

Filename: PMP6505_REVA_bom.xls

Date: January 5, 2010

updates in bold red: add C113, C214; C315, C415 change R209 and see note 5

PMP6505_REVA BOM

COUNT	RefDes	VALUE	Description	Size	Part Number	MFR
3	C1, C2, C3	470uF	Capacitor, Aluminum, 16V, 105 deg C, 20%	0.315 inch	16ZLG470M10x12.5	Rubycon
4	C10, C15, C20, C21	470pF	Capacitor, Ceramic, 50V, X7R, 15%	0402	{Part Number}	{MFR}
4	C101, C201, C306, C406	100pF	Capacitor, Ceramic, 50V, X7R, 15%	0402	{Part Number}	{MFR}
5	C105, C155, C205, C309, C409	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0805	GRM40yyyxxxKvv	muRata
4	C106, C206, C310, C410	0.33uF	Capacitor, Ceramic, 16V, X5R, 15%	0402	std	std
8	C107, C108, C207, C208, C301, C302, C401, C402	10uF	Capacitor, Ceramic, 10uF, 25V, X5R, 20%	1210	std	std
3	C109, C311, C411	1.5nF	Capacitor, Ceramic, 100V, X7R, 15%	0805	std	std
1	C209 Note 5	2.2nF	Capacitor, Ceramic, 100V, X7R, 15%	0805	std	std
8	C112, C113 , C212, C214 , C313, C315 , C413, C415	47uF	Capacitor, Ceramic, 47uF, 16V, X5R	1210	GRM32ER61C476KE	Murata
8	C113, C114, C213, C214, C314, C315, C414, C415	DNP	Capacitor, Ceramic, open, 16V, X5R	1210	DNP	TBD
4	C115, C215, C316, C416	330uF	Capacitor, Aluminum, SMT, 2V, 7mOhms, 20%	7343(D)	EEFSD0D331R	Panasonic
2	C14, C17	4.7uF	Capacitor, Ceramic, 10V, X5R, 20%	0603	GRM39yyyxxxKvvvA	muRata
1	C151	0.22uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	GRM39yyyxxxKvvvA	muRata
2	C152, C153	0.1uF	Capacitor, Ceramic, 25V, X7R, 15%	0603	GRM39yyyxxxKvvvA	muRata
1	C154	1uF	Capacitor, Ceramic, 25V, X5R, 20%	0603	Std	Std

9	C25, C102, C111, C202, C211, C307, C312, C407, C412	1uF	Capacitor, Ceramic, 6.3V, X5R, 20%	0402	{Part Number}	{MFR}
17	C4, C18, C19, C103, C104, C110, C203, C204, C210, C303, C304, C305, C308, C403, C404, C405, C408	0.1uF	Capacitor, Ceramic, 16V, X7R, 15%	0402	GRM155R71C104KA	Murata
10	C16, C22	0.01uF	Capacitor, Ceramic, 50V, X7R, 15%	0402	{Part Number}	{MFR}
1	C601	22uF	Capacitor, Ceramic, 16V, X7R, 20%	1210	Std	std
1	C602	1.0uF	Capacitor, Ceramic, 1.0-uF, 25-V, X7R, 10%	0603	C1608X7R1E105K	TDK
1	C603	10pF	Capacitor, Ceramic, 10-pF, 50-V, C0G, 10%	0603		TDK
1	C604	22 uF	Capacitor, Ceramic, 22-uF, 16-V, X7R, 20%	1210	C3225X7R1C226M	TDK
12	D101, D102, D103, D104, D153, D154, D201, D202, D203, D204, D301, D401	MBR0530TxG	Diode, Schottky, 0.5A, 30V	SOD-123	MBR0530TxG	On Semi
1	D151	BAT54	Diode, Schottky, 200-mA, 30-V	SOT23	BAT54-V-GS08	Vishay-Liteon
1	D152	RED	Diode, LED, Red Clear, 20mcd	0.079 X 0.049	LTST-C170CKT	Lite On
5	J1, J101, J201, J301, J401	ED120/2DS	Terminal Block, 2-pin, 15-A, 5.1mm	0.40 x 0.35 inch	ED120/2DS	OST
5	J302, J402	PEC02SAAN	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
1	J2	.WHW10G-0202-T-I	Connector, Male Straight 2x5 pin, 100mil spacing, 4 Wall	0.338 x 0.788 inch	AWHW10G-0202-T-R	Assmann Electronics
1	J601	ED1609-ND	Terminal Block, 2-pin, 15-A, 5.1mm	0.40 x 0.35	ED1609	
4	L101, L201, L301, L401	470nH	Inductor, SMT, 17.5A, 4.2-milliohm	0.255 x 0.270 inch	MPT730-R47M1	Delta (Cyntec)
1	L601	6.8uH	Inductor, SMT, 6.8-uH, 1.6-A, 49.2-milliohm	0.276 sq	PCMC063T-R47MN	Susumu
1	Q101	CSD86350Q5D	MOSFET, Dual N-Chan, TBD-V, TBD-A	0.276 sq	SLF7032T-6R8M1R6	TDK
				QFN-8 POWER	CSD86350Q5D	TI

