

Filename: PMP5214\_REVA\_bom.xls

Date: June 16, 2010

## PMP5214\_REVA 5214\_REVA BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR	AREA
1	C1	2.2uF	Capacitor, Ceramic, 25V, X5R, 10%	1210	Std	Std	83,600
	C12, C17, C20,						
5	C22, C28	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	0805	STD	STD	10560
3	C13, C27, C29	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD	5650
1	C14	100pF	Capacitor, Ceramic, 50V, C0G, 5%	0603	STD	STD	5650
3	C15, C19, C21	1uF	Capacitor, Ceramic, 25V, X5R, 10%	0805	Std	Std	10560
	C16, C18, C23,						
	C26, C30, C32,						
10	C33, C34, C35, C36	10uF	Capacitor, Ceramic, 25V, X5R, 10%	1210	Std	Std	83,600
0	C2, C10	Open	Capacitor, Ceramic, 25V, X5R, 10%	1210	Std	Std	83,600
	C201, C202, C204,						
	C205, C206, C208,						
	C209, C213, C214,						
	C215, C216, C217,						
	C219, C220, C221,						
16	C222	0.1uF	Capacitor, Ceramic, 0.1uF, 50 V, X7R, 20%	0603	STD	Any	5650
1	C207	0.22uF	Capacitor, Ceramic, 0.22uF, 25 V, X7R, 20%	0603	STD	Any	5650
3	C210, C211, C212	1.0uF	Capacitor, Ceramic, 1.0 uF, 25 V, X7R, 20%	0805	STD	Any	10560
0	C25	Open	Capacitor, Ceramic, 50V, X7R, 10%	0603	STD	STD	5650
0	C3	Open	Capacitor, Ceramic, vvV, [temp], [tol]	1210	Std	Vishay	28000
1	C31	3300pF	Capacitor, Ceramic, 50V, X7R, 15%	0805	GRM40yyyxxxKvv	muRata	10560
2	C4, C11	10nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	5650
1	C5	1500pF	Capacitor, Ceramic, 50-V, C0G, 5%	0603	Std	Std	5650
2	C52, C53	100pF	Capacitor, Ceramic, 100pF, 50 V, X7R, 10%	0603	STD	Any	5650
1	C6	47pF	Capacitor, Ceramic, 50-V, C0G, 5%	0603	Std	Std	5650
1	C7	0.1uF	Capacitor, Ceramic, 25V, X7R, 15%	0603	GRM39yyyxxxKvvv	muRata	5650
1	C8	150pF	Capacitor, Ceramic, 50-V, C0G, 5%	0603	Std	Std	5650
1	C9	1uF	Capacitor, Ceramic, 25V, X5R, 10%	0603	Std	Std	5650
1	D1	BAT54HT1	Diode, Schottky, 200-mA, 30-V	SOD323	BAT54HT1	On Semi	14105
1	D2	BAT54C	Diode, Dual Schottky, 200-mA, 30-V	SOT23	BAT54C	Vishay-Liteon	14105
3	D201, D202, D203	MBRX02560	Diode, Schottky, 250mA, 60V	SOD-323	MBRX02560	Micro Commercial	16600
1	D204	MM3Z5V6C	Diode, Zener, 5.6V, 200mw	SOD323	MM3Z5V6C	Fairchild	15500

