

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
C1	1	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	0402	GRM155R71C104KA88 D	MuRata		
C2, C3, C4, C5, C6	5	100uF	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1206	1206	GRM31CR60J107ME39 L	MuRata		
C8, C11, C17	3	1uF	CAP, CERM, 1 uF, 25 V, +/- 10%, X5R, 0402	0402	GRM155R61E105KA12 D	MuRata		
C13, C14, C18	3	10uF	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206	GRM31CR71E106KA12 L	MuRata		
C15	1	0.1uF	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X5R, 0402	0402	GRM155R61E104KA87 D	MuRata		
C16	1	0.1uF	CAP, CERM, 0.1 uF, 6.3 V, +/- 10%, X7R, 0402	0402	GRM155R70J104KA01 D	MuRata		
J1, J2	2		Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH	39357-0002	Molex		
L1	1	1uH	Inductor, Shielded, Powdered Iron, 1 uH, 14.8 A, 6.49 ohm, SMD	8.18x8.18mm	IHLP3232CZER1R0M11	Vishay-Dale		
R1, R5, R9	3	100k	RES, 100k ohm, 1%, 0.063W, 0402	0402	CRCW0402100KFKED	Vishay-Dale		
R2	1	49.9	RES, 49.9 ohm, 1%, 0.063W, 0402	0402	CRCW0402499FKED	Vishay-Dale		
R3	1	46.4k	RES, 46.4 k, 0.1%, 0.1 W, 0603	0603	RT0603BRD0746K4L	Yageo America		
R4	1	23.2k	RES, 23.2 k, 0.1%, 0.1 W, 0603	0603	RT0603BRD0723K2L	Yageo America		
R6	1	200k	RES, 200k ohm, 1%, 0.063W, 0402	0402	CRCW0402200KFKED	Vishay-Dale		
R7	1	150k	RES, 150k ohm, 1%, 0.063W, 0402	0402	CRCW0402150KFKED	Vishay-Dale		
R8	1	249k	RES, 249 k, 1%, 0.063 W, 0402	0402	CRCW0402249KFKED	Vishay-Dale		
R11	1	47.5k	RES, 47.5 k, 1%, 0.063 W, 0402	0402	CRCW040247K5FKED	Vishay-Dale		
R12	1	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
U1	1		High Performance, 8-A Single Synchronous Step-Down Converter, RVE0028A (VQFN-CLIP-28)	RVE0028A	TPS53513RVER	Texas Instruments	TPS53513RVET	Texas Instruments
C7	0	100uF	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1206	1206	GRM31CR60J107ME39 L	MuRata		
C9, C10	0	0.1uF	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	0603	0603YC104JAT2A	AVX		
C12	0	470pF	CAP, CERM, 470pF, 25V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1E471JA01 D	MuRata		
R10	0	1.0	RES, 1.0, 5%, 0.25 W, 0805	0805	CRM0805-JW-1R0ELF	Bourns		
R13	0	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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 the third party, or a license from TI 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/sampterm.htm) (<http://www.ti.com/sc/docs/sampterm.htm>).

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