PMP20199 REV A Bill of Materials



Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		PMP20199	Any	Printed Circuit Board	•
C1, C2	2	47uF	EEU-EE2G470S	Panasonic	CAP, AL, 47uF, 400V, +/-20%, TH	18x20mm
C3		0.22uF	890324025027CS		CAP, Film, 0.22 μF, 275 V, +/- 10%, TH	18x6x11.5mm
C4, C5	2	120uF	EKZN800ELL121MJ16S	Chemi-Con	CAP, AL, 120 µF, 80 V, +/- 20%, 0.09 ohm, TH	D10xL16mm
C6	1	1uF	GRM31CR72A105KA01L	MuRata	CAP, CERM, 1 µF, 100 V, +/- 10%, X7R, 1206	1206
C7	1	2200pF	DE2E3KY222MA2BM01	MuRata	CAP, CERM, 2200pF, 250V, +/-20%, KY, Radial D8x5mm	Radial D8x5mm
C8		4.7uF	GRM188R61C475KAAJ	MuRata	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X5R, 0603	0603
C9, C15, C16,		0.01uF	C1608X7R2A103K	TDK	CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0603	0603
C18					, , , , , , , , , , , , , , , , , , , ,	
C10, C13, C17,	4	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C20						
C11, C23	2	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0402	0402
C12	1	1uF	C1005X5R1E105K050BC	TDK	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0402	0402
C14	1	10uF	GRM31CR61H106KA12L	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X5R, 1206_190	1206_190
C19	1	1000pF	1812GC102KA1	AVX	CAP, CERM, 1000pF, 2000V, +/-10%, X7R, 1812	1812
C21, C22	2	0.1uF	C2012X7R2A104K	TDK	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805
D1		1.1V	DF1506S-T		Diode, Switching-Bridge, 600V, 1.5A, DF-S	DF-S
D2	1	100V	SMCJ100A	Littelfuse	Diode, TVS, Uni, 100V, 1500W, SMC	SMC
D3	1	1.05V	MURA160T3G	ON Semiconductor	Diode, Ultrafast, 600V, 1A, SMA	SMA
D4	1	400V	MURS340T3G		Diode, Ultrafast, 400 V, 3 A, SMC	SMC
D5, D9		200V	BAS21-TP		Diode, P-N, 200V, 200A, SOT-23	SOT-23
D6		58V	SMBJ58A-13-F		Diode, TVS, Uni, 58V, 600W, SMB	SMB
D8		Blue	LB Q39G-L2N2-35-1	OSRAM	LED, Blue, SMD	BLUE 0603 LED
F1	1		0443003.DR	Littelfuse	Fuse, 3 A, 250 V, SMD	FUSE
						10.1x3.12x3.13mm
F2	1		C1S 1.5	Bel Fuse	Fuse, 1.5A, 63V, SMD	1206
J1	1		770W-X2/10		AC Receptacle, 2.5A, R/A, TH	AC, Reception
	-				, , , , , , , , , , , , , , , , , , , ,	14.5x15x22 mm
J2, J3	2		1-406541-1	AMP	RJ-45, Right Angle, No LED, tab up	16.26x14.54x15.75
J4	1		TSW-105-07-G-D	Samtec	Header, 100mil, 5x2, Gold, TH	5x2 Header
L1	1	33uH	CDRH6D28NP-330NC	Sumida	Inductor, Shielded Drum Core, Ferrite, 33uH, 0.97A, 0.165 ohm, SMD	CDRH6D28
L2	1	10mH	744821110	Wurth Elektronik	Coupled inductor, 10 mH, 0.7 A, 0.35 ohm, +/- 30%, TH	15 x 18 x 7.5mm
L3	1	uH	ACM7060-301-2PL-TL	TDK	Coupled inductor, 5A, 0.01 ohm, SMD	6x3.5x7 mm
Q1		600V	AOD7S60		MOSFET, N-CH, 600V, 7A, DPAK	DPAK
Q2	1	100V	FDMC3612		MOSFET, N-CH, 100V, 3.3A, 3.3x1x3.3mm	3.3x1x3.3mm
R1, R11	2	2.00Meg	CRCW12062M00FKEA		RES, 2.00 M, 1%, 0.25 W, 1206	1206
R2		0	CRCW12060000Z0EA		RES, 0, 5%, 0.25 W, 1206	1206
R3		30.1	CRCW040230R1FKED		RES, 30.1 ohm, 1%, 0.063W, 0402	0402
R4	1	75.0k	CRCW040275K0FKED		RES, 75.0 k, 1%, 0.063 W, 0402	0402
R5	1	1.00k	CRCW04021K00FKED		RES, 1.00k ohm, 1%, 0.063W, 0402	0402
R6	1	31.6k	CRCW040231K6FKED		RES, 31.6 k, 1%, 0.063 W, 0402	0402
R7		0.36	CSRN2010FKR360		RES, 0.36, 1%, 1 W, 2010	2010
R8, R12, R14,	6	10.0k	ERJ-2RKF1002X		RES, 10.0 k, 1%, 0.1 W, 0402	0402
R23, R24, R25					, , , , , , , , , , , , , , , , , , , ,	
R9	1	22	CRCW120622R0JNEA	Vishay-Dale	RES, 22, 5%, 0.25 W, 1206	1206
R10, R13, R16,		75.0	CRCW040275R0FKED		RES, 75.0, 1%, 0.063 W, 0402	0402
R17		-			, , , , ,	

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R18	1	47	CRCW040247R0JNED	Vishay-Dale	RES, 47, 5%, 0.063 W, 0402	0402
R19	1	22.1	CRCW040222R1FKED	Vishay-Dale	RES, 22.1, 1%, 0.063 W, 0402	0402
R20	1	499	CRCW0603499RFKEA	Vishay-Dale	RES, 499, 1%, 0.1 W, 0603	0603
R21, R22	2	0.51	CRM0805-FX-R510ELF	Bourns	RES, 0.51 ohm, 1%, 0.25W, 0805	0805
R26	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
T1	1	140uH	RLTI-1141	Renco Electronics	Transformer, 140uH, TH	1110x685x895mil
T2	1	350uH	H6096NL	Pulse Engineering	TRANSFORMER/CMC MOD, GIGABIT POE+, SMT	12.2X6.6X18.16 mm
TP3, TP5	2	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP4	1	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP6	1	Yellow	5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
U1	1		UCC28700DBVR	Texas Instruments	Constant-Voltage, Constant-Current Controller With Primary-Side Regulation, DBV0006A	DBV0006A
U2	1		TPS23861PW	Texas Instruments	QUAD IEEE 802.3at POWER-OVER-ETHERNET PSE CONTROLLER, PW0028A	PW0028A
U3	1		TPS71533DCK	Texas Instruments	50 mA, 24 V, 3.2-mA Supply Current Low-Dropout Linear Regulator, DCK0005A	DCK0005A

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