	D3, D4, D5, D6, D7,						
6	D8	Green	Diode, LED, Green, 2.1-V, 20-mA, 6-mcd	0603	LTST-C190GKT	Lite On	9451
1	F201	SFH-1212A	Fuse, Fast Acting, 5x20mm, 12A, vvV	0.224 x 0.138 ir	SFH-1212A	Sony	56232
1	J1	D120/2DS	Terminal Block, 2-pin, 15-A, 5.1mm	0.40 x 0.35 inch	D120/2DS	OST	141600
1	J10	D120/3DS	Terminal Block, 3-pin, 15-A, 5.1mm	0.60 x 0.35 inch	D120/3DS	OST	212400
1	J2	ED555/3DS	Terminal Block, 3-pin, 6-A, 3.5mm	0.41 x 0.25 inch	ED555/3DS	OST	105825
1	J3	ED120/4DS	Terminal Block, 4-pin, 15-A, 5.1mm	0.80 x 0.35 inch	ED120/4DS	OST	281076
1	J4	ED555/4DS	Terminal Block, 4-pin, 6-A, 3.5mm	0.55 x 0.25	ED555/4DS	OST	148400
1	J5	15-91-3044	Connector, SMT 4P, RA	0.550 x 0.660 ir	15-91-3044	Molex	382800
1	J6	56579-0519	Connector, USB, Mini AB 5-pins	0.354 X 0.307 li	56579-0519	Molex	144000
2	J7, J204	PEC02SAAN	Header, Male 2-pin, 100mil spacing	0.100 inch x 2	PEC02SAAN	Sullins	
1	J8	DC-10x	Connector, DC Jack xx mm Dia., 12VDC, 5A	0.354 x 0.550 ir	DC-10x	Cliff	279400
0	JP201					STD	
1	L1	4.7uH	Inductor, SMT, 13.5A, 8.7milliohm	0.51 x 0.51 inch	IHLP5050FDER4R	Vishay	342900
	Q1, Q2, Q8, Q202,	FDMS6673BZ or			FDMS6673BZ or	Fairchild or	
5	Q203	Si7149DP	MOSFET, PChan, -30V, -28A, 6.8milliohm	PWRPAK S0-8	Si7149DP	Vishay	85057
1	Q201	BSS84	MOSFET, Pch, -50V, -0.13A, 10 Ohm	SOT23	BSS84	Infineon	14105
1	Q204	NDS351AN	MOSFET, N-ch, 30-V, 1.4A, 0.16-Ohms	SOT23	NDS351AN	Fairchild	14105
2	Q205, Q206	Si1023X	MOSFET, P-ch, -20V, -350mA, 1.2 Ohms	SC-89	Si1023x	Vishay	9409
	Q3, Q6, Q10, Q11, Q13, Q14, Q15,						
9	Q17, Q18	2N7002DICT	MOSFET, N-ch, 60-V, 115-mA, 1.2-Ohms	SOT23	2N7002DICT	Vishay-Liteon	14105
2	Q4, Q5	CSD17302Q5A	MOSFET, N-Chan, 30V, 17A, 7.2 milli-ohm	QFN-8 POWER	CSD17302Q5A	TI	86800
1	Q7	NDS0605	MOSFET, P-ch, -60 V, 180-mA, 5 Ohms	SOT-23	NDS0605	Vishay	14105
3	Q9, Q12, Q16	TP0610K	Mosfet, P-Ch, 60V, Rds 6 ohms, Id 185 mA	SOT-23	TP0610K	Vishay-Siliconix	14105
2	R1, R40	3.9	Resistor, Chip, 0.5W, 5%	1210	Std	Std	24200
1	R13	4.75k	Resistor, Chip, 1/16W, 1%	0603	STD	STD	9100
1	R15	1.40M	Resistor, Chip, 1/10W, 1%	0805	Std	Std	10560
1	R17	0	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay	9100
2	R18, R26	0.01	Resistor, Chip, 1W, 1%	2512	STD	STD	56000
1	R2	422k	Resistor, Chip, 1/16W, 1%	0603	STD	STD	9100
1	R201	301	Resistor, Chip, 301-Ohms, 1-W, 10%	2512	CRCW2512301RFI	Vishay	35100
1	R202	1M	Resistor, Chip, 1M-Ohms, 1/16-W, 5%	0603	Std	Std	5650
2	R203, R205	3 Meg	Resistor, Chip, 1/16-W, 5%	0603	Std	Std	5650
	R204, R210, R212, R213, R215, R216,						
8	R217, R230	1K	Resistor, Chip, 1K-Ohms, 1/16-W, 5%	0603	Std	Std	5650
1	R206	0	Resistor, Chip, 1/16-W, 5%	0603	Std	Std	5650
3	R207, R209, R211	5.1K	Resistor, Chip, 5.1K-Ohms, 1/16-W, 5%	0603	Std	Std	5650
2	R208, R214	220K	Resistor, Chip, 220K-Ohms, 1/16-W, 5%	0603	Std	Std	5650
1	R21	12	Resistor, Chip, 1/16W, 5%	0603	Std	Std	5,650

