

Bill of Materials

TI DESIGNS
TIDA-00070

Item	Quantity	Reference	Note	Part	Foot Print	Part Number	Manufacturer	Tol	Volt	Rating
1	3	C1,C10,C18		10uF	603	ECJ-1VB0J106M	Panasonic			
2	22	C11,C12,C13,C14,C19,C20,		0.1uF	201	GRM033R60J104KE19D	Murata			
3	2	C15,C16		.22uF	201	C0603X5R0J224M	TDK	20%	6.3V	
4	1	C17		2.2uF	402	C1005X5R0J225M	TDK	20%	6.3V	
5	2	C29,C37		1uF	603	ECJ-1V41E105M	Panasonic	20%	25V	
6	2	C30,C51		27pF	402	CC0402JRN09BN270	Yageo	5%	50V	
7	2	C31,C43		100uF	1206	C1206C107M9PACTU	Kemet	20%	6.3V	
8	2	C32,C47		.01uF	402	CC0402KRX7R9BB103	Yageo	10%	50V	
9	2	C33,C35		4.7uF	603	C0603C475K8PACTU	Kemet	10%	10V	
10	9	C34,C42,C50,C52,C53,C54, C55,C56,C57		0.1uF	402	CC0402KRX5R7BB104	Yageo	10%	16V	
11	1	C36		10uF	805	GRM21BR71A106KE51L	Murata	10%	10V	
12	1	C38		.1uF	402	ECJ-0EB1C104K	Panasonic	10%	16V	
13	1	C39		10nF	402	C1005X7R1E103K	TDK	10%	25V	
14	2	C40,C44		22uF	1206	GRM31CR60J226KE19L	Murata	10%	6.3V	
15	1	C41		33pF	402	GRM1555C1H330JZ01D	Murata	2%	25V	
16	2	C45,C46	DNI	22pF	402	04025A220KAT2A	AVX	10%	50V	
17	2	C48,C49		10uF	603	ECJ-1VB0J106M	Panasonic	20%	6.3V	
18	1	C58		4.7uF	TANT_A	TAJA475K006RNJ	AVX	10%	6.3V	
19	1	D1		GREEN	diode_0805	DC1112H-TR	Stanley			
20	1	D2	DNI	GREEN	diode_0805	DC1112H-TR	Stanley			
21	1	FB1		68 ohm @ 100MHz	402	BKP1005HS680-T	Taiyo Yuden			
22	4	FB2,FB4,FB6,FB7		68 OHM @ 100MHz	1206	EXC-ML32A680U	Panasonic			
23	2	FB3,FB5		27uF	1206_BEAD_NFM31P	NFM31PC276B0J3	Murata			
24	1	FB9		1K @ 100MHz	603	BLM21AG102SN1D	Taiyo Yuden			
25	1	J1		HMTSW-106-07-G-S-.240	HDR_THVT_1x6_100_M	HMTSW-106-07-G-S-.240	SAMTEC			
26	1	J2		USB_MINI_AB_MNE20-5G5P10	CON_SMRT_USBMNE20	MNE20-5G5P10	ACON			
27	1	J3		CONN_QSH_30X2-D-A	conn_QSH_30X2-D-A					
28	4	J14,J15,J16,J17	DNI	HEADER 2POS	JUMPER2	22-28-4020	Molex			
29	2	L1,L2		2.2uH	LPS3015	LPS3015-222ML	Coilcraft			
30	1	Q1		DTC114EET1G	SOT_416_3_63x31	DTC114EET1G	ON Semiconductor			
31	1	Q2	DNI	DTC114EET1G	SOT_416_3_63x31	DTC114EET1G	ON Semiconductor			
32	1	R1		10K	402	ERJ-2RKF1002X	Panasonic			
33	2	R2,R7		10	402	RC0402FR-0710RL	YAGEO	1%		1/16W
34	2	R3,R23		10K	402	CRCW040210K0FKED	DALE	1%		1/10W
35	1	R4		10K	402	ERJ-2RKF1002X	Panasonic	1%		1/10W
36	1	R5		12K	402	RC0402FR-0712KL	Yageo	1%		1/16W
37	1	R6		1K	402	RC0402FR-071KL	Yageo	1%		1/16W
38	4	R8,R9,R11,R45		10K	402	RC0402FR-0710KL	Yageo			
39	1	R10		2.2K	402	RC0402FR-072K2L	Yageo			
40	1	R13		10K	402	MCR01MZPF1002	Rohm Semiconductor	1%		1/16W
41	1	R18		820K	402	ERJ-2RKF8203X	Panasonic	1%		1/16W
42	1	R19		191K	402	CRCW0402191KFKED	Vishay/Dale	1%		1/16W
43	1	R20		180K	402	MCR01MZPF1803	ROhm	1%		1/16W

1	3	C1,C10,C18		10uF	603	ECJ-1VB0J106M	Panasonic			
44	1	R21		182K	402	CRCW0402182KFKED	Vishay/Dale	1%		1/16W
45	3	R22,R26,R27		0	201	ERJ-1GE0R00C	Panasonic	5%		
46	1	R24		10K	201	ERJ-1GEF1002C	Panasonic	1%		1/20W
47	1	R25		330	402	RC0402FR-07330RL	Yageo			
48	5	R28,R30,R31,R32,R33	DNI	10K	402	CRCW040210K0FKED	DALE	1%		1/10W
49	1	R29	DNI	330	402	RC0402FR-07330RL	Yageo			
50	4	R34,R35,R36,R37		0	402	ERJ-2GE0R00X	Panasonic			
51	4	R38,R39,R40,R41	DNI	0	402	ERJ-2GE0R00X_DNI	Panasonic			
52	1	R42		0	603	ERJ-3GEY0R00V	Panasonic			
53	1	R46		4.7K	402	ERJ-2RKF4701X	Panasonic			
54	1	SW1		PROGRAMN	SW_RESET_PTS635	PTS635SL43LFS	C&K Components			
55	1	SW2	DNI	PROGRAMN	SW_RESET_PTS635	PTS635SL43LFS	C&K Components			
56	1	TP1		Testloop_Black	testpoint_62dia	5011	KEYSTONE			
57	1	TP2		Testloop_Red	testpoint_62dia	5010	Keystone			
58	1	U1		LFE3-35E-FN484CES	BGA_484_1mm	LFE3-35E-FN484CES	Lattice			
59	1	U2	DNI	M25P16-VMW6TG	SOIC_8_197x157_50	M25P80-VMN6TP	Numonyx			
60	1	U3		FT2232H	LQFP_64_402x402_20	FT2232H	FTDI			
61	1	U4	TI Supplied	TPS62420	SON_DRC_10	TPS62420DRCR	Texas Instruments			
62	1	U5		TPS76933DBVT	SOT_5_118x67_57	TPS76933DBVT	Texas Instruments			
63	1	U6		93LC46B-I/SN	SOIC-8	93LC46B-I/SN	Microchip			
64	1	Y1		12MHz w/ 10pF	XTAL_4_SM_130x102	ABM8G-12.000MHZ-B4Y-	Abracon			
65	2	SCREW1,Z_STANDOFF	SCREW FOR STANDOFF	SCREW MACHINE PHILLIPS 4-40X1/4		PMS 440 0025 PH	B&F Fastener Supply			
66	2	FF2	STANDOFF	STANDOFF RND 4-40THR .875"L ALUM		1846	Keystone Electronics			

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.