

Bill of Materials

TI DESIGNS
TIDA-00428

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part(DigiKey)
1	1	C1	10uF	CAP, CERM, 10uF, 16V, +/-20%, X5R, 0805	AVX	0805YD106MAT2A	1582704
2	10	C9, C10, C15, C16, C100, C101	4.7uF	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0402	TDK	C1005X5R1A475K050BC	445-13820-1-ND
3	1	C17	1uF	CAP, CERM, 1 uF, 6.3 V, +/- 20%, X5R, 0402	TDK	C1005X5R0J105M	445-1415-1-ND
4	3	C23, C323, C325	1uF	CAP CER 1UF 16V 10% X7R 0805	TDK	C2012X7R1C105K/1.25	445-1358-1-ND
5	5	C24, C200, C203, C324, C326	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	TDK	C1608X7R1H103K	445-1311-1-ND
6	15	C5, C6, C7, C8, C25, C31, C32	0.1uF	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	AVX	0603YC104JAT2A	478-3726-1-ND
7	2	C26, C27	220pF	CAP, CERM, 220pF, 50V, +/-1%, C0G/NP0	AVX	06035A221FAT2A	478-3719-1-ND
8	2	C28, C29	30pF	CAP, CERM, 30pF, 100V, +/-5%, C0G/NP0	MuRata	GRM1885C2A300JA01D	490-1338-1-ND
9	1	C30	2200pF	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603	Kemet	C0603X222K5RACTU	399-5341-1-ND
10	1	C33	0.47uF	CAP, CERM, 0.47uF, 10V, +/-10%, X7R, 0603	MuRata	GRM188R71A474KA61D	GRM188R71A474KA61D-ND
11	1	C106	0.022uF	CAP, CERM, 0.022uF, 16V, +/-10%, X5R, 0603	MuRata	GRM155R61C223KA01D	GRM155R61C223KA01D-ND
12	6	C22, C201, C204, C206, C208	22uF	CAP ALUM 22UF 10V 20% SMD	Panasonic - ECG	EEE-1AA220WR	PCE3869CT-ND
13	3	C21, C321, C327	2.2uF	CAP, CERM, 2.2uF, 16V, +/-10%, X5R, 0805	AVX	0805YD225KAT2A	478-2580-1-ND
14	1	D1		LED, Green, SMD	Lumex	SML-LX0603GW-TR	67-1549-1-ND
15	1	D2		Diode, Zener, 7.5 V, 550 mW, SMB	ON Semiconductor	1SMB5922BT3G	863-1SMB5922BT3G
16	1	D3		LED, Green, SMD	Lumex	SSF-LXH305GD-TR	67-1375-1-ND
17	1	D32		Diode, Zener, 7.5 V, 550 mW, SMB	ON Semiconductor	1SMB5922BT3G	863-1SMB5922BT3G
18	2	D100, D101		LED, Green, SMD	Lumex	SML-LX0603GW-TR	67-1549-1-ND
19	3	FB1, FB31, FB32		Ferrite Bead, 60 ohm @ 100 MHz, 0.8 A, 0603	Taiyo Yuden	BK1608HS600-T	587-1873-2-ND
20	4	H1, H2, H3, H4		Machine Screw, Round, #4-40 x 1/4, Nylon	B&F Fastener Supply	NY PMS 440 0025 PH	H542-ND
21	17	H7, H8, H9, H10		Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C	1902CK-ND
22	1	J1, J3		Disconnect Terminal, 5.08mm, 2x1, Tin, TH	Keystone	1212-ST	1212-STK-ND
23	1	J8		Header (shrouded), 100mil, 5x2, Gold, TH	TE Connectivity	5103308-1	A33159-ND
24	5	J9, J16		Header, 100mil, 2x1, Tin, TH	TE Connectivity	5-146278-2	5-146278-2-ND
25	11	J17, J102		Connector, BNC Edge Mount, SMD	Samtec	BNC7T-J-P-GN-ST-EM1D	
26	4	J18, J19, J100, J101		Connector, TH, End launch SMA 50 ohm	Emerson Network Power	142-0771-821	J807-ND
27	5	J20, J21, J103, J201		Header, 100mil, 2x1, Tin, TH	TE Connectivity	5-146278-2	5-146278-2-ND

