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PMP6961_REVE_BOM.xlsx 2/25/2014 4:04:55 PM PMP6961 Rev E Bill Of Materials

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Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer
!PCB1	1	10×F	Printed Circuit Board	0000	PMP6961	Any
C1, C12	2	10pF	CAP, CERM, 100V, +/-10%, X7R, 0603	0603 B22022 12 Emm	STD	STD EPCOS Inc
C2 C3	1	0.22uF 0.047uF	CAP, Film, 0.22uF, 630V, +/-10%, TH CAP, CERM, 0.047uF, 630V, +/-10%, X7R, 1210	B32922_12.5mm 1210	B32922C3224K GRM32DR72J473KW01L	EPCOS Inc MuRata
C3 C4	1	100uF	CAP, CERNI, 0.0470F, 650V, +/-10%, X7R, 1210	Cap 22x25mm	ESMQ451VSN101MP25S	Nippon Chemi-Con
C5	1	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805	C2012X7R2A104K	TDK
C6, C17, C26, C31	4	0.1uF	CAP, CERM, 50V, +/-10%, X7R, 0603	0603	STD	STD
C7	1	1000uF	CAP, AL, 1000uF, 16V, +/-20%, 0.049 ohm, TH	12.5x15mm	EKY-160ELL102MK15S	Nippon Chemi-Con
C8, C9, C10	3	10uF	CAP, CERM, 10uF, 16V, +/-10%, X5R, 1206	1206	C3216X5R1C106KT	TDK
C11, C21, C23, C25, C27	5	1uF	CAP, CERM, 25V, +/-10%, X7R, 0603	0603	STD	STD
C13, C16, C28	3	1000pF	CAP, CERM, 50V, +/-10%, X7R, 0603	0603	STD	STD
C14	1	2200pF	CAP, CERM, 2200pF, 250V, +/-20%, E, Cap, 7x12x9 mm	Cap, 7x12x9 mm	DE1E3KX222MA4BL01 STD	MuRata STD
C15 C18	1	0.47uF 220uF	CAP, CERM, 25V, +/-10%, X7R, 0603 CAP, AL, 220uF, 16V, +/-20%, 0.34 ohm, SMD	0603 6.3x7.7	UUD1C221MCL1GS	Nichicon
C18 C19	1	2200F	CAP, CERM, 50V, +/-10%, X7R, 0603	0603	STD	STD
C20, C29, C30	3	0.01uF	CAP, CERM, 50V, +/-10%, X7R, 0603	0603	STD	STD
C22	1	330pF	CAP, CERM, 50V, +/-10%, X7R, 0603	0603	STD	STD
C24	1	0.047uF	CAP, CERM, 50V, +/-10%, X7R, 0603	0603	STD	STD
D1, D5, D8, D9, D11, D12,	9	100V	Diode, Switching, 100V, 0.2A, SOD-123	SOD-123	MMSD4148T1G	ON Semiconductor
D13, D14, D16						
D2, D10	2	10V	Diode, Zener, 10V, 500mW, SOD-123	SOD-123	MMSZ5240B-7-F	Diodes Inc.
D3	1	0.88V	DIODE SUPER FAST 100V 1A SMA	SMA	ES1B-13-F	Diodes Inc
D4 D6	1	75V 91V	Diode, Switching, 75V, 0.3A, SOT-23 Diode, Zener, 91V, 500mW, SOD-123	SOT-23 SOD-123	BAV99-7-F MMSZ5270BT1G	Diodes Inc. ON Semiconductor
D6	1	30V	Diode, Zener, 91V, 500mW, SOD-123 Diode, Schottky, 30V, 0.2A, SOT-23	SOD-123 SOT-23	BAT54S-7-F	Diodes Inc.
D15	1	3.6V	Diode, Zener, 3.6V, 500mW, SOD-123	SOD-123	MMSZ4685-V	Vishay-Semiconductor
F1	1		Fuse, 2A, 250V, TH	TR5 fuse 8.5mm DIA	37212000001	Littelfuse
J1	1		Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm	ED555/2DS	On-Shore Technology
L1	1	17.1uH	Inductor, Shielded Drum Core, Ferrite, 17.1uH, 9.9A, 0.0091 ohm, SMD	Inductor, 22.2x12.2x19mm	PA2729.173NL	Pulse Engineering
L2	1	1mH	Inductor, Shielded Drum Core, Ferrite, 1mH, 0.11A, 16.3 ohm, SMD	LPS4414	LPS4414-105MLB	Coilcraft
Q1, Q8	2	0.08V	TRANSISTOR NPN 100V 1A SOT-89	SOT-89	FCX493TA	Diodes Inc
Q2, Q5	2	1.6V	Transistor, PNP, 60V, 0.8A, SOT-23	SOT-23	MMBT2907A	Fairchild Semiconductor
