

Bill of Materials

TI DESIGNS

TIDA-00353

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	R	Mating Connector for +4V	1757019	Phoenix Contact	1757019			
2	1	+4V	Terminal_Block2	1759017	Phoenix Contact	1759017		mstba_ra_200_2	
3	1	+5V_POWER_CONNECTOR	Mating Connector for +5V	1757019	Phoenix Contact	1757019			
4	0	+5V	Terminal_Block2	1759017	Phoenix Contact	1759017		mstba_ra_200_2	DNI
5	0	BP2.5	HDR-1x1_0	5005	Keystone	5005		tp_500x_50	DNI
6	0	atus_LD2,VCMB,VCMA,CL	HDR-1x1_0	-	-	-		tp_500x_50	DNI
7	5	_SYSREF,EXTREF,CLK	CLK_DIFF	142-0701-851	Johnson	142-0701-851		con_sma-edge	
8	10	C203,C213,C222,C232	0.01u	C1005X7R1E103K050BB	TDK Corporation	C1005X7R1E103K050BB		C0402_NO_SS	
9	0	C8,C13,C14,C15,C16,R26,C9,C11,C180,C181,C204,C214,C223,C234	A/R	-	-	-		C0402_NO_SS	DNI
10	8		10u	GRM31CR61E106KA12L	Murata	GRM31CR61E106KA12L		smd_size1206	
11	44	C70,C72,C75,C78,C79,C8	0.1u	GRM155R61C104KA88D	Murata Electronics North America	GRM155R61C104KA88D		C0402_NO_SS	
12	0	C20,C21,C22,C23	0.1u	GRM155R61C104KA88D	Murata Electronics North America	GRM155R61C104KA88D		smd_size0402	DNI
13	0	C24,C26,C28,C29,C30,C31	0.1u	GRM155R61C104KA88D	Murata Electronics North America	GRM155R61C104KA88D		C0402_NO_SS	DNI
14	0	C25,C27	0.01u	C1005X7R1E103K050BB	TDK Corporation	C1005X7R1E103K050BB		C0402_NO_SS	DNI
15	0	C40,C41,C46,C47	A/R	CBR04C509B1GAC	Kemet	CBR04C509B1GAC		C0402_NO_SS	DNI
16	0	C42,C43,C48,C49	A/R	500R07S270GV4T	Johanson Technology Inc	500R07S270GV4T		C0402_NO_SS	DNI
17	23	C62,C65,C67,C69,C71,C73,C74,C77,C80,C82,C85,C88,C90,C93,C94,C100,C101,C102,C103,C104,C105,C106,C107	0.01u	GRM033R71A103KA01D	Murata Electronics North America	GRM033R71A103KA01D		201	
18	1	C97	1u	C1220X5R1A105M085AC	TDK Corporation	C1220X5R1A105M085AC		508	
19	16	C98,C116,C119,C201,C206,C208,C211,C216,C220,C225,C227,C230,C235,C237,C239,C241	10uF	TAJA106M016RNJ	AVX Corporation	TAJA106M016RNJ		cap_a-case	
20	6	C108,C109,C110,C111,C114,C117	0.1u	GRM033R60J104KE19D	Murata Electronics North America	GRM033R60J104KE19D		201	
21	0	R51,C112	A/R	-	-	-		201	DNI
22	9	1,C192,C193,C194,C195	0.1u	GRM155R61C104KA88D	Murata Electronics North America	GRM155R61C104KA88D		smd_size0402	
23	2	C115,C118	1u	C1220X5R1A105M085AC	TDK Corporation	C1220X5R1A105M085AC		508	
24	0	C120,C121	A/R	GRM155R61C104KA88D	Murata Electronics North America	GRM155R61C104KA88D		smd_size0402	DNI
25	3	C130,C135,C138	1u	C1005X5R1A105K	TDK Corporation	C1005X5R1A105K		C0402_NO_SS	
26	2	C134,C148	10u	CL21B106K0QNNNE	Samsung Electro-Mechanics America, Inc	CL21B106K0QNNNE		805	
27	1	C150	022uF	C0603C223J3RACTU	Kemet	C0603C223J3RACTU		603	
28	1	C151	390p	06035A391JAT2A	AVX Corporation	06035A391JAT2A		603	
29	0	C160	8200p	C1608C0G1E822J	TDK Corporation	C1608C0G1E822J		603	DNI
30	0	C161	0.39u	C0603C394K4RACTU	Kemet	C0603C394K4RACTU		603	DNI
31	0	C163	100p	C1608C0G1H101J	TDK Corporation	C1608C0G1H101J		603	DNI
32	0	C164,C174	0.1u	0603YC104KAT2A	AVX Corporation	0603YC104KAT2A		603	DNI
33	0	C169	10u	TAJA106M016RNJ	AVX Corporation	TAJA106M016RNJ		smd_size3216	DNI
34	10	6,C228,C236,C238,C240,C	0.1u	0603YC104KAT2A	AVX Corporation	0603YC104KAT2A		603	
35	2	C185,C186	47p	GRM1535C1H470JDD5D	Murata Electronics North America	GRM1535C1H470JDD5D		C0402_NO_SS	
36	4	C202,C212,C221,C231	1u	C1206C105K4RACTU	Kemet	C1206C105K4RACTU		smd_size1206	
37	4	C205,C215,C224,C233	2.2n	CGA3E2X7R1H222K080AA	TDK Corporation	CGA3E2X7R1H222K080AA		smd_size0603	
38	1	C210	1uF	C1005X5R1C105K050BC	TDK	C1005X5R1C105K050BC		C0402_NO_SS	
39	1	FMC	ASP-134488-01_0	SEAM-40-02.0-S-10-2-A-K-TR	Samtec Inc	SEAM-40-02.0-S-10-2-A-K-TR		conn_SEAM_040	

