

Filename: PMP10710_BOM.xls
 Variant: 001
 Generated: 8/11/2015 3:45:53 PM

PMP10710

Designator	Description	Manufacturer	PartNumber	Quantity
IPC B1	Printed Circuit Board	Any	PMP10710	1
C1	CAP, CERM, 470pF, 100V, +/-5%, C0G/NP0, 0805	MuRata	GRM2165C2A471JA01D	1
C2, C3, C4, C10	CAP, CERM, 3.3uF, 50V, +/-10%, X7R, 1210	MuRata	GRM32DR71H335KA88L	4
C5	CAP, OS-CON, 330 µF, 25 V, +/- 20%, 0.014 ohm, F12, SMD, 2-Leads, Body 10.5x10.5mm, Height 12.7mm SMD	Sanyo	25SVPF330M	1
C6, C7, C8, C9	CAP, AL, 330 µF, 35 V, +/- 20%, 0.06 ohm, SMD	Panasonic	EEE-FP1V331AP	4
C11, C13, C14	CAP, CERM, 10 µF, 35 V, +/- 20%, X7R, 1210	Taiyo Yuden	GMK325AB7106MM-T	3
C12	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1210	MuRata	GRM32CR72A105KA35L	1
C15, C20	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0805	AVX	08053C104KAT2A	2
C16, C21	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	MuRata	GRM1885C1H101JA01D	2
C17	CAP, CERM, 4.7uF, 16V, +/-10%, X7R, 0805	MuRata	GRM21BR71C475KA73L	1
C19, C23	CAP, CERM, 0.47uF, 25V, +/-10%, X7R, 0603	MuRata	GRM188R71E474KA12D	2
C22, C25, C59	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X7R, 1206	MuRata	GRM31CR71H475KA12L	3
C24	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0603	AVX	06033C104KAT2A	1
C26, C32, C40	CAP, CERM, 470 pF, 100 V, +/- 5%, X7R, 0603	AVX	06031C471JAT2A	3
C27	CAP, CERM, 0.047 µF, 50 V, +/- 10%, X7R, 0603	TDK	C1608X7R1H473K	1
C28, C35, C36, C43	CAP, CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0603	Kemet	C0603C151J5GACTU	4
C29, C37	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603	AVX	06033C104JAT2A	2
C30, C31, C33, C34, C38, C39, C41, C42	CAP, CERM, 10 µF, 25 V, +/- 20%, X7R, 1206_190	TDK	C3216X7R1E106M160AE	8
C44, C61, C68, C70	CAP, CERM, 0.01 µF, 100 V, +/- 10%, X7R, 0805	MuRata	GRM21BR72A103KA01L	4
C45, C49, C54, C62	CAP, AL, 1000 µF, 50 V, +/- 20%, 0.05 ohm, SMD	Chemi-Con	EMVY500GTR102MMN0S	4
C46, C63, C64, C69, C71, C72, C73	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0805	AVX	08055C104KAT2A	7
C47, C65, C74	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0805	AVX	08055C102KAT2A	3
C48, C53, C58, C66	CAP, CERM, 0.033 µF, 50 V, +/- 10%, X7R, 0603	MuRata	GRM188R71H333KA61D	4
C50, C55	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 1206	TDK	C3216X7R1H105K	2
C51, C56	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 1206	AVX	12061C104KAT2A	2
C52, C57, C60, C67	CAP, Film, 0.68 µF, 250 V, +/- 10%, TH	WIMA	MKP4F036804F00KSSD	4
C75	CAP, CERM, 330 pF, 100 V, +/- 5%, X7R, 0603	AVX	06031C331JAT2A	1
C76	CAP, CERM, 4700 pF, 2000 V, +/- 10%, X7R, 1812	AVX	1812GC472KAT1A	1
D1	Diode, Schottky, 100V, 1A, PowerDI123	Diodes Inc.	DFLS1100-7	1
D2	Diode, Schottky, 60 V, 1 A, SOD-323F	NXP Semiconductor	PMEG6010CEJ,115	1
D3	LED, Green, SMD	Lite-On	LTST-C190KGKT	1
D4, D5, D7	LED, Red, SMD	Lite-On	LTST-C190CKT	3
D6, D8	LED, Yellow , SMD	Lite-On	LTST-C170KSKT	2
FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	3

