

Bill of Materials

TI DESIGNS

TIDA-00823

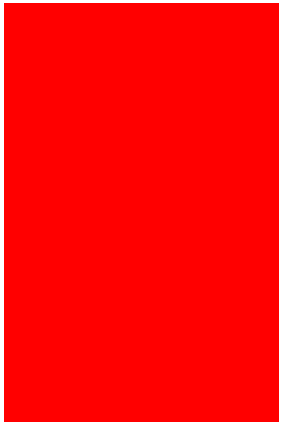
Item	Qty	Part Reference	Value	PCB Footprint	Mfr_Name	Mfr_Part_Number	Note
1	4	C1 C3 C14 C16	.01uF	0306	MURATA	LLL185R71E103MA01L	
2	4	C2 C4 C15 C17	2200pF	0306	MURATA	LLL185R71H222MA01L	
3	14	C5 C10 C13 C18 C24 C27 C101 C104 C197 C198 C200-C203	.01uF	0402	MURATA	GRM155R71H103JA88D	
4	0	C6 C19	5.6pF	0402	AVX CORP	MK02275R6BAT2A_DNI	DNI
5	2	C7 C20	9pF	0402	MURATA	GJM1555C1H9R0CB01D	
6	2	C8 C21	6.2pF	0402	MURATA	GJM1555C1H6R2CB01D	
7	32	C9 C12 C23 C26 C35 C65 C73-C75 C79-C84 C86-C91 C93 C95 C97 C117-C119 C122-C124 C132 C133	.1uF	0402	MURATA	GRM155R71C104KA88D	
8	2	C11 C25	10uF	TANT_A	AVX	TPSA106K010R0900	LOW ESR/OR EQUIVALENT
9	38	C28-C34 C36-C62 C66 C67 C70 C71	.1uF	0201	MURATA	GRM033R61A104KE15D	
10	16	C63 C147-C149 C158-C160 C171-C173 C182-C184 C193-C195	.01uF	0603	AVX	06035C103JAT2A	
11	0	C64 C72	.1uF	0402	MURATA	GRM155R71C104KA88D_DNI	DNI
12	2	C68 C69	.01uF	0201	TDK	C0603X5R1A103K030BA	
13	1	C76	.68uF	0402	MURATA	GRM155F50J684ZE01D	
14	3	C77 C120 C121	47pF	0402	MURATA	GRM1555C1H470FA01D	
15	1	C78	3900pF	0402	MURATA	GRM155R71H392KA01D	
16	2	C85 C92	100pF	0603	AVX CORP	06031A101GAT2A	
17	4	C94 C127 C138 C162	10uF	0603	TDK	C1608X5R1C106M080AB	
18	1	C96	2200pF	0402	MURATA	GRM155R71E222KA01D	
19	1	C98	10pF	0402	MURATA	GRM1555C1H100JA01D	
20	9	C99 C102 C105 C108 C112-C116	1uF	0402	TDK	C1005X5R1C105K050BC	
21	4	C100 C103 C129 C136	10uF	3528	KEMET	T520B106M016ATE100	LOW ESR/OR EQUIVALENT
22	0	C106 C107 C109-C111	.01uF	0402	MURATA	GRM155R71H103JA88D_DNI	DNI
23	1	C125	47uF	TANT_B	AVX	TPSB476K010R0250	
24	16	C126 C140 C145 C150 C151 C156 C161 C164 C169 C174 C175 C180 C185 C186 C191 C196	10uF	0805	MURATA	GRM21BR61E106KA73L	
25	4	C128 C135 C139 C163	22uF	0603	TDK CORP	C1608X5R0J226M080AC	
26	7	C130 C137 C141 C152 C165 C176 C187	0.1uF	0603	AVX	0603YC104KAT2A	
27	2	C131 C199	1000pF	0603	KEMET	C0603C102K3RACTU	
28	10	C142 C146 C153 C157 C166 C170 C177 C181 C188 C192	1uF	0603	TDK	C1608X7R1E105K080AB	
29	5	C143 C154 C167 C178 C189	47uF	1206	MURATA	GRM31CR61A476ME15L	