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part(DigiKey)
28	16	J31		Connector, Receptacle, Mini-USB Type B, R	TE Connectivity	1734035-2	A31727CT-ND
29	4	J33		Header, 100mil, 2x2, Gold, TH	Samtec	TSW-102-07-G-D	SAM1028-02-ND



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30	1	J200		Receptacle, 0.8mm, 10x2, Gold, R/A, SMT	Molex	074441-0010	WM1696CT-ND
31	1	L200, L201		Inductor, Shielded Drum Core, Powdered Iron	Vishay-Dale	IHLP2020BZER4R7M01	541-1090-1-ND
32	2	Q1		MOSFET, N-CH, 50 V, 0.22 A, SOT-23	Fairchild Semiconductor	BSS138	BSS138CT-ND
33	1	R1, R2	2.0K	RES, 2.00k ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW04022K00FKED	541-2.00KLCT-ND
34	1	R12, R20, R23, R24, R25, R10	1.0K	RES, 1.00k ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW04021K00FKED	541-1.00KLCT-ND
35	17	R21, R105, R107	220 ohm	RES, 220 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW0402220RJNED	541-220JCT-ND
36	1	R28, R101	75.0 ohm	RES, 75.0 ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW040275R0FKED	541-75.0LCT-ND
37	4	R31, R32	33 ohm	RES, 33 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040233R0JNED	541-33JCT-ND
38	4	R33	1.5K	RES, 1.5k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04021K50JNED	541-1.5KJCT-ND
39	4	R34	33K	RES, 33k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040233K0JNED	541-33KJCT-ND
40	1	R35	1.2M	RES, 1.2Meg ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06031M20JNEA	541-1.2MGCT-ND
41	1	R36	33K	RES, 33k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040233K0JNED	541-33KJCT-ND
42	1	R37	200 ohm	RES, 200 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603200RFKEA	541-200HCT-ND
43	1	R100	0 ohm	RES, 0, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06030000Z0EA	541-0.0GCT-ND
44	2	R200, R201, R202, R203, R20	10.0K	RES, 10.0k ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW040210K0FKED	541-10.0KLTR-ND
45	2	S1		Switch, Tactile, SPST-NO, SMT	Panasonic	EVQ-PSD02K	P8088SCT-ND
46	2	SH-J9		Shunt, 100mil, Gold plated, Black	3M	969102-0000-DA	3M9580-ND
47	12	U1		Low Power 12G UHD Adaptive Cable Equalizer	Texas Instruments	LMH1219RTWR	
48	4	U2		500mA, Low Quiescent Current, Ultra-Low Noise	Texas Instruments	TPS73533DRBR	
49	8	U3		IC, 4-Chan ESD-Protection Array	Texas Instruments	TPD4E004DRY	296-23618-1-ND
50	7	U4		25 MHz Mixed Signal Microcontroller with 12	Texas Instruments	MSP430F5529IPN	
51	1	U100		Ultra HD Low-Power SDI Reclocker and Cal	Texas Instruments	LMH1218RTWT	

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52	1	U321		500mA, Low Quiescent Current, Ultra-Low N	Texas Instruments	TPS73525DRBR	
53	1	U322		500mA, Low Quiescent Current, Ultra-Low N	Texas Instruments	TPS73533DRBR	
54	1	Y1		Crystal, 24.000MHz, 20pF, SMD	ECS Inc.	ECS-240-20-5PX-TR	XC1255CT-ND
55	6	FID1		Fiducial mark. There is nothing to buy or m	N/A	N/A	N/A

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