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40	6	1.8.GND3.0.GND	TP_BLACK	5006	Keystone	5006		tp_500x_50	
41	1	JP1	Jumper_1x3_100_430L					HDR_THVT_1x3	(SHUNT 1-2)
42	1	JP2	HDR-1x2	TSW-102-07-G-S	Samtec Inc	TSW-102-07-G-S		blkcon_2x1	
43	0	J1	HDR-1x4	TSW-104-07-G-S	Samtec Inc	TSW-104-07-G-S		blkcon_4x1	DNI
44	2	J2,J3	HDR-1x4	TSW-104-07-G-S	Samtec Inc	TSW-104-07-G-S		blkcon_4x1	
45	0	LMKSPI	HDR2x5	TSW-105-07-G-D	Samtec Inc	TSW-105-07-G-D		blkcon_5x2	DNI
46	3	LMK_RESET	PUSH_BUTTON	PTS635SK25SMTR LFS	C&K Components	PTS635SK25SMTR LFS		evqppd	
47	0	L1,L2,L3,L4	1u	0603LS-102XJLB	Coilcraft	0603LS-102XJLB		coilcraft_size0603	DNI
48	0	L5,L8,L9,L12	A/R	0402HP-13NXGLU	Coilcraft	0402HP-13NXGLU		coilcraft_size0402	DNI
49	0	L6,L7,L10,L11	A/R	0603CS-68NXGLU	Coilcraft	0603CS-68NXGLU		coilcraft_size0603	DNI
50	9	26,L27,L28	INDUCTOR FERRITE/SM	BLM18SG331TN1D	Murata Electronics North America	BLM18SG331TN1D		r0603	
51	6	T6	TP	-	-	-		VIA85D55	
52	3	RA/TRIGRDY	LED	LTST-C170KGKT	LITEON	LTST-C170KGKT		LED_0805	
53	3	Q2,Q3,Q4	SSM3K37MFV,L3F	SSM3K37MFV.L3F	Toshiba	SSM3K37MFV.L3F		sof-723	
54	0	VINB-,VINA+,REFCLK	CLK_DIFF	142-0701-851	Johnson	142-0701-851		con_sma-edge	DNI
55	9	R79,R94,R97	0	ERJ-2GE0R00X	Panasonic	ERJ-2GE0R00X		C0402_NO_SS	
56	8	R24,R25	0	ERJ-1GE0R00C	Panasonic	ERJ-1GE0R00C		C0201_NO_SS	
57	4	R10,R11,R22,R23	33, 1%	ERJ-2RKF33R0X	Panasonic - ECG	ERJ-2RKF33R0X		C0402_NO_SS	
58	0	R14,R15,R28,R29	A/R	-	-	-		C0201_NO_SS	DNI
59	2	R16,R27	10	ERJ-2GEJ100X	Panasonic	ERJ-2GEJ100X		C0402_NO_SS	
60	0	R17	499	ERJ-2RKF4990X	Panasonic	ERJ-2RKF4990X		C0402_NO_SS	DNI
61	0	R31,R40,R145	0	ERJ-2GE0R00X	Panasonic	ERJ-2GE0R00X		C0402_NO_SS	DNI
62	0	R32	24k	ERJ-2GEJ243X	Panasonic Electronic Components	ERJ-2GEJ243X		C0402_NO_SS	DNI
63	0	R33	10K	CRCW040210K0FKED	Vishay Dale	CRCW040210K0FKED		C0402_NO_SS	DNI
64	0	R36,R37,R38,R39	39, 1%	ERJ-2RKF39R0X	Panasonic	ERJ-2RKF39R0X		C0402_NO_SS	DNI
65	1	R50	100	ERJ-1GEF1000C	Panasonic Electronic Components	ERJ-1GEF1000C		201	
66	12	R121,R122,R123,R124,R1	10K	CRCW040210K0FKED	Vishay Dale	CRCW040210K0FKED		C0402_NO_SS	
67	21	R129,R130,R131,R132,R13	22	ERJ-2RKF22R0X	Panasonic Electronic Components	ERJ-2RKF22R0X		C0402_NO_SS	
68	3	R57,R58,R68	56	ERJ-2GEJ560X	Panasonic - ECG	ERJ-2GEJ560X		smd_size0402	
