Filename: ProC3BA.tmp

variant. 001

Generated: 8/25/2016 5:53:28 PM

TID #: TIDA-00377





Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-00377	Any	Printed Circuit Board	
2	C1	1	3.3uF	C3225X7S2A335M200AB	TDK	CAP, CERM, 3.3 µF, 100 V, +/- 20%, X7S, 1210	1210
3	C2, C4	2	1uF	GRM188R61E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0603	0603
4	C3, C5	2	1000pF	GRM188R71E102KA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0603	0603
5	C6, C7, C8, C9, C10		0.1uF	GRM188R71C104KA01D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0603	0603
6	C11, C12	2	200pF	GRM1885C1H201JA01D	MuRata	CAP, CERM, 200 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
7	D1, D2, D4, D5, D8, D9, D10		75V	1N4448WX-TP	Micro Commercial Components	Diode, Switching, 75 V, 0.25 A, SOD-323	SOD-323
8	D6	1	78V	SMAJ78CA	Littelfuse	Diode, TVS, Bi, 78 V, 400 W, SMA	SMA
9	D7	1	18V	SMAZ18-13-F	Diodes Inc.	Diode, Zener, 18 V, 1 W, AEC-Q101, SMA	SMA
	J1, J2, J3, J4, J10, J11	6		5-146278-2	TE Connectivity	Header, 100mil, 2x1, Tin, TH	Header, 2x1, 100mil, TH
11	J5	1		282834-4	TE Connectivity	Terminal Block, 100mil, 4X1 TH	10.62x10x6.5 mm
12	J6, J7, J8, J9	4		5-146278-3	TE Connectivity	Header, 100mil, 3x1, Tin, TH	Header, 3x1, 100mil, TH
13	Q1	1	100 V	DSC2C01R0L	Panasonic	Transistor, NPN, 100 V, 0.02 A, SOT-23	SOT-23
14	Q2	1	40 V	MMBT3904LT1G	ON Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
15	Q3, Q4	2	100V	CSD19537Q3	Texas Instruments	MOSFET, N-CH, 100 V, 50 A, DQG0008A	DQG0008A
16	R1, R6, R25, R26	4	10.0Meg	CRCW080510M0FKEA	Vishay-Dale	RES, 10.0 M, 1%, 0.125 W, 0805	0805
17	R2	1	205k	CRCW0805205KFKEA	Vishay-Dale	RES, 205 k, 1%, 0.125 W, 0805	0805
18	R4	1	1.43Meg	CRCW08051M43FKEA	Vishay-Dale	RES, 1.43 M, 1%, 0.125 W, 0805	0805
19	R5, R7, R22	3	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
20	R8	1	3.74Meg	CRCW08053M74FKEA	Vishay-Dale	RES, 3.74 M, 1%, 0.125 W, 0805	0805
21	R9	1	2.94Meg	CRCW08052M94FKEA	Vishay-Dale	RES, 2.94 M, 1%, 0.125 W, 0805	0805
22	R10	1	1.30Meg	CRCW08051M30FKEA	Vishay-Dale	RES, 1.30 M, 1%, 0.125 W, 0805	0805
23	R11	1	93.1k	CRCW080593K1FKEA	Vishay-Dale	RES, 93.1 k, 1%, 0.125 W, 0805	0805
	R12		931	CRCW0805931RFKEA	Vishay-Dale	RES, 931, 1%, 0.125 W, 0805	0805
	R13, R20, R21	3	33Meg	RC0805JR-0733ML	Yageo America	RES, 33 M, 5%, 0.125 W, 0805	0805
	R14		6.49Meg	CRCW08056M49FKEA	Vishay-Dale	RES, 6.49 M, 1%, 0.125 W, 0805	0805
	R15		422k	CRCW0805422KFKEA	Vishay-Dale	RES, 422 k, 1%, 0.125 W, 0805	0805
28	R16		0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
29	R18, R19	2	124k	CRCW0402124KFKED	Vishay-Dale	RES, 124 k, 1%, 0.063 W, 0402	0402
	R23	1	402k	CRCW0805402KFKEA	Vishay-Dale	RES, 402 k, 1%, 0.125 W, 0805	0805
	R28		806k	CRCW0805806KFKEA	Vishay-Dale	RES, 806 k, 1%, 0.125 W, 0805	0805
	R29		2.80Meg	CRCW08052M80FKEA	Vishay-Dale	RES, 2.80 M, 1%, 0.125 W, 0805	0805
	SH-J1, SH-J2, SH- J3, SH-J4, SH- J6, SH-J7, SH- J8, SH-J9, SH- J10, SH-J11		1x2	SPC02SYAN	Sullins Connector Solutions	Shunt, 100mil, Flash Gold, Black	Closed Top 100mil Shunt
34	U1	1		LP339D	Texas Instruments	Quad, Low-Power, General Purpose Differential Comparator, D0014A	D0014A
35	U2, U7	2		ATL431AIDBZR	Texas Instruments	2.5V Low Iq Adjustable Precision Shunt Regulator, DBZ0003A	DBZ0003A
36	U3	1		SN74AUP2G08DCUR	Texas Instruments	LOW-POWER DUAL 2-INPUT POSITIVE-AND GATE, DCU0008A	DCU0008A
37	U4	1		SN74AUP1G74DQER	Texas Instruments	LOW-POWER SINGLE POSITIVE-EDGE-TRIGGERED D-TYPE FLIP- FLOP WITH CLEAR AND PRESET, DQE0008A	DQE0008A
38	U5	1		SN74AUP1G17DCKR	Texas Instruments	LOW-POWER SINGLE SCHMITT-TRIGGER BUFFER, DCK0005A	DCK0005A
39	U6	1		SN74AUP1G14DCKR	Texas Instruments	LOW-POWER SINGLE SCHMITT-TRIGGER INVERTER, DCK0005A	DCK0005A
40	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
41	H1, H2, H3, H4	0		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
	H5, H6, H7, H8	0		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
43	R3, R17, R24, R27	0		CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805

## IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ('TI") reference designs are solely intended to assist designers ("Designer(s)") who are developing systems that incorporate TI products. TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design.

Tl's provision of reference designs and any other technical, applications or design advice, quality characterization, reliability data or other information or services does not expand or otherwise alter Tl's applicable published warranties or warranty disclaimers for Tl products, and no additional obligations or liabilities arise from Tl providing such reference designs or other items.

TI reserves the right to make corrections, enhancements, improvements and other changes to its reference designs and other items.

Designer understands and agrees that Designer remains responsible for using its independent analysis, evaluation and judgment in designing Designer's systems and products, and has full and exclusive responsibility to assure the safety of its products and compliance of its products (and of all TI products used in or for such Designer's products) with all applicable regulations, laws and other applicable requirements. Designer represents that, with respect to its applications, it has 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. Designer agrees that prior to using or distributing any systems that include TI products, Designer will thoroughly test such systems and the functionality of such TI products as used in such systems. Designer may not use any TI products in life-critical medical equipment unless authorized officers of the parties have executed a special contract specifically governing such use. Life-critical medical equipment is medical equipment where failure of such equipment would cause serious bodily injury or death (e.g., life support, pacemakers, defibrillators, heart pumps, neurostimulators, and implantables). Such equipment includes, without limitation, all medical devices identified by the U.S. Food and Drug Administration as Class III devices and equivalent classifications outside the U.S.

Designers are authorized to use, copy and modify any individual TI reference design only in connection with the development of end products that include the TI product(s) identified in that reference design. HOWEVER, 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 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 the reference design or other items described above 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 AND OTHER ITEMS DESCRIBED ABOVE ARE PROVIDED "AS IS" AND WITH ALL FAULTS. TI DISCLAIMS ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, REGARDING THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, 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 DESIGNERS AGAINST ANY CLAIM, INCLUDING BUT NOT LIMITED TO ANY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON ANY COMBINATION OF PRODUCTS AS DESCRIBED IN A TI REFERENCE DESIGN 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 THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, AND REGARDLESS OF WHETHER TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Tl's standard terms of sale for semiconductor products (<a href="http://www.ti.com/sc/docs/stdterms.htm">http://www.ti.com/sc/docs/stdterms.htm</a>) apply to the sale of packaged integrated circuit products. Additional terms may apply to the use or sale of other types of TI products and services.

Designer will fully indemnify TI and its representatives against any damages, costs, losses, and/or liabilities arising out of Designer's non-compliance with the terms and provisions of this Notice.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2016, Texas Instruments Incorporated