1 W, 0603	0603
38	R18	1	23.7k	CRCW060323K7FKEA	Vishay-Dale	RES, 23.7 k, 1%, 0.1 W, 0603	0603
39	R19	1	53.6k	CRCW060353K6FKEA	Vishay-Dale	RES, 53.6 k, 1%, 0.1 W, 0603	0603
40	R20	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
41	U1	1		LM5017SDX/NOPB	Texas Instruments	100V, 600mA Constant On-Time Synchronous Buck Regulator, NGU0008B	NGU0008B
42	U2	1		TPS7A4901DGN	Texas Instruments	+36V, +150mA, Ultralow-Noise, Positive LINEAR REGULATOR, DGN0008D	DGN0008D
43	U3	1		TPS7A3001DGN	Texas Instruments	-36V, -200mA, Ultralow-Noise, High PSRR, Adjustable -1.18 to -33 V Output, Negative Linear Regulator, 8-pin MSOP (DGN), -40 to 125 degC, Green (RoHS & no Sb/Br)	DGN0008D
44	U4	1		TPS62175DQCR	Texas Instruments	28V, 0.5A Step-Down Converter with Sleep Mode, DQC0010A	DQC0010A
45	C12	0	56pF	GRM21A5C2E560JW01D	MuRata	CAP, CERM, 56 pF, 250 V, +/- 5%, C0G/NP0, 0805	0805
46	C13	0	0.015uF	GRM188R71H153KA01D	MuRata	CAP, CERM, 0.015 µF, 50 V, +/- 10%, X7R, 0603	0603
47	R11	0	1.00k	CRCW08051K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.125 W, 0805	0805

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