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 TID #: TIDA-00689



TIDA-00689 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC1B1	1		TIDA-00689	Any	Printed Circuit Board	
2	C1	1	1000pF	202R18W102KV4E	Johanson Technology	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1206_190	1206_190
3	C2	1	0.01uF	C0603C103J5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0603	0603
4	C3, C4	2	2.2uF	UMK316B7225KD-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 1206	1206
5	C5	1	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
6	C6	1	0.22uF	885012206048	Würth Elektronik	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0603	0603
7	C7, C22	2	10uF	885012207026	Würth Elektronik	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, 0805	0805
8	C8, C29	2	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
9	C10	1	1000pF	885012206034	Würth Elektronik	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0603	0603
10	C11, C18, C27	3	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
11	C12	1	0.022uF	GRM188R71H223KA01D	MuRata	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0603	0603
12	C13	1	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X7R, 0603	0603
13	C14	1	100pF	C0603C101J5GACTU	Kemet	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
14	C15, C19, C23, C28	4	0.1uF	885012206095	Würth Elektronik	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
15	C16, C17, C25, C26	4	10uF	GRM21BC71E106KE11L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7S, 0805	0805
16	C20	1	6.8pF	06035A6R8CAT2A	AVX	CAP, CERM, 6.8 pF, 50 V, +/- 4%, C0G/NP0, 0603	0603
17	C21	1	0.22uF	GRM188R71C224KA01D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0603	0603
18	C24	1	5.6pF	06035A5R6CAT2A	AVX	CAP, CERM, 5.6 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
19	C30	1	4700pF	885012206087	Würth Elektronik	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0603	0603
20	C31	1	0.01uF	885012206040	Würth Elektronik	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0603	0603
21	D1, D6, D10	3	Green	LTST-C190KGKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm
22	D2, D7, D8	3	45V	NTS245SFT1G	ON Semiconductor	Diode, Schottky, 45 V, 2 A, AEC-Q101, SOD-123FL	SOD-123FL
23	D4	1	Blue	LB Q39G-L2N2-35-1	OSRAM	LED, Blue, SMD	BLUE 0603 LED
24	D5	1	Red	LTST-C190CKT	Lite-On	LED, Red, SMD	Red LED, 1.6x0.8x0.8mm
25	J1, J2, J3, J5, J7, J8, J12, J13	8		HMTSW-102-07-G-S-240	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
26	J4, J6, J9, J11	4		1751248	Phoenix Contact	Conn Term Block, 2POS, 3.5mm, TH	11x8.5x7.3mm
27	L1, L2	2	2.2uH	LQM18PN2R2MFH	MuRata	Inductor, Ferrite, 2.2 uH, 0.35 A, 0.38 ohm, SMD	0603
28	L3	1	600 ohm	BLM18KG601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 1.3 A, 0603	0603
29	L4, L5	2	10uH	74404024100	Würth Elektronik	Inductor, Wirewound, Ferrite, 10 uH, 0.47 A, 0.435 ohm, SMD	SMD, 2.5x2mm
30	L6	1	22uH	74489430220	Würth Elektronik	Coupled inductor, 22 uH, 1.1 A, 0.48 ohm, SMD	8x8mm
31	R1	1	1.21k	CRCW06031K21FKEA	Vishay-Dale	RES, 1.21 k, 1%, 0.1 W, 0603	0603
32	R2, R22, R23	3	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, 0603	0603
33	R3	1	113k	CRCW0603113KFKEA	Vishay-Dale	RES, 113 k, 1%, 0.1 W, 0603	0603
34	R4	1	16.9k	CRCW060316K9FKEA	Vishay-Dale	RES, 16.9 k, 1%, 0.1 W, 0603	0603
35	R5	1	27.4k	CRCW060327K4FKEA	Vishay-Dale	RES, 27.4 k, 1%, 0.1 W, 0603	0603
36	R6	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
37	R7	1	3.48k	CRCW06033K48FKEA	Vishay-Dale	RES, 3.48 k, 1%, 0.1 W, 0603	0603
38	R8, R14, R21	3	5.36k	CRCW06035K36FKEA	Vishay-Dale	RES, 5.36 k, 1%, 0.1 W, 0603	0603
39	R9	1	150	CRCW0603150RFKEA	Vishay-Dale	RES, 150, 1%, 0.1 W, 0603	0603
40	R10, R13	2	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
41	R11	1	42.2	CRCW060342R2FKEA	Vishay-Dale	RES, 42.2, 1%, 0.1 W, 0603	0603
42	R12	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
43	R15	1	976k	CRCW0603976KFKEA	Vishay-Dale	RES, 976 k, 1%, 0.1 W, 0603	0603
44	R16	1	86.6k	CRCW060386K6FKEA	Vishay-Dale	RES, 86.6 k, 1%, 0.1 W, 0603	0603
45	R17	1	105k	CRCW0603105KFKEA	Vishay-Dale	RES, 105 k, 1%, 0.1 W, 0603	0603
46	R18	1	1.30Meg	CRCW06031M30FKEA	Vishay-Dale	RES, 1.30 M, 1%, 0.1 W, 0603	0603
47	R20	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
48	U1	1		LM5160DNTR	Texas Instruments	Wide Input 65V, 1.5A Synchronous Step-Down DC-DC Converter, DNT0012B	DNT0012B
49	U2	1		TPS65130RGER	Texas Instruments	Positive and Negative Output DC-DC Converter, RGE0024B	RGE0024B
50	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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