

Bill of Materials

TI DESIGNS
TIDA-00596
Variant 001

Item	Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
1	IPCB	1		Printed Circuit Board		TIDA-00596	Any		
2	C0, C1, C2, C3, C30, C31	6	22uF	CAP, CERM, 22uF, 10V, +/-20%, X5R, 0603	0603	CL10A226MP8NUNE	Samsung	GRM188R60J226MEA0	Murata
3	C4, C5, C6, C7	4	10uF	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0603	0603	GRM188R60J106ME47D	MuRata		
4	C8	1	0.1uF	CAP, CERM, 0.1uF, 10V, +/-10%, X5R, 0201	0201	CL03A104KP3NNNC	Samsung	GMD033R60J104KE11	Murata
5	C9	1	220uF	CAP, TANT, 220uF, 10V, +/-10%, 0.05 ohm, 7343-31 SMD	7343-31	TPSD227K010R0050	AVX	-	-
6	C10	1	100uF	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1206	1206	GRM31CR60J107ME39L	MuRata		
7	C11, C29	2	10pF	CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0603	0603	GRM1885C1H100JA01D	MuRata		
8	C12, C13	2	15pF	CAP, CERM, 15pF, 100V, +/-5%, C0G/NP0, 0603	0603	GRM1885C2A150JA01D	MuRata		
9	C14, C21, C23, C39, C48	5	10uF	CAP, CERM, 10uF, 16V, +/-20%, X5R, 0603	0603	EMK107BBJ106MA-T	Taiyo Yuden		
10	C15, C16, C17, C18, C19, C20, C22, C24, C25, C26, C28, C38, C46	13	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E104KA01D	MuRata		
11	C34	1	10uF	CAP, CERM, 10uF, 16V, +/-10%, X5R, 0805	0805	EMK212BJ106KG-T	Taiyo Yuden		
12	C37, C41, C43, C45, C47	5	1uF	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0603	0603	GRM188R61E105KA12D	MuRata		
13	C40	1	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, X5R, 0603	0603	GRM188R61H103KA01D	MuRata		
14	D1	1	5.6V	Diode, Zener, 5.6V, 5W, SMB	SMB	SMBJ5339B-TP	Micro Commercial Components		
15	FID1, FID2, FID3	3		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
16	H1, H2, H3, H4	4		MACHINE SCREW PAN PHILLIPS 4-40	Screw	NY PMS 440 0050 PH	B&F Fastener Supply	-	-
17	H5, H6, H7, H8	4		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone	-	-
18	J0, J1B, J2A, J3A	4	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
19	J01	1		SMT Jumper Link	S1911-46R	S1911-46R	Harwin Inc	5102	Keystone Electronics
20	J4	1		Header, TH, 100mil, 2x2, Gold plated, 230 mil above insulator	TSW-102-07-G-D	TSW-102-07-G-D	Samtec, Inc.	-	-
21	J5, J9	2		Header, TH, 100mil, 2x1, Gold plated, 230 mil above	TSW-102-07-G-S	TSW-102-07-G-S	Samtec, Inc.	-	-
22	J6	1		Conn Rcpt Mini USB2.0 Type B 5POS SMD	USB Mini Type B	1734035-2	TE Connectivity		
23	L0, L1, L2, L3	4	470nH	Inductor, Shielded, Metal Composite, 470nH, 3.9A,	2.5x1x2mm	VLS252010HBX-R47M	TDK		
24	L4, L6	2	10uH	Inductor, Wirewound, Ferrite, 10uH, 0.12A, 0.5 ohm,	0805	LB2012T100KR	Taiyo Yuden		
25	R1	1	0.01	RES, 0.01 ohm, 1%, 3W, 2512 High Power Current	2512	CRA2512-FZ-R010ELF	Bourns	-	-
26	R4	1	6.80k	RES, 6.80k ohm, 1%, 0.1W, 0603	0603	RC0603FR-076K8L	Yageo America		
27	R5, R7	2	39.0	RES, 39.0 ohm, 1%, 0.1W, 0603	0603	RC0603FR-0739RL	Yageo America		
28	R8	1	47.0k	RES, 47.0k ohm, 1%, 0.1W, 0603	0603	RC0603FR-0747KL	Yageo America		
29	R9	1	27.0k	RES, 27.0k ohm, 1%, 0.1W, 0603	0603	RC0603FR-0727KL	Yageo America		
30	R10, R11, R13, R14, R15, R16, R17, R22	8	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		
31	R12, R23	2	1.00	RES, 1.00 ohm, 1%, 0.1W, 0603	0603	RC0603FR-071RL	Yageo America		
32	R20, R21	2	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale		
33	R29	1	470k	RES, 470k ohm, 5%, 0.1W, 0603	0603	CRCW0603470KJNEA	Vishay-Dale		
34	SH-J9, SH-J10, SH-J12	3	1x2	Shunt, 100mil, Gold plated, Black	Shunt	969102-0000-DA	3M	SNT-100-BK-G	Samtec
35	TP1, TP2, TP3, TP4, TP5, TP6, TP9, TP12, TP15, TP19	10	Yellow	Test Point, TH, Miniature, Yellow	Keystone5004	5004	Keystone	-	-
36	TP11, TP13	2	Double	Terminal, Turret, TH, Double	Keystone1502-2	1502-2	Keystone		
37	U1	1		LP8758 Multiphase 4-Core Step-Down Converter, YFF0035	YFF0035	LP8758	Texas Instruments		None
38	U2	1		AT91SAM ARM-based Flash MCU, LQFP100	100 pin LQFP	ATSAM3U2C-AU	Atmel		
39	U3	1		Dual Linear Regulator with 300mA and 150mA Outputs and Power-On-Reset, 10-pin LLP, Pb-Free	SDA10A	LP3996SD-1833/NOPB	Texas Instruments		