1	Q151	CSD16407Q5	MOSFET, NChan, 25V, 31A, 2.5 milliOhm	QFN5X6mm	CSD16407Q5	TI(Ciclon)
1	Q201	CSD86330Q3D	MOSFET, Synchronous Buck NexFET Power Block	QFN-8 POWER	CSD86330Q3D	TI
	R10, R11, R12, R13, R101, R102, R201, R202, R304, R305, R404, R405	2.49k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
12	R103, R203, R302, R402	20k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
4						
	R106, R113, R206, R213, R306, R311, R406, R411	7.5k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
8						
1	R109	1.5k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R209	2.21k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
	R110, R114, R115, R210, R214, R215, R312, R313, R412,					
10	R413	1	Resistor, Chip, 1/16W, 5%	0402	Std	Std
3	R111, R309, R409	1	Resistor, Chip, 1/2W, 5%	2010	Std	Std
1	R211 Note 5	0.68	Resistor, Chip, 1/2W, 5%	2010	Std	Std
	R112, R212, R310, R410	15k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
4						
1	R151	8.06k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R152	100k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R153	10k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R154	331	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
2	R155, R160	10	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxx-J	Vishay
3	R156, R157, R158	0.05	Resistor, Chip, 1W, 5%	2512	Std	Std
1	R159	0.005	Resistor, Chip, 1W, 5%	2512	Std	Std
3	R161, R162, R163	DNP	Resistor, Chip, 1W, 5%	2512	Std	Std
	R19, R21, R23, R43	1k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
4						
2	R2, R5	133k	Resistor, Chip, 1/16W, 1%	0402	Std	Std

7	R20, R22, R25, R27, R28, R39, R41	100k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
5	R42, R44	10	Resistor, Chip, 1/16W, 5%	0402	Std	Std
2	R303, R403	2k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
2	R308, R408	2	Resistor, Chip, 1/16W, 5%	0402	Std	Std
1	R36	1 M	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R4	56.2k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
4	R40, R46, R47, R48	51	Resistor, Chip, 1/16W, 5%	0402	Std	Std
1	R45	0.2	Resistor, Chip, 1/16W, 5%	0603	CRCW0603-xxx-J	Vishay
6	R601, R602, R604, R605, R606, R608	1.00M	Resistor, Chip, 1.00M-Ohms, 1/16-W, 1%	0603	Std	Std
1	R603	261k	Resistor, Chip, 261k-Ohms, 1/16-W, 1%	0603	Std	Std
1	R607	51	Resistor, Chip, 1/16W, 5%	0603	Std	Std
1	R609	232k	Resistor, Chip, 1/16-W, 1%	0603	Std	Std
27	R7, R8, R24, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R104, R105, R204, R205, R301, R401	10k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
9	R99, R107, R108, R116, R207, R208, R216, R307, R407	0	Resistor, Chip, 1/16W, 5%	0402	Std	Std
4	S1, S2, S3, S4	76SB04T	