Filename: Pro61BE.tmp

Variant: 001

Generated: 4/14/2016 11:01:14 AM

TID #: TIDA-01162



TIDA-01162 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-01162	Any	Printed Circuit Board	
2	C1, C2	2	22uF	GRM188R61A226ME15D	MuRata	CAP, CERM, 22 μF, 10 V, +/- 20%, X5R, 0603	0603
3	C3, C12	2	4.7uF	C2012X7R1A475M	TDK	CAP, CERM, 4.7 μF, 10 V, +/- 20%, X7R, 0805	0805
4	C4, C9, C11, C13	4	0.1uF	C0603C104K8RACTU	Kemet	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0603	0603
5	C5	1	1uF	GRM188R70J105KA01D	MuRata	CAP, CERM, 1 µF, 6.3 V, +/- 10%, X7R, 0603	0603
6	C6	1	3.3uF	C0603C335K9PACTU	Kemet	CAP, CERM, 3.3 µF, 6.3 V, +/- 10%, X5R, 0603	0603
7	C7, C14	2	1000pF	GRM188R71C102KA01D	MuRata	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0603	0603
8	C8	1	2.2uF	GRM188R60J225KE19D	MuRata	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X5R, 0603	0603
9	C10	1	47uF	GRM21BR61A476ME15	MuRata	CAP, CERM, 47 µF, 10 V, +/- 20%, X5R, 0805	0805
10	D1, D2	2	40V	DFLS240-7	Diodes Inc.	Diode, Schottky, 40 V, 2 A, AEC-Q101, PowerDl123	PowerDI123
11	D3, D4	2	Green	LTST-C171GKT	Lite-On	LED, Green, SMD	LED_0805
12	J1, J2, J3, J5, J6, J7	6		PEC01DAAN	Sullins Connector Solutions	Header, 2.54mm, 1x2, Tin, Black, TH	Header, 2.54mm, 2x1, TH
13	J4, J8	2		851-43-004-20-001000	Mill-Max	SOCKET .050" GRID SIP 4 POS R/A, TH	R/A 4x1 receptacle
14	Q1, Q2	2	30V	PMV45EN2R	NXP Semiconductor	MOSFET, N-CH, 30 V, 4.1 A, SOT-23	SOT-23
15	Q3, Q4	2	45 V	BC847BW,115	NXP Semiconductor	Transistor, NPN, 45 V, 0.1 A, AEC-Q101, SOT-323	SOT-323
	R1, R2, R3, R9, R12, R14, R16, R18	8	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
17	R4, R5	2	240	CRCW0603240RJNEA	Vishay-Dale	RES, 240, 5%, 0.1 W, 0603	0603
18	R6, R7	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
19	R8, R17	2	47k	CRCW060347K0JNEA	Vishay-Dale	RES, 47 k, 5%, 0.1 W, 0603	0603
20	R10, R20	2	50k	3352T-1-503LF	Bourns	Trimming Potentiometer, 50K, 0.5W, TH	9.53x8.89mm
21	R11, R21	2	330	CRCW0603330RJNEA	Vishay-Dale	RES, 330, 5%, 0.1 W, 0603	0603
22	R13	1	40.2k	CRCW060340K2FKEA	Vishay-Dale	RES, 40.2 k, 1%, 0.1 W, 0603	0603
23	R15	1	127k	CRCW0603127KFKEA	Vishay-Dale	RES, 127 k, 1%, 0.1 W, 0603	0603
24	R19	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
25	TP1, TP2, TP5, TP6, TP7, TP8, TP9, TP10	8	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
26	TP3, TP11	2		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
27	TP4, TP12	2		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
28	U1, U3	2		MSP430G2153IPW20R	Texas Instruments	16 MHz Mixed Signal Microcontroller with 1 KB Flash, 256 B SRAM and 24 GPlOs, -40 to 85 degC, 20-pin SOP (PW), Green (RoHS & no Sb/Br)	
29	U2	1		LP2981-33DBVR	Texas Instruments	150-mA Low-noise Low-dropout Regulator With Shutdown, DBV0005A	DBV0005A
30	U4	1		DRV8850RGYR	Texas Instruments	Low-Voltage H-Bridge IC With LDO Regulator, RGY0024B	RGY0024B
	U5	1		SN74LVC2G14DCKR	Texas Instruments	Dual Schmitt-Trigger Inverter, DCK0006A	DCK0006A
32	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

IMPORTANT NOTICE FOR TI DESIGN INFORMATION AND RESOURCES

Texas Instruments Incorporated ('TI") technical, application or other design advice, services or information, including, but not limited to, reference designs and materials relating to evaluation modules, (collectively, "TI Resources") are intended to assist designers who are developing applications that incorporate TI products; by downloading, accessing or using any particular TI Resource in any way, you (individually or, if you are acting on behalf of a company, your company) agree to use it solely for this purpose and subject to the terms of this Notice.

TI's provision of TI Resources does not expand or otherwise alter TI's applicable published warranties or warranty disclaimers for TI products, and no additional obligations or liabilities arise from TI providing such TI Resources. TI reserves the right to make corrections, enhancements, improvements and other changes to its TI Resources.

You understand and agree that you remain responsible for using your independent analysis, evaluation and judgment in designing your applications and that you have full and exclusive responsibility to assure the safety of your applications and compliance of your applications (and of all TI products used in or for your applications) with all applicable regulations, laws and other applicable requirements. You represent that, with respect to your applications, you have all the necessary expertise to create and implement safeguards that (1) anticipate dangerous consequences of failures, (2) monitor failures and their consequences, and (3) lessen the likelihood of failures that might cause harm and take appropriate actions. You agree that prior to using or distributing any applications that include TI products, you will thoroughly test such applications and the functionality of such TI products as used in such applications. TI has not conducted any testing other than that specifically described in the published documentation for a particular TI Resource.

You are authorized to use, copy and modify any individual TI Resource only in connection with the development of applications that include the TI product(s) identified in such TI Resource. NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT OF TI OR ANY THIRD PARTY 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 products or services are used. Information regarding or referencing third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of TI Resources may require a license from a third party under the patents or other intellectual property of TI.

TI RESOURCES ARE PROVIDED "AS IS" AND WITH ALL FAULTS. TI DISCLAIMS ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, REGARDING TI RESOURCES OR USE THEREOF, INCLUDING BUT NOT LIMITED TO ACCURACY OR COMPLETENESS, TITLE, ANY EPIDEMIC FAILURE WARRANTY AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY YOU AGAINST ANY CLAIM, INCLUDING BUT NOT LIMITED TO ANY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON ANY COMBINATION OF PRODUCTS EVEN IF DESCRIBED IN TI RESOURCES OR OTHERWISE. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, DIRECT, SPECIAL, COLLATERAL, INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES IN CONNECTION WITH OR ARISING OUT OF TI RESOURCES OR USE THEREOF, AND REGARDLESS OF WHETHER TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

You agree to fully indemnify TI and its representatives against any damages, costs, losses, and/or liabilities arising out of your non-compliance with the terms and provisions of this Notice.

This Notice applies to TI Resources. Additional terms apply to the use and purchase of certain types of materials, TI products and services. These include; without limitation, TI's standard terms for semiconductor products http://www.ti.com/sc/docs/stdterms.htm), evaluation modules, and samples (http://www.ti.com/sc/docs/sampterms.htm).

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2017, Texas Instruments Incorporated