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40	U4	1		SOT-23 Precision Low Dropout Voltage Reference	MF05A	LM4132AMF-2.5	Texas Instruments		
41	X0, X1, X2, X3, X4	5	2x1	Conn Term Block, 2POS, 5.08mm, TH	2POS Terminal Block	1715721	Phoenix Contact		
42	X5, X10	2		Header, 2 Pos, 6A, 63V	6.2x8.5x5.54 mm	1725656	Phoenix Contact		
43	X6	1		Terminal Block, 8x1, 2.54 mm, TH	8POS Terminal Block	1725711	Phoenix Contact		
44	Y1	1		Crystal, 12Mhz, 18pF, SMD	ABM3	ABM3-12.000MHZ-B2-T	Abracon Corporation		
45	C0_1, C1_1, C2_1, C3_1	0	22uF	CAP, CERM, 22uF, 10V, +/-20%, X5R, 0805	0805	LMK212BJ226MG-T	Taiyo Yuden	-	-
46	C0_2, C1_2, C2_2, C3_2	0	10uF	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0603	0603	C0603C106M9PACTU	Kemet	-	-
47	J1A, J2B, J3B, J10, J12, J13, J14, J15, J16, J17	0	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
48	J02, J23	0		SMT Jumper Link	S1911-46R	S1911-46R	Harwin Inc	5102	Keystone Electronics
49	LBL1	0		Thermal Transfer Printable Labels, 1.250" W x 0.250" H - 10,000 per roll	PCB Label 1.25"H x 0.250"W	THT-13-457-10	Brady		
50	R2, R3, R6	0	1.8k	RES, 1.8k ohm, 5%, 0.1W, 0603	0603	CRCW06031K80JNEA	Vishay-Dale	-	-
51	TP10, TP14, TP16, TP17, TP18	0		Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	TSW-102-07-G-S	TSW-102-07-G-S	Samtec, Inc.	-	-
52	X7, X9	0		Connector, 7 pos, 2.54mm, R/A, SMT	30x3.6x9.2mm	OPP-07-01-T-S-M	Samtec		

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