

Change in menu Project

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC B1	1		Printed Circuit Board		PMP7950 rev1B	Any	-	-
C1	1	470pF	CAP, CERM, 470pF, 100V, +/-5%, COG/NP0, 0805	0805	GRM2165C2A471JA01D	MuRata	-	-
C3, C4, C5, C6	4	3.3uF	CAP, CERM, 3.3uF, 50V, +/-10%, X7R, 1210	1210	GRM32DR71H335KA88L	MuRata	-	-
C7	1	330uF	CAP, AL, 330uF, 50V, +/-20%, 0.087 ohm, SMD	LH0	EMVY500GTR331MLH0S	Nippon Chemi-Con		
C8, C9, C10, C11, C12	5	1uF	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1210	1210	GRM32CR72A105KA35L	MuRata		
C13, C14	2	330uF	CAP, AL, 330uF, 100V, +/-20%, 0.153 ohm, SMD	SMT Radial K16	EEV-FK2A331M	Panasonic		
C15	1	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0805	0805	08053C104KAT2A	AVX		
C16, C18, C20	3	100pF	CAP, CERM, 100pF, 50V, +/-5%, COG/NP0, 0603	0603	GRM1885C1H101JA01D	MuRata	-	-
C17	1	4.7uF	CAP, CERM, 4.7uF, 16V, +/-10%, X7R, 0805	0805	GRM21BR71C475KA73L	MuRata	-	-
C19, C21	2	0.47uF	CAP, CERM, 0.47uF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E474KA12D	MuRata	-	-
C22	1	1uF	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0805	0805	GRM219R71E105KA88D	MuRata		
C23	1	330pF	CAP, CERM, 330pF, 50V, +/-10%, X7R, 0603	0603	C0603C331K5RACTU	Kemet	-	-
C24	1	0.022uF	CAP, CERM, 0.022uF, 50V, +/-10%, X7R, 0603	0603	C0603X223K5RACTU	Kemet	-	-
D1	1	0.77V	Diode, Schottky, 100V, 1A, PowerDI123	PowerDI123	DFLS1100-7	Diodes Inc.		
FID1, FID2, FID3	3		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
H1, H2, H5, H6	4		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone	-	-
H3, H4, H7, H8	4		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply	-	-
J1	1	2x1	Conn Term Block, 2POS, 5.08mm, TH	2POS Terminal Block	1715721	Phoenix Contact		
J2	1	2x1	Conn Term Block, 2POS, 3.5mm, TH	11x8.5x7.3mm	1751248	Phoenix Contact		
L1	1	4.7uH	Inductor, Shielded E Core, Ferrite, 4.7uH, 28A, 0.0026 ohm, SMD	SER2918	SER2918H-472KL	Coilcraft		
LBL1	1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W	THT-14-423-10	Brady	-	-
Q1, Q2, Q3	3	150V	MOSFET, N-CH, 150V, 40A, DDPAK	DDPAK	SUM40N15-38	Vishay-Siliconix		None
R1	1	8.2	RES 8.2 OHM 3/4W 5% 2010 SMD	2010 (5025 Metric)	CRCW20108R20JNEF	Vishay Dale	-	-
R2	1	0.004	RES 0.004 OHM 3W 1% 3015 WIDE	Wide 3015 (7638 Metric), 1530	KRL7638-C-R004-F-T1	Susumu	-	-
R3, R4	2	100	RES, 100 ohm, 1%, 0.1W, 0603	0603	CRCW0603100RFKEA	Vishay-Dale	Equivalent	Any
R5, R7, R8, R9, R10, R14	6	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	ERJ-3GEY0R00V	Panasonic	-	-
R11	1	6.98k	RES, 6.98k ohm, 1%, 0.1W, 0603	0603	CRCW06036K98FKEA	Vishay-Dale		
R12	1	2.2	RES, 2.2 ohm, 5%, 0.125W, 0805	0805	CRCW08052R20JNEA	Vishay-Dale		
R13	1	23.2k	RES, 23.2k ohm, 1%, 0.1W, 0603	0603	CRCW060323K2FKEA	Vishay-Dale		
R15	1	8.06k	RES, 8.06k ohm, 1%, 0.1W, 0603	0603	CRCW06038K06FKEA	Vishay-Dale	Equivalent	Any
R16	1	36.5k	RES, 36.5k ohm, 1%, 0.1W, 0603	0603	CRCW060336K5FKEA	Vishay-Dale	Equivalent	Any
R18	1	68.1k	RES, 68.1k ohm, 1%, 0.1W, 0603	0603	CRCW060368K1FKEA	Vishay-Dale	Equivalent	Any
R19	1	750	RES, 750 ohm, 1%, 0.1W, 0603	0603	CRCW0603750RFKEA	Vishay-Dale		
R20	1	51.1k	RES, 51.1k ohm, 1%, 0.125W, 0805	0805	CRCW080551K1FKEA	Vishay-Dale		
R21	1	825	RES, 825 ohm, 1%, 0.125W, 0805	0805	CRCW0805825RFKEA	Vishay-Dale	Equivalent	Any
R22, R23, R24	3	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW0603000Z0EA	Vishay-Dale		
TP1, TP3	2	Red	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint	5010	Keystone		
TP2, TP7, TP8	3	White	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint	5012	Keystone		
TP4, TP5	2	Black	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint	5011	Keystone		
TP6	1	Yellow	Test Point, Compact, Yellow, TH	Yellow Compact Testpoint	5009	Keystone		
U1	1			eg: 0603, used in PnP report	LM5122MH	TI	-	-
C2	0	330uF	CAP, AL, 330uF, 100V, +/-20%, 0.153 ohm, SMD	SMT Radial K16	EEV-FK2A331M	Panasonic		
C25, C26	0	1uF	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E105KA12D	MuRata		
C27	0	1uF	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1210	1210	GRM32CR72A105KA35L	MuRata		
D2	0	0.57V	Diode, Schottky, 60V, 1A, SOD-123F	SOD-123F	PMEG6010CEH,115	NXP Semiconductor	-	-
Q4, Q6, Q8	0	0.2V	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23	MMBT3904	Fairchild Semiconductor		
Q5, Q7, Q9	0	0.25V	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23	MMBT3906	Fairchild Semiconductor		
R6, R17	0	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	ERJ-3GEY0R00V	Panasonic	-	-

Notes:

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

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.