69	3	R69,R119,R120	0	ERJ-3GEY0R00V	Panasonic Electronic Components	ERJ-3GEY0R00V		603	
70	0	R70	100	ERJ-2RKF1000X	Panasonic - ECG	ERJ-2RKF1000X		C0402_NO_SS	DNI
71	1	R71	100	ERJ-2RKF1000X	Panasonic - ECG	ERJ-2RKF1000X		C0402_NO_SS	
72	4	R90,R91,R92,R93	121	CRCW0402121RFKED	Vishay Dale	CRCW0402121RFKED		C0402_NO_SS	
73	9	R98,R99,R160,R163,R167, R168,R171,R175,R178	1k	ERJ-2RKF1001X	Panasonic - ECG	ERJ-2RKF1001X		smd_size0402	
74	1	R100	470	RC0603FR-07470RL	Yageo	RC0603FR-07470RL		603	
75	0	R101,R102	A/R	CRCW0402200RFKED	Vishay Dale	CRCW0402200RFKED		C0402_NO_SS	DNI
76	0	R103	0	ERJ-3GEY0R00V	Panasonic Electronic Components	ERJ-3GEY0R00V		603	DNI
77	0	R104	3.30k	RC0603FR-073K3L	Yageo	RC0603FR-073K3L		603	DNI
78	1	R107	49.9	ERJ-2RKF49R9X	Panasonic - ECG	ERJ-2RKF49R9X		C0402_NO_SS	
79	2	R108,R109	200	CRCW0402200RFKED	Vishay Dale	CRCW0402200RFKED		C0402_NO_SS	
80	0	R146,R148,R150,R153,R15	24k	CRCW040224K0JNED	Vishay Dale	CRCW040224K0JNED		smd_size0402	DNI
81	0	R6	15k	ERJ-2RKF1502X	Panasonic Electronic Components	ERJ-2RKF1502X		smd_size0402	DNI
82	0	5,R236	A/R	-	-	-		smd_size0402	DNI
83	1	R162	200	CRCW0402200RFKED	Vishay Dale	CRCW0402200RFKED		smd_size0402	
84	1	R164	10K	CRCW040210K0FKED	Vishay Dale	CRCW040210K0FKED		smd_size0402	
85	1	R166	806	ERJ-2RKF8060X	Panasonic - ECG	ERJ-2RKF8060X		smd_size0402	
86	1	R170	2.10K	CRCW04022K10FKED	Vishay Dale	CRCW04022K10FKED		smd_size0402	
87	1	R177	2.32K	CRCW04022K32FKED	Vishay Dale	CRCW04022K32FKED		smd_size0402	
88	0	R179,R180,R181	A/R	-	-	-		603	DNI
89	2	R217,R218	300	ERJ-2RKF3000X	Panasonic Electronic Components	ERJ-2RKF3000X		402	
90	1	R219	75	ERJ-2RKF75R0X	Panasonic Electronic Components	ERJ-2RKF75R0X		402	
91	3	R220,R221,R234	0	RC0402JR-070RL	Yageo	RC0402JR-070RL		C0402_NO_SS	
92	4	W3.SCREW4	Screw for Standoff	PMSSS 440 0075 PH	BUILDING FASTENERS	PMSSS 440 0075 PH			MP2
93	4	STANDOFF3,STANDOFF4	Board Standoff	1648-440-AL	RAF Electronic Hardware	1648-440-AL			MP3
94	6	T1,T2,T3,T4,T6,T7	MABA-007159-000000	MABA-007159-000000	M/A-COM Technology Solutions	MABA-007159-000000		MABA-007159-000000	
95	0	T5	ADT2-1T-1P+	ADT2-1T-1P+	Mini-Circuits	ADT2-1T-1P+		ADT1-1WT	DNI
96	0	T8,T9	TCM4-19+	TCM4-19+	Mini-Circuits	TCM4-19+		db714	DNI
97	1	USB	USB_MINI_AB_MNE20-5G5P10	6.51305E+11	Würth Electronics Inc	6.51305E+11		CON_SMRT_USBMNE20_F	