Q3, Q10 Q4	2	60V 800V	MOSFET, N-CH, 60V, 19A, SON 5x6mm	SON 5x6mm DPAK	CSD18531Q5A STD4NK80ZT4	Texas Instruments STMicroelectronics
Q4 Q6	1	0.4V	MOSFET N-CH 800V 3A DPAK Transistor, NPN, 400V, 1A, TO-92	TO-92	PHE13003A,126	NXP Semiconductor
Q9	1	800V	MOSFET N-CH 800V 5.2A D2PAK	DDPAK	STB7NK80ZT4	STMicroelectronics
Q12	1	60V	MOSFET, N-CH, 60V, 0.17A, SOT-23	SOT-23	2N7002-7-F	Diodes Inc.
R1, R13	2	2k	RES, 1%, 0.25W, 1206	1206	STD	STD
R2	1	10k	RES, 1%, 0.25W, 1206	1206	STD	STD
R3, R4, R19, R28, R34,	6	10k	RES, 1%, 0.1W, 0603	0603	STD	STD
R37						
R5, R6, R9, R10	4	499k	RES, 1%, 0.25W, 1206	1206	STD STD	STD
R7 R8	1	200k 3.3	RES, 1%, 1W, 2512 RES, 1%, 0.1W, 0603	2512 0603	STD	STD STD
R11	1	51.1	RES, 1%, 0.1W, 0603	0603	STD	STD
R12, R18	2	1MEG	RES, 1%, 0.25W, 1206	1206	STD	STD
R14, R15	2	0.02	RES, 1%, 1W, 2512	2512	STD	STD
R16	1	2.61k	RES, 1%, 0.1W, 0603	0603	STD	STD
R17	1	3.01k	RES, 1%, 0.1W, 0603	0603	STD	STD
R20, R40	2	0	RES, 1%, 0.1W, 0603	0603	STD	STD
R21	1	0.22	RES, 1%, 1W, 2010	2010	STD	STD
R22	1	12.4k	RES, 1%, 0.1W, 0603	0603	STD	STD
R23 R24	1	10 20k	RES, 1%, 0.1W, 0603 RES, 1%, 0.1W, 0603	0603 0603	STD STD	STD STD
R25, R27, R30, R32, R36,	7	20k 1k	RES, 1%, 0.1W, 0603	0603	STD	STD
R41, R43		···			-·-	
R26	1	80.6k	RES, 1%, 0.1W, 0603	0603	STD	STD
R29	1	84.5k	RES, 1%, 0.1W, 0603	0603	STD	STD
R31, R38		100k	RES, 1%, 0.1W, 0603		STD	STD
R33	1	2.37k	RES, 1%, 0.1W, 0603	0603	STD	STD
R35	1	6.19k	RES, 1%, 0.1W, 0603	0603	STD	STD
R39 R42	1	3.24k 25.5k	RES, 1%, 0.1W, 0603 RES, 1%, 0.1W, 0603	0603 0603	STD STD	STD STD
T2	1	25.5K 300uH	Gate Drive Transformer, 300uH, TH	13.97x13.3x13.97mm	G044052LF	GCI Technologies
T?	1	700 uH	Forward Transformer, 700 uH, TH	1250x510x1250mil	RLTI-1048	Renco Electronics
TP1	1	Red	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint	5010	Keystone
TP2	1	Black	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint	5011	Keystone
TP3, TP5	2	Red	Test Point, Miniature, Red, TH	Red Miniature Testpoint	5000	Keystone
TP4, TP6	2	Black	Test Point, Miniature, Black, TH	Black Miniature Testpoint	5001	Keystone
U1	1		Advanced Active Clamp PWM Controller with Current-Mode Control, -40 to +125	PW0020A	UCC2897APWR	Texas Instruments
	0		degC, 20-pin TSSOP (PW), Green (RoHS & no Sb/Br)	70 400 0		Vieheu Cereisen besten
U2, U4 U3	2		OptoCoupler, Phototransitor, 80-160%, SSOP-4 PRECISION PROGRAMMABLE REFERENCE, DBZ0003A	7x2.12x2.6mm DBZ0003A	VOS617A-7X001T TL431AIDBZ	Vishay-Semiconductor Texas Instruments
U3 U5	1		DUAL D-TYPE POSITIVE-EDGE-TRIGGERED FLIP-FLOPS WITH CLEAR AND	PW0014A	SN74AHCT74PW	Texas Instruments
50			PRESET, PW0014A			
U6	1		DUAL OPERATIONAL AMPLIFIERS WITH INTERNAL REFERENCE, D0008A	D0008A	TL103WAID	Texas Instruments

Notes:

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

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