

PMP40133 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C20, C21, C41	3	0.1uF	C1005X5R1A104K050BA	TDK	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	0402
C22	1	1000pF	C1005C0G1E102J	TDK	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
C23, C24	2	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0402	0402
C25, C26	2	12pF	GRM1555C1H120JA01D	MuRata	CAP, CERM, 12 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C27, C28	2	1uF	08053D105KAT2A	AVX	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0805	0805
C29	1	1uF	C1005X5R1A105K050BB	TDK	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402
C32, C35	2	0.1uF	GRM155R61C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0402	0402
C34, C38	2	0.22uF	GRM155R60J224KE01D	MuRata	CAP, CERM, 0.22 µF, 6.3 V, +/- 10%, X5R, 0402	0402
C36	1	0.047uF	GRM155R61C473KA01D	MuRata	CAP, CERM, 0.047 µF, 16 V, +/- 10%, X5R, 0402	0402
C37	1	0.1uF	GMK105BJ104KV-F	Taiyo Yuden	CAP, CERM, 0.1 µF, 35 V, +/- 10%, X5R, 0402	0402
C39, C40	2	560pF	GRM155R71H561KA01D	MuRata	CAP, CERM, 560 pF, 50 V, +/- 10%, X7R, 0402	0402
D10, D12, D14, D15	4	Green	LTST-C190GKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm
D16	1	Orange	LTST-C190KFKT	Lite-On	LED, Orange, SMD	1.6x0.8x0.8mm
J2	1		PPPC072LFBN-RC	Sullins Connector Solutions	Receptacle, 2.54mm, 7x2, Gold, TH	Receptacle, 2.54mm, 7x2, TH
J3	1		PBC04SAAN	Sullins Connector Solutions	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54 mm, 4x1, TH
R1, R2, R3, R63, R65, R68	6	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R17, R21, R23, R30, R34	5	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, 0402	0402
R40	1	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, 0402	0402
R41	1	27	CRCW040227R0JNED	Vishay-Dale	RES, 27, 5%, 0.063 W, 0402	0402
R43, R44	2	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
R45, R46, R50, R52, R75	5	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
R47	1	130k	CRCW0402130KFKED	Vishay-Dale	RES, 130 k, 1%, 0.063 W, 0402	0402
R48, R49	2	2.2k	CRCW04022K20JNED	Vishay-Dale	RES, 2.2 k, 5%, 0.063 W, 0402	0402
R51	1	47.0	RK73H1ETTP47R0F	KOA Speer	RES, 47.0, 1%, 0.063 W, 0402	0402
R53	1	24.3k	CRCW040224K3FKED	Vishay-Dale	RES, 24.3 k, 1%, 0.063 W, 0402	0402
R56	1	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
R64, R67	2	0	DNP	DNP	DNP	0402
R70	1	120	CRCW0603120RJNEA	Vishay-Dale	RES, 120, 5%, 0.1 W, 0603	0603
S1, S2	2		B3U-1100P	Omron Electronic Components	Switch, SPST-NO, Off-Mom, 12 V, SMD	SMD, 3-Leads, Body 3x2.5mm
U5	1		INA199BIDCKR	Texas Instruments	Voltage Output, High or Low Side Measurement, Bi-Directional Zero-Drift Series Current-Shunt Monitor, DCK0006A	DCK0006A
U6	1		MSP430G2955IRHA40R	Texas Instruments	MIXED SIGNAL MICROCONTROLLER, RHA0040B	RHA0040B
U7	1		TPL0102-100PWR	Texas Instruments	256-TAPS DUAL CHANNEL DIGITAL POTENTIOMETER WITH NON-VOLATILE MEMORY, PW0014A	PW0014A
U8	1		TLV70433DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 24 V Input, with Ultra-Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U9	1		DNP	Texas Instruments	DNP	RSM0032B
Y1	1		MS3V-T1R 32.768KHZ +/- 20PPM 12.5PF	Micro Crystal AG	Crystal, 32.768kHz, 12.5pF, SMD	1.4x1.4x5.0mm SMD

IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Designer(s)") who are developing systems that incorporate TI products. TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design.

TI's provision of reference designs and any other technical, applications or design advice, quality characterization, reliability data or other information or services 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 reference designs or other items.

TI reserves the right to make corrections, enhancements, improvements and other changes to its reference designs and other items.

Designer understands and agrees that Designer remains responsible for using its independent analysis, evaluation and judgment in designing Designer's systems and products, and has full and exclusive responsibility to assure the safety of its products and compliance of its products (and of all TI products used in or for such Designer's products) with all applicable regulations, laws and other applicable requirements. Designer represents that, with respect to its applications, it has 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. Designer agrees that prior to using or distributing any systems that include TI products, Designer will thoroughly test such systems and the functionality of such TI products as used in such systems. Designer may not use any TI products in life-critical medical equipment unless authorized officers of the parties have executed a special contract specifically governing such use. Life-critical medical equipment is medical equipment where failure of such equipment would cause serious bodily injury or death (e.g., life support, pacemakers, defibrillators, heart pumps, neurostimulators, and implantables). Such equipment includes, without limitation, all medical devices identified by the U.S. Food and Drug Administration as Class III devices and equivalent classifications outside the U.S.

Designers are authorized to use, copy and modify any individual TI reference design only in connection with the development of end products that include the TI product(s) identified in that reference design. HOWEVER, 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 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 the reference design or other items described above 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 AND OTHER ITEMS DESCRIBED ABOVE ARE PROVIDED "AS IS" AND WITH ALL FAULTS. TI DISCLAIMS ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, REGARDING THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, 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 DESIGNERS AGAINST ANY CLAIM, INCLUDING BUT NOT LIMITED TO ANY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON ANY COMBINATION OF PRODUCTS AS DESCRIBED IN A TI REFERENCE DESIGN 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 THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, AND REGARDLESS OF WHETHER TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

TI's standard terms of sale for semiconductor products (<http://www.ti.com/sc/docs/stdterms.htm>) apply to the sale of packaged integrated circuit products. Additional terms may apply to the use or sale of other types of TI products and services.

Designer will fully indemnify TI and its representatives against any damages, costs, losses, and/or liabilities arising out of Designer's non-compliance with the terms and provisions of this Notice.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2016, Texas Instruments Incorporated