Designator	Description	Manufacturer	PartNumber	Quantity
H1, H2, H3, H4	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	B&F Fastener Supply	NY PMS 440 0025 PH	4
H5, H6, H7, H8	Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C	4
H100		Used in BOM report	Used in BOM report	1
J1, J2, J3, J4	Standard Banana Jack, Uninsulated, 5.5mm	Keystone	575-4	4
J5	Header, 100mil, 2x1, Gold, TH	Sullins Connector Solutions	PBC02SAAN	1
J6	RCA Jack, Black, R/A, TH	Keystone	972	1
J7	RCA Jack, Red, R/A, TH	Keystone	971	1
J8, J10	Binding Post, RED, TH	Keystone	7006	2
J9, J11	Binding Post, BLACK, TH	Keystone	7007	2
L1	Inductor, Shielded, Ferrite, 10 µH, 30 A, 0.0024 ohm, SMD	Würth Elektronik	7443641000	1
L2	Inductor, Shielded Drum Core, Ferrite, 82 µH, 0.35 A, 0.52 ohm, SMD	Coilcraft	MSS5131-823MLB	1
L3, L4, L5, L6	Inductor, Shielded, Ferrite, 10uH, 7.8A, 0.011 ohm, SMD	Toko	931BS-100M	4
LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10	1
Q1, Q2, Q3	MOSFET, N-CH, 40 V, 90 A, DPAK	Infineon Technologies	IPD90N04S4-03	3
Q4, Q5, Q6, Q7, Q8, Q9	MOSFET, N-CH, 60 V, 0.17 A, SOT-23	Diodes Inc.	2N7002-7-F	6
R1	RES, 8.2, 5%, 0.75 W, 2010	Vishay-Dale	CRCW20108R20JNEF	1
R2	RES, 0.0022, 1%, 2 W, 2512	Vishay-Dale	WSLP25122L200FEA	1
R3, R4	RES, 100 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100RFKEA	2
R6, R7, R8, R12, R18	RES, 0 ohm, 5%, 0.1W, 0603	Panasonic	ERJ-3GEY0R00V	5
R9, R10, R11, R13, R16	RES, 0.001, 1%, 1 W, 2512	Panasonic	ERJ-M1WTF1M0U	5
R14	RES, 30.1 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060330K1FKEA	1
R15	RES, 2.2 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08052R20JNEA	1
R17	RES, 137 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603137KFKEA	1
R19	RES, 7.68 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06037K68FKEA	1
R20	RES, 45.3 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060345K3FKEA	1
R22	RES, 6.04 k, 0.5%, 0.1 W, 0603	Yageo America	RT0603DRE076K04L	1
R23	RES, 88.7 k, 0.5%, 0.1 W, 0603	Yageo America	RT0603DRE0788K7L	1
R24	RES, 33.2 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060333K2FKEA	1
R25	RES, 2.49 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06032K49FKEA	1
R26	RES, 59.7 k, 0.5%, 0.1 W, 0603	Yageo America	RT0603DRE0759K7L	1
R27	RES, 48.7 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080548R7FKEA	1
R28, R33, R34, R39	RES, 10.0 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060310K0FKEA	4
R29, R30, R31, R32, R35, R36, R37, R38	RES, 2.21 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06032K21FKEA	8
R40, R41, R43, R46	RES, 3.32, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06033R32FKEA	4
R42	RES, 30.1 k, 0.5%, 0.1 W, 0603	Yageo America	RT0603DRE0730K1L	1
R44, R47	RES, 47.0 k, 0.5%, 0.1 W, 0603	Yageo America	RT0603DRE0747KL	2
R45, R54, R55, R56	RES, 3.32, 1%, 0.125 W, 0805	Yageo America	RC0805FR-073R32L	4
R48, R49, R50, R51, R52, R53	RES, 100, 0.1%, 0.125 W, 0805	Susumu Co Ltd	RG2012P-101-B-T5	6

Designator	Description	Manufacturer	PartNumber	Quantity
R57, R58, R59, R60, R61, R62	RES, 4.70 k, 0.1%, 0.125 W, 0805	Yageo America	RT0805BRD074K7L	6
SW1, SW2, SW3	Switch, DPDT, On-On, 0.4 VA, 28 V, TH	NKK Switches	G22AP	3
TP1, TP3	Test Point, Multipurpose, Red, TH	Keystone	5010	2
TP2, TP7, TP8	Test Point, Multipurpose, White, TH	Keystone	5012	3
TP4, TP5	Test Point, Multipurpose, Black, TH	Keystone	5011	2
TP6	Test Point, Compact, Yellow, TH	Keystone	5009	1
U1		TI	LM5122MH	1
U2	Wide Input Voltage Range Buck Regulator with High Efficiency Sleep Mode, DDC0006A	Texas Instruments	LMR16006YQDDCRQ1	1
U3, U4	High-Performance, Fully-Differential AUDIO OPERATIONAL AMPLIFIER, DGN0008D	Texas Instruments	OPA1632DGNR	2
U5	125W STEREO / 250W MONO PurePath HD ANALOG-INPUT POWER STAGE, PHD0064B	Texas Instruments	TAS5611PHDR	1

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.