1	R22	1Meg	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F Vishay	9100
3	R225, R226, R227	100	Resistor, Chip, 100-Ohms, 1/4-W, 5%	1206	CRCW1206100RJ Vishay	15390
1	R231	.010 75ppm	Resistor, Chip, 0.010 Ohms, 1-W, 1%	2512	WSL-2512-010 1% Vishay	35100
1	R3	91k	Resistor, Chip, 1/16W, 1%	0603	STD STD	9100
6	R30, R31, R34, R35, R36, R39 R4, R5, R8, R10, R11, R12, R14, R16, R19, R20,	2.21k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F Vishay	9100
12	R23, R24	10k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F Vishay	9100
1	R41	100	Resistor, Chip, 1/16W, 1%	0603	STD STD	9100
1	R42	10	Resistor, Chip, 1/10W, 5%	0805	CRCW0805-xxx-J Vishay	15300
1	R43	0.47	Resistor, Chip, 1/2W, 1%	2010	STD Vishay	30800
5	R220, R229 R54, R55, R221,	100	Resistor, Chip, 100-Ohms, 1/16-W, 5%	0603	Std Std	5650
4	R223 R6, R25, R27, R28, R29, R32, R33,	200	Resistor, Chip, 200-Ohms, 1/16-W, 5%	0603	Std Std	5650
9	R37, R38	100k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F Vishay	9100
1	R7	82.5k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F Vishay	9100
1	R9	200K	Resistor, Chip, 1/16W, 1%	0603	STD STD	9100
2	RT201, RT202	10K	Thermistor, 10K ohms	0.095 X 0.150	103AT-2 Semitec	25,000
BP1, BP2, BP3	SONATA 4400 SPK2, SPK3,	rechargeable Lithium-ion	(37.2 X 65.2 mm)	SONATA 4400	Boston Power	2744.00 mm
0	SPK204		Spark gap built into the layout			
1	TP1	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 ir	5001 Keystone	10
1	TP2	5015	Test Point, SMT	0.105 x 0.040 ir	5015 Keystone	
1	TP201	DSG	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir	5002 Keystone	10
1	TP202	FUSE	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir	5002 Keystone	10
0	TP203	FUSEPIN	Test point, 40 mil SMT	None None	None	
1	TP204	CHG	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir	5002 Keystone	10
1	TP205	BAT	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir	5002 Keystone	10
0	TP206	SRP	Test point, 40 mil SMT	None None	None	
0	TP207	SRN	Test point, 40 mil SMT	None None	None	
1	TP208	CELLS-	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir	5002 Keystone	10
1	TP209	2.7V	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir	5002 Keystone	10
0	TP221, TP222, TP223, TP224	STD	Test Point, 0.032 Hole		STD STD	
1	TP23	GND	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 ir	5001 Keystone	10

1	TP24	VREF	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir 5002	Keystone	10
1	TP26	ACOK	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir 5002	Keystone	10
1	TP27	VICM	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir 5002	Keystone	10
1	TP28	SDA	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir 5002	Keystone	10
1	TP29	SCL	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir 5002	Keystone	10
0	TP3, TP12, TP16	STD	Test Point, 0.020 Hole	STD	STD	
1	TP30	ICOUT	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 ir 5002	Keystone	10
3	TP31, TP32, TP33	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 ir 5000	Keystone	10
0	TP6, TP8, TP9	STD	Test Point, 0.020 Hole"			
1	U1	BQ24747RHD	IC, SMBus-Controlled Level 2 Multi-Chem. Battery Charger Con	QFN-28	BQ24747RHD	66564
1	U201	BQ29412DCT	IC, Voltage Protection for 2, 3, 4 Cell Lion , 2nd Protection, 4.45	SSOP-08	BQ29412DCT	TI
1	U202	BQ3060PW	IC, SBS 1.1-COMPLIANT GAS GAUGE and PROTECTION	TSSOP-24	BQ3060PW	TI
						117120

- 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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