30	5	C144 C155 C168 C179 C190	33uF	TANT_B	AVX	TPSB336K016R0350	
31	4	D1-D4	LED GREEN	LED_1206	LITE ON	LTST-C150KGKT	
32	0	F1	FUSE 10A 63V FAST	1206	TE Connectivity	1206SFF200F/63-2_DNI	DNI
33	16	FB1-FB11 FB13-FB17	120 OHM @ 100MHz	1206	MURATA	BLM31PG121SN1L	
34	1	FB12	1k OHM @ 100MHz	1806	MURATA	BLM41PG102SN1L	
35	2	FLT1 FLT2	FILTER LC HIGH FREQ, .2uF	1806_BEAD_NFM41P	MURATA	NFM41PC204F1H3L	
36	5	J1-J5	CONN, SMA, JACK, 50 OHM, EDGE MNT	SMA_SMEL_DUAL_PSF-S01_250x215	Johnson Components	142-0711-821	
37	1	J6	CONN, SMA, JACK, 50 OHM, THVT	SMA_THVT_312x312	Johnson Components	142-0701-201	
38	1	J7	CON, SMVT, HS, FIELD ARRAY, 400POS, MALE	CON_SMVT_40x10_SEAM_MTG	SAMTEC	SEAM-40-02.0-S-10-2-A-K-TR	
39	1	J8	CONN, USB MINI AB, SMT	CON_SMRT_USBMNE20_F	WURTH ELEKTRONIK	651305142821	
40	1	J9	CONN, JACK, PWR, MINI, R/A, TH	CON_RAPC722_JACK_THVT_3	SWITCHCRAFT	RAPC722X	
41	2	JP1 JP2	HDR, THVT, 2POS, .100	HDR_THVT_1x2_100_M	SAMTEC	HTSW-102-07-G-S	
42	4	L1 L3 L5 L7	7.5nH	ind_0603	COILCRAFT	0603CS-7N5XGEU	
43	4	L2 L4 L6 L8	18nH	ind_0603	COILCRAFT	0603CS-18NXGEU	
44	1	L9	1.5uH	2016	TOYO	1286AS-H-1R5M	
45	2	MT1 MT2	STANDOFF, FEMALE, 4-40 X 1 3/16", AL	MFG125_PLATED	RAF	1648-440-AL	STANDOFF
46	0	PP1	PROBE POINT	PROBE_POINT_30PAD	N/A	N/A	
47	1	Q1	CSD17313Q2	mosfet_8_2mmx2mm_0p65	Texas Instruments	CSD17313Q2	
48	4	R2 R14 R17 R25	4.99	0402	VISHAY/DALE	CRCW04024R99FKED	
49	0	R3 R10	127	0402	PANASONIC	ERJ-2RKF1270X_DNI	DNI
50	0	R4 R15 R19 R26	A/R	0402	DNI	DNI	DNI
51	4	R5 R9 R20 R23	53.6	0402	PANASONIC	ERA-2AEB53R6X	
52	9	R7 R21 R38 R39 R41 R64 R67 R119 R125	0	0402	PANASONIC	ERJ-2GE0R00X	
53	0	R11	365	0402	PANASONIC	ERJ-2RKF3650X_DNI	DNI
54	6	R12 R18 R22 R42 R49 R51	49.9	0402	PANASONIC	ERJ-2RKF49R9X	
55	4	R16 R24 R29 R33	20	0402	PANASONIC	ERJ-2RKF20R0X	
56	5	R27 R28 R30 R31 R74	1k	0402	PANASONIC	ERJ-2RKF1001X	
57	2	R32 R34	100	0201	PANASONIC	ERJ-1GEF1000C	
58	1	R36	620	0402	PANASONIC	ERJ-2GEJ621X	
59	1	R37	39k	0402	PANASONIC	ERJ-2GEJ393X	
60	0	R40	100	0402	PANASONIC	ERJ-2RKF1000X_DNI	DNI
61	4	R43 R44 R46 R47	240	0402	PANASONIC	ERJ-2RKF2400X	
62	0	R45 R54 R55 R57 R120-R124 R126 R131 R132	0	0402	PANASONIC	ERJ-2GE0R00X_DNI	DNI
63	2	R48 R58	100	0402	PANASONIC	ERJ-2RKF1000X	
64	3	R50 R52 R53	750	0603	VISHAY DALE	CRCW0603750RFKEA	
65	1	R56	2.1k	0402	PANASONIC	ERJ-2RKF2101X	
66	1	R59	48.7k	0402	PANASONIC	ERJ-2RKF4871X	
67	3	R60-R62	4.75k	0402	PANASONIC	ERJ-2RKF4751X	
68	0	R63 R82 R84 R85 R89 R91 R92 R99 R102 R104 R106 R109 R111 R113-R115 R117 R118	0	0603	PANASONIC	ERJ-3GEY0R00V_DNI	DNI
69	3	R65 R69 R70	22.1	0402	PANASONIC	ERJ-2RKF22R1X	
70	14	R68 R83 R86 R87 R90 R93 R94 R100 R101 R103 R107 R108 R110 R116	0	0603	PANASONIC	ERJ-3GEY0R00V	
71	1	R76	1.05M	0603	VISHAY DALE	CRCW06031M05FKEA	
72	1	R77	200k	0603	PANASONIC	ERJ-3EKF2003V	
73	5	R78 R88 R95 R105 R112	47.5k	0603	PANASONIC	ERJ-3EKF4752V	
74	1	R80	590k	0603	PANASONIC	ERJ-3EKF5903V	