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
98	0	U3	LMH6521	LMH6521SQE/NOPB	Texas Instruments	LMH6521SQE/NOPB		32LLP_SQA32A	DNI
99	1	U6	FT245RL	FT245RL-REEL	FTDI, Future Technology Devices International Ltd	FT245RL-REEL		FT245RL	
100	1	U7	LP5900SD-1.8/NOPB	LP5900SD-1.8/NOPB	Texas Instruments	LP5900SD-1.8/NOPB		sc-mkt-sdb06a_6lp	
101	4	U8,U9,U10,U11	LP3878-ADJ	LP3878SD-ADJ/NOPB	Texas Instruments	LP3878SD-ADJ/NOPB		sc-mkt-sdc08a_llp	
102	1	U12	ADC16DX370 or LM97937	ADC16DX370RMET or LM97937RMET	Texas Instruments	ADC16DX370RMET or LM97937RMET		qfn56_0p5	
103	1	U13	LMK04828BISQ	LMK04828BISQ	Texas Instrument	LMK04828BISQ		sc-mkt-sqa64a	
104	3	U14,U15,U16	SN74AVC4T774	SN74AVC4T774PWR	Texas Instruments	SN74AVC4T774PWR		tssop16_pw	
105	0	VSP1.8,VA3.0_LED,V_XO3P3,V_VCXO3p3,VLMK3p3,VAMP	TP, RED	5005	Keystone	5005		tp_500x_50	DNI
106	4	VD1p2,VA1p2,VA1p8,VA3.0	TP, RED	5005	Keystone	5005		tp_500x_50	
107	0	Y1	CCHD-950-61.44	CCHD-950-25-61.440	Crystek Corporation	CCHD-950-25-61.440		soic6_100_wg274	DNI
108	0	Y2	CWX823-012.288M	CWX823-012.288M	Connor-Winfield	CWX823-012.288M		CWX813	DNI
109	0	Y3	CVHD-950-122.88	CVHD-950-122.880	Crystek Corporation	CVHD-950-122.880		soic6_100_wg274	DNI
110	1	Z, SH-H12	SHUNT-HEADER						SHUNT FOR HEADER
111	12	Z1,Z2,Z3,Z4,Z6,Z7,Z9,Z11,Z12,Z13,Z14,Z17	NFM41PC204F1H3	NFM41PC204F1H3L	Murata Electronics North America	NFM41PC204F1H3L		rnm41p	

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