Filename: PMP7848_BOM_REVA

Date: 03/11/2013

Item	Designator	Description	Manufacturer	PartNumber	Quantity
1	AA1	Printed Circuit Board	TBD by TI	551XX7848-001 REV A	1
2	C1, C17, C18, C20	CAP, AL, 68uF, 100V, +/-20%, 0.32 ohm, SMD	Panasonic	EEV-FK2A680Q	4
3	C2, C19, C21	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1206	MuRata	GRM31CR72A105KA01L	3
4	C3, C4, C13, C14, C15, C16	CAP, CERM, 4.7uF, 50V, +/-10%, X7R, 1206	MuRata	GRM31CR71H475KA12L	6
5	C5, C22, C30, C33, C42	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	TDK	C1608X5R1C105K	5
	C6, C10, C11, C23, C27, C28,				
	C32, C34, C35, C36, C37,				
6	C44, C45, C47, C48	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	TDK	C1608X7R1H104K	15
	C7, C8, C9, C12, C24, C25,				
7	C26, C29	CAP, CERM, 100pF, 25V, +/-10%, X7R, 0603	AVX	06033C101KAT2A	8
	C41	CAP, AL, 100uF, 16V, +/-20%, 0.36 ohm, SMD	Panasonic	EEE-FK1C101P	1
	C43, C46	CAP, CERM, 1000pF, 50V, +/-10%, X8R, 0603	TDK	C1608X8R1H102K	2
	D1, D7	Diode, Schottky, 200V, 1A, PowerDI123	Diodes Inc.	DFLS1200-7	2
	D5	Diode, Schottky, 100V, 3A, SMC	International Rectifier	30BQ100TRPBF	1
12	D8	Diode, Zener, 5.6V, 500mW, SOD-123	Diodes Inc.	MMSZ5232B-7-F	1
	FID1, FID2, FID3, FID4, FID5,				
13	FID6	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	6
14	Q1, Q2	MOSFET N-CH 60V 8SON	Texas Instruments	CSD18531Q5A	2
15	Q3, Q5	Transistor, NPN, 40V, 0.2A, SOT-23	Fairchild Semiconductor	MMBT3904	2
16	Q4	Transistor, PNP, 40V, 0.2A, SOT-23	Fairchild Semiconductor	MMBT3906	1
17	R1, R11	RES, 3.32 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW08053R32FKEA	2
	R2, R6, R16, R19, R20, R25,				
	R30	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA	7
		RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA	6
	R4	RES, 0.075 ohm, 1%, 2W, 2512	Stackpole Electronics Inc	CSRN2512FK75L0	1
21	R5, R9, R15	RES, 63.4k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060363K4FKEA	3
22	R7, R17	RES, 42.2k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060342K2FKEA	2
	R8, R18	RES, 3.32k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06033K32FKEA	2
	R12, R26	RES, 4.99 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06034R99FKEA	2
	R14	RES, 0.025 ohm, 1%, 2W, 2512	Stackpole Electronics Inc	CSRN2512FK25L0	1
	R21	RES, 517 ohm, 0.5%, 0.1W, 0603	Yageo America	RT0603DRE07517RL	1
	R22, R23	RES, 100k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100KFKEA	2
	R24	RES, 4.02k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06034K02FKEA	1
	R31	RES, 39.2k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060339K2FKEA	1
	R32	RES, 698 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603698RFKEA	1
	R33	RES, 20.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060320K0FKEA	1
32	R34, R36	RES, 10k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310K0JNEA	2

33	R35	RES, 2.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06032K00FKEA	1
	T1	INDUCTOR/TRANSFORMER 3.4UH SMD	Cooper Bussmann	VP5-0053-R	1
	T2	ALU TRANS	Ferroxcube	ALU TRANS	1
	TP1, TP2, TP3, TP4, TP5,				
36	TP6, TP7, TP8, TP9	PCB Pin, TH	Mill-Max	3125-2-00-34-00-00-08-0	9
	TP12, TP13, TP15, TP18,				
	TP19	Test Point, TH, Miniature, Red	Keystone	5000	5
38	TP14, TP16, TP17, TP20	Test Point, TH, Miniature, Black	Keystone	5001	4
		60V Low Side Controller for Boost and SEPIC, 10-			
	U1, U2	pin MSOP, Pb-Free	National Semiconductor	LM5022MMX/NOPB	2
40	U3	5MHz Low Voltage, Low Power Dual Op Amp	National Semiconductor	LMV822M	1
		1.6V Factory Preset Temperature Switch and			
41	U4	Temperature Sensor, 6-pin LLP, Pb-Free	National Semiconductor	LM26LVCISD-060/NOPB	1
		Single General Purpose, Low Voltage, Tiny Pack			
42	U5	Comparator, 5-pin SOT-23	National Semiconductor	LMV331M5X	1
		Dual General Purpose, Low Voltage, Tiny Pack			
43	U6	Comparator, 8-pin Narrow SOIC	National Semiconductor	LMV393MX	1
		Low-Voltage (1.24V) Adjustable Precision Shunt			
	U7	Regulator, 5-pin SOT-23	National Semiconductor	LMV431ACM5	1
	C31, C38, C39, C40	CAP, CERM, 100pF, 25V, +/-10%, X7R, 0603	AVX	06033C101KAT2A	0
	D2, D4	Diode, Zener, 43V, 550mW, SMB	ON Semiconductor	1SMB5940BT3G	0
	D3, D6	Diode, Schottky, 60V, 1A, SMA	Diodes Inc.	B160-13-F	0
	R27, R28, R39	RES, 100 ohm, 1%, 0.25W, 1206	Vishay-Dale	CRCW1206100RFKEA	0
	R29	RES, 63.4k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060363K4FKEA	0
50	R38	RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA	0

IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve 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 (also referred to herein as "components") 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 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.

TI does not warrant or represent that any license, either express or implied, is granted under 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.

Reproduction of significant portions of TI information in TI data books or data sheets 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.

Resale of TI components or services with statements different from or beyond the parameters stated by TI for that component or service voids all express and any implied warranties for the associated TI component or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

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 which anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm 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 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 a special agreement specifically governing such use.

Only those TI components which 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 which have *not* been so designated is solely at the Buyer's risk, and that 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.

Products Applications

Audio www.ti.com/audio Automotive and Transportation www.ti.com/automotive Communications and Telecom **Amplifiers** amplifier.ti.com www.ti.com/communications **Data Converters** dataconverter.ti.com Computers and Peripherals www.ti.com/computers **DLP® Products** www.dlp.com Consumer Electronics www.ti.com/consumer-apps

DSP **Energy and Lighting** dsp.ti.com www.ti.com/energy Clocks and Timers www.ti.com/clocks Industrial www.ti.com/industrial Interface interface.ti.com Medical www.ti.com/medical logic.ti.com Logic Security www.ti.com/security

Power Mgmt power.ti.com Space, Avionics and Defense www.ti.com/space-avionics-defense

Microcontrollers <u>microcontroller.ti.com</u> Video and Imaging <u>www.ti.com/video</u>

RFID www.ti-rfid.com

OMAP Applications Processors <u>www.ti.com/omap</u> TI E2E Community <u>e2e.ti.com</u>

Wireless Connectivity <u>www.ti.com/wirelessconnectivity</u>