

PMP10478 REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		PMP10478	Any	Printed Circuit Board	
2	C1, C7, C11, C16, C17	5	0.1uF	C1005X5R0J104K	TDK	CAP, CERM, 0.1uF, 6.3V, +/-10%, X5R, 0402	0402
3	C2	1	15uF	EEUED2G150	Panasonic	CAP, AL, 15uF, 400V, +/-20%, 1.909859 ohm, TH	12.5x20
4	C3	1	47uF	EEUED2G470S	Panasonic	CAP, AL, 47uF, 400V, +/-20%, 0.609529 ohm, TH	18x20
5	C4, C18	2	47uF	GRM31CR61A476KE15L	MuRata	CAP, CERM, 47uF, 10V, +/-10%, X5R, 1206	1206
6	C5	1	0.1uF	VJ1808Y104KXPAT5Z	Vishay-Vitramon	CAP, CERM, 0.1uF, 250V, +/-10%, X7R, 1808	1808
7	C6, C8, C15, C19	4	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	0402
8	C9	1	4700pF	VY2472M49Y5US63V7	Vishay-Bccomponents	CAP, CERM, 4700 pF, 440 V, +/- 20%, Y5U, TH, 12.5x5mm	TH, 12.5x5mm
9	C10	1	0.22uF	B32922C3224M	EPCOS Inc	CAP, Film, 0.22uF, 630V, +/-20%, TH	B32922 12.5mm
10	C12, C13, C14	3	470uF	RL80J471MDNASQKX	Nichicon	CAP, AL, 470 uF, 6.3 V, +/- 20%, 0.008 ohm, TH	D8xL8
11	C20	1	4.7uF	GRM21BR61E475MA12L	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 20%, X5R, 0805	0805
12	C21	1	0.01uF	GRM155R71H103KA88D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0402	0402
13	C22	1	0.22uF	GRM155R71C224KA12D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0402	0402
14	C100	1	0.022uF	GRM155R71H223KA12D	MuRata	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0402	0402
15	C101	1	10uF	GRM21BR61C106KE15L	MuRata	CAP, CERM, 10 uF, 16 V, +/- 10%, X5R, 0805	0805
16	D1	1	1.1V	DF1506S-T	Diodes Inc.	Diode, Switching-Bridge, 600V, 1.5A, DF-S	DF-S
17	D2	1	110V	SMCJ110A-TP	Micro Commercial Components	TVS DIODE 110VWM 177VC SMC	SMC
18	D3	1	800V	US1K-13-F	Diodes Inc.	Diode, Fast Rectifier, 800 V, 1 A, SMA	SMA
19	D4	1	200V	BAS21-TP	Micro Commercial Components	Diode, P-N, 200V, 200A, SOT-23	SOT-23
20	D100	1	30V	BAT54SWT1G	Fairchild Semiconductor	Diode, Schottky, 30 V, 0.2 A, SOT-323	SOT-323
21	F1	1		0452003.	Littelfuse	Fuse, 3A, 125V, SMD	SloBlo452
22	J1, J2	2		1002-021-01000	CnC Tech	Connector, Receptable, USB Type A, Vertical, TH	Vertical USB Type A
23	L2	1	10mH	744821110	Würth Elektronik eiSos	Coupled inductor, 10 mH, 0.7 A, 0.35 ohm, +/- 30%, TH	15 x 18 x 7.5mm
24	Q1	1	650V	SPP07N60C3	Infineon Technologies	MOSFET, N-CH, 650V, 7.3A, TO-220AB	TO-220AB
25	Q2	1	30V	CSD17312Q5	Texas Instruments	MOSFET, N-CH, 30 V, 100 A, SON 5x6mm	SON 5x6mm
26	R1	1	51	CRCW251251R0JNEG	Vishay-Dale	RES, 51, 5%, 1 W, 2512	2512
27	R2	1	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, 0402	0402
28	R3, R101	2	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0k ohm, 1%, 0.063W, 0402	0402
29	R4	1	499k	CRCW0402499KFKED	Vishay-Dale	RES, 499k ohm, 1%, 0.063W, 0402	0402
30	R5	1	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
31	R6	1	66.5k	CRCW040266K5FKED	Vishay-Dale	RES, 66.5 k, 1%, 0.063 W, 0402	0402
32	R7	1	10	CRCW040210R0JNED	Vishay-Dale	RES, 10 ohm, 5%, 0.063W, 0402	0402
33	R8, R19, R20	3	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
34	R9	1	22.6k	CRCW040222K6FKED	Vishay-Dale	RES, 22.6 k, 1%, 0.063 W, 0402	0402
35	R10	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
36	R12	1	0.51	CRM1206-FX-R510ELF	Bourns	RES, 0.51, 1%, 0.5 W, 1206	1206
37	R13	1	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, 0402	0402
38	R14, R17	2	499	CRCW0402499RFKED	Vishay-Dale	RES, 499, 1%, 0.063 W, 0402	0402
39	R15	1	23.2k	CRCW040223K2FKED	Vishay-Dale	RES, 23.2k ohm, 1%, 0.063W, 0402	0402
40	R16	1	200k	CRCW0402200KFKED	Vishay-Dale	RES, 200k ohm, 1%, 0.063W, 0402	0402
41	R21	1	30.1k	CRCW040230K1FKED	Vishay-Dale	RES, 30.1 k, 1%, 0.063 W, 0402	0402
42	R100	1	4.7	CRCW12064R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.25 W, 1206	1206
43	T1	1	300 uH	G144093LF	GCI Technologies	Transformer, 300 uH, TH	TH, 30.1x23.4mm
44	TP1	1	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
45	TP2	1	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
46	U1	1		TMP300BIDCKR	Texas Instruments	1.8V, Resistor-Programmable TEMPERATURE SWITCH and ANALOG OUT TEMPERATURE SENSOR, DCK0006A	DCK0006A
47	U2	1		TPS2513DBV	Texas Instruments	DUAL CHANNEL AUTO DETECT USB CHARGING CONTROLLER, DBV0006A	DBV0006A
48	U3, U6	2		TPD2E001DRLR	Texas Instruments	Low-Capacitance + / - 15 kV ESD-Protection Array for High-Speed Data Interfaces, 2 Channels, -40 to +85 degC, 5-pin SOT (DRL), Green (RoHS & no Sb/Br)	DRL0005A
49	U4	1		TPS2561ADRC	Texas Instruments	DUAL CHANNEL PRECISION ADJUSTABLE CURRENT-LIMITED POWER SWITCHES, DRC0010A	DRC0010A
50	U5	1		UCC28740DR	Texas Instruments	Constant-Voltage, Constant-Current Flyback Controller Using Opto-Coupler Feedback, D0007A	D0007A
51	U7	1		UCC24610DRB	Texas Instruments	GREEN Rectifier Controller Device, DRB0008A	DRB0008A
52	U8	1		VOS617A-7X001T	Vishay-Semiconductor	OptoCoupler, Phototransistor, 80-160%, SSOP-4	7x2.12x2.6mm
53	U9	1		TL431AIDBZ	Texas Instruments	PRECISION PROGRAMMABLE REFERENCE, DBZ0003A	DBZ0003A

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.