75	2	R81 R98	162k	0603	PANASONIC	ERJ-3EKF1623V	
76	1	R96	301k	0603	PANASONIC	ERJ-3EKF3013V	
77	0	SJP1	JUMPER_L_0603_SMT	JUMPER_SMD_L_0603	DNI	DNI	
78	0	SJP2	SOLDER JUMPER, 0603	JUMPER_SMT_1x2_0603	DNI	DNI	SHUNT 1-2
79	0	SJP3	JUMPER_L_0603_SMT	JUMPER_SMD_L_0603	DNI	DNI	SHUNT 2-3
80	1	SW1	SWITCH, SMT, PUSHBUTTON, SPST	SW_SMVT_SPST_EVQPJX_2	PANASONIC	EVQ-PNF04M	
81	1	T1	JTX-2-10T+	XFMR_6_310X280_100	MINI-CIRCUITS	JTX-2-10T+	
82	1	T2	JTX-2-10T+	XFMR_6_310X280_100	MINI-CIRCUITS	JTX-2-10T+	
83	9	TP1 TP7-TP10 TP13-TP16	RED	TESTPOINT_62DRILL_THM	KEYSTONE	5000	
84	7	TP2-TP6 TP11 TP12	BLK	TESTPOINT_62DRILL_THM	KEYSTONE	5001	
85	1	U1	LMH3401	QFN_14_98x98_0P50MM	Texas Instruments	LMH3401IRMS	
86	1	U2	LMH6401	UQFN_16_118x118_0P5mm_RMZ	Texas Instruments	LMH6401IRMZ	
87	1	U3	ADS54J60	QFN_72_10MMX10MM_0P50MM_PWRPAD	Texas Instruments	ADS54J60IRGC	
88	1	U4	LMK04828	QFN_64_360X360_0P50MM_PWRPAD	Texas Instruments	LMK04828BISQ/NOPB	
89	1	U5	SN65LVDS4	QFN_10_81X61_RSE	Texas Instruments	SN65LVDS4RSET	
90	2	U6 U8	TXB0104	VQFN_14_138x138_0P50_RGY	Texas Instruments	TXB0104RGYR	
91	1	U7	FT245RL	SSOP_28_413x220_26	FTDI Chip	FT245RL-REEL	
92	1	U9	TPS63050	DSBGA_12_1P56MMx1P16MM_YFF	Texas Instruments	TPS63050YFF	
93	1	U10	TPS2400	DBV5	Texas Instruments	TPS2400DBVT	
94	2	U11 U15	TPS82085	uSIL_8_3MMx2p8MM_0p65mm	Texas Instruments	TPS82085SIL	
95	5	U12-U14 U16 U17	TPS7A8300	VQFN_20_138x138_0P50_RGR	Texas Instruments	TPS7A8300RGR	
96	1	Y1	122.88MHz	VCXO_6_CUSTOM	Crystek	CVHD-950-122.880	
97	1		BARE BOARD, TSW54J60		TTM	TSW54J60 REV B	
98	2		SCREW, 4-40 X 3/4", PHIL, SS		BUILDING FASTENERS	PMSSS 440 0075 PH	SCREW FOR STANDOFF
99	2	SEE NOTE 3	SHUNT-JUMPER-0603		PANASONIC	ERJ-3GEY0R00V	SHUNT FOR JUMPER

NOTES:

1. USE WATER SOLUBLE FLUX DURING BOARD ASSEMBLY.
2. ASSEMBLY MUST BE RoHS COMPLIANT AND LEAD FREE.
3. INSTALL 99:
 - SP2 PINS 1-2
 - SP3 PINS 2-3
4. DNI - DO NOT INSTALL THIS COMPONENT.



IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Buyers") who are developing systems that incorporate TI semiconductor products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products.

TI reference designs have been created using standard laboratory conditions and engineering practices. **TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design.** TI may make corrections, enhancements, improvements and other changes to its reference designs.

Buyers are authorized to use TI reference designs with the TI component(s) identified in each particular reference design and to modify the reference design in the development of their end products. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN, including but not limited to any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

TI REFERENCE DESIGNS ARE PROVIDED "AS IS". TI MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. TI DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO TI REFERENCE DESIGNS OR USE THEREOF. TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY BUYERS AGAINST ANY THIRD PARTY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON A COMBINATION OF COMPONENTS PROVIDED IN A TI REFERENCE DESIGN. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY AND WHETHER OR NOT TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING IN ANY WAY OUT OF TI REFERENCE DESIGNS OR BUYER'S USE OF TI REFERENCE DESIGNS.

TI reserves the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques for TI components are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

Reproduction of significant portions of TI information in TI data books, data sheets or reference designs is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous failures, monitor failures and their consequences, lessen the likelihood of dangerous failures and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in Buyer's safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed an agreement specifically governing such use.

Only those TI components that TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components that have **not** been so designated is solely at Buyer's risk, and Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.