

Filename: PMP2688_REVA_SCH_bom.xls

Date: 11/06/2008

PMP2688_REVA_SCH BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR	AREA
1	C1	330uF	Capacitor, Alum, 330uF, 35V, 23 milliohm	0.315 inch	EGXE350Exx331MJ20S	Nippon Chemi-Con	
5	C3	0.1uF	Capacitor, Ceramic, 50V, X7R	0603	GCM188R71H104KA57D	muRata	
	C4	0.1uF	Capacitor, Ceramic, 50V, X7R	0603	GCM188R71H104KA57D	muRata	
3	C5	1000uF 35V	Capacitor, multi pattern, TH 0.080 to 0.200	0.571 inch	EGXE350Exx102ML25S	Nippon Chemi-Con	
	C6	1000uF 35V	Capacitor, multi pattern, TH 0.080 to 0.200	0.571 inch	EGXE350Exx102ML25S	Nippon Chemi-Con	
	C7	0.1uF	Capacitor, Ceramic, 50V, X7R	0603	GCM188R71H104KA57D	muRata	
5	C8	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	std	TDK	
2	C9	470pF	Capacitor, Ceramic, Low Inductance, 50V, 125°C, 5%	0603	GCM1885C1Hvvvv	muRata	
	C10	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	std	TDK	
2	C11	330pF	Capacitor, Ceramic, 50V, X7R, 15%	0603	std	TDK	
	C12	1000uF 35V	Capacitor, multi pattern, TH 0.080 to 0.200	0.571 inch	EGXE350Exx102ML25S	Nippon Chemi-Con	
5	C13	2.2uF	Capacitor, Ceramic, 2.2uF, 50V, X7R	1206	GCM31CR71H225KA88L	Murata	
	C14	470pF	Capacitor, Ceramic, Low Inductance, 50V, 125°C, 5%	0603	GCM1885C1Hvvvv	muRata	
1	C15	82pF	Capacitor, Ceramic CGO, Low Inductance, 50V, 125°C, 5%	0603	GCM1885C1Hvvvv	muRata	
	C16	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	std	TDK	
	C17	0.1uF	Capacitor, Ceramic, 50V, X7R	0603	GCM188R71H104KA57D	muRata	
	C18	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	std	TDK	
	C19	330pF	Capacitor, Ceramic, 50V, X7R, 15%	0603	std	TDK	
1	C20	33nF	Capacitor, Ceramic, Low Inductance, vvV, [temp], [tol]	0603	GRM39yyxxxKvvvA	muRata	
1	C21	1nF	Capacitor, Ceramic, Low Inductance, vvV, [temp], [tol]	0603	GRM39yyxxxKvvvA	muRata	
	C22	2.2uF	Capacitor, Ceramic, 2.2uF, 50V, X7R	1206	GCM31CR71H225KA88L	Murata	
	C23	0.1uF	Capacitor, Ceramic, 50V, X7R	0603	GCM188R71H104KA57D	muRata	
	C24	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	std	TDK	
	C25	2.2uF	Capacitor, Ceramic, 2.2uF, 50V, X7R	1206	GCM31CR71H225KA88L	Murata	
	C26	2.2uF	Capacitor, Ceramic, 2.2uF, 50V, X7R	1206	GCM31CR71H225KA88L	Murata	
	C27	2.2uF	Capacitor, Ceramic, 2.2uF, 50V, X7R	1206	GCM31CR71H225KA88L	Murata	
2	C28	220pF	Capacitor, Ceramic, 50V, X7R	0603	GCM188R71H104KA57D	muRata	
	C29	220pF	Capacitor, Ceramic, 50V, X7R	0603	GCM188R71H104KA57D	muRata	
1	C31	0.1uF	Capacitor, Ceramic, vvV, [temp], [tol]	0805	GRM40yyxxxKvv	muRata	
2	D1	BAS16	Diode, Switching, 150-mA, 75-V, 350mW	SOT23	BAS16	Vishay-Liteon	
	D2	BAS16	Diode, Switching, 150-mA, 75-V, 350mW	SOT23	BAS16	Vishay-Liteon	
4	D3	BAS21	Diode, Switching, 200-mA, 200-V, 330-mW	SOT23	BAS21	Zetex	
	D4	BAS21	Diode, Switching, 200-mA, 200-V, 330-mW	SOT23	BAS21	Zetex	
2	D5	MBRB2545CT	Diode, Dual Schottky, 15 A, 45-V	D2PAK	MBRB2545CT	STD	
	D6	MBRB2545CT	Diode, Dual Schottky, 15 A, 45-V	D2PAK	MBRB2545CT	STD	
	D7	BAS21	Diode, Switching, 200-mA, 200-V, 330-mW	SOT23	BAS21	Zetex	
	D8	BAS21	Diode, Switching, 200-mA, 200-V, 330-mW	SOT23	BAS21	Zetex	
1	J1	Vin	Lug, Solderless, #10 - #10-12 AWG, Copper/Tin, Uninsulated	0.375 x1.00 inch	33457	AMP	
1	J2	D120/2DS	Terminal Block, 2-pin, 15-A, 5.1mm	0.40 x 0.35 inch	D120/2DS	OST	
2	J3	ED1514	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED1514	OST	
1	J4	Gnd	Lug, Solderless, #10 - #10-12 AWG, Copper/Tin, Uninsulated	0.375 x1.00 inch	33457	AMP	

	J5	ED1514	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED1514	OST
1	JP1	PTC36SAAN	Header, 2-pin, 100mil spacing, (36-pin strip)	0.100 inch x 2	PTC36SAAN	Sullins
2	L1	5.6uH	Inductor, SMT, 5.6uH, 13.5A, 10milliohm	0.51 x 0.51 inch	IHLP5050FDER5R6M01	Vishay
	L2	5.6uH	Inductor, SMT, 5.6uH, 13.5A, 10milliohm	0.51 x 0.51 inch	IHLP5050FDER5R6M01	Vishay
2	Q1	FDD8444L	MOSFET, N-ch, 40V, 50A, 6 milliohm	DPAK	FDD8444L	Fairchild
	Q2	FDD8444L	MOSFET, N-ch, 40V, 50A, 6 milliohm	DPAK	FDD8444L	Fairchild
2	Q3	2N7002DICT	MOSFET, N-ch, 60-V, 115-mA, 1.2-Ohms	SOT23	2N7002DICT	Vishay-Liteon
	Q4	2N7002DICT	MOSFET, N-ch, 60-V, 115-mA, 1.2-Ohms	SOT23	2N7002DICT	Vishay-Liteon
3	Q5	MMBT3906LT1	Bipolar, PNP, xx-V, yy-mA, zz-W	SOT23	MMBT3906LT1	On Semi
	Q6	MMBT3906LT1	Bipolar, PNP, xx-V, yy-mA, zz-W	SOT23	MMBT3906LT1	On Semi
	Q7	MMBT3906LT1	Bipolar, PNP, xx-V, yy-mA, zz-W	SOT23	MMBT3906LT1	On Semi
2	Q8	MMBT3904LT1	Bipolar, NPN, xx-V, yy-mA, zz-W	SOT23	MMBT3904LT1	On Semi
	Q9	MMBT3904LT1	Bipolar, NPN, xx-V, yy-mA, zz-W	SOT23	MMBT3904LT1	On Semi
1	R1	10 ohm	Resistor, Chip, 1/16W, 1%	0603	Std	Std
2	R2	180K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R3	10K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
4	R4	0.01	Resistor, Metal Film, 1/4 watt, ± 1%	1206	WSL12065L000FEA18	Vishay
3	R5	1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R6	180K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R7	2.94k	Resistor, Chip, 1/16W, x%	0603	Std	Std
	R8	1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R9	19.1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
3	R10	1k	Resistor, Chip, 1/16W, x%	0603	Std	Std
	R11	0.01	Resistor, Metal Film, 1/4 watt, ± 1%	1206	WSL12065L000FEA18	Vishay
	R12	1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R13	0.01	Resistor, Metal Film, 1/4 watt, ± 1%	1206	WSL12065L000FEA18	Vishay
1	R14	51.1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R15	3.16K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R16	0.01	Resistor, Metal Film, 1/4 watt, ± 1%	1206	WSL12065L000FEA18	Vishay
1	R17	27K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R18	49.9	Resistor, Chip, 1/16W, x%	0603	Std	Std
	R19	1K	Resistor, Chip, 1/16W, x%	0603	Std	Std
	R20	1K	Resistor, Chip, 1/16W, x%	0603	Std	Std
4	R21	1K	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxxx-F	Vishay
	R22	1K	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxxx-F	Vishay
4	R23	10K	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxxx-F	Vishay
	R24	10K	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxxx-F	Vishay
	R25	1K	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxxx-F	Vishay
	R26	10K	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxxx-F	Vishay
	R27	1K	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxxx-F	Vishay
	R28	10K	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxxx-F	Vishay
1	R29	15,8K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R32	0	Resistor, Chip, 1/16W, 1%	0603	Std	Std
10	TP3	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
2	TP4	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
	TP5	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone

	TP6	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP7	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP8	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
	TP9	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP10	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP11	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP12	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP13	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
	TP14	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
2	U1	TPS40210DGQ	IC, 4.5V-52V I/P, Current Mode Boost Controller	DGQ10	TPS40210DGQ	TI
	U2	TPS40210DGQ	IC, 4.5V-52V I/P, Current Mode Boost Controller	DGQ10	TPS40210DGQ	TI
1	U3	TLC555QDRQ1	IC, Timer, Low-Power CMOS	SO8	TLC555QDRQ1	TI
1	U4	LM2904AVQPWRQ1	IC, Dual Op Amp, 2-36 Vin	TSSOP-8	LM2904AVQPWRQ1	TI
1	U5	TPS79801DGN	IC, LDO Micropower Linear Regulator, 3V-60V, 100 mA	HTSSOP-8	TPS79801DGN	TI
1	U8	SN74AHC1G04QD	IC, Single Hex Inverter	DCK-5	SN74AHC1G04QDCKRQ1	TI

- Notes:
1. These assemblies are ESD sensitive, ESD precautions shall be observed.
 2. These assemblies must be clean and free from flux and all contaminants.
Use of no clean flux is not acceptable.
 3. These assemblies must comply with workmanship standards IPC-A-610 Class 2.
 4. Ref designators marked with an asterisk (***) cannot be substituted.
All other components can be substituted with equivalent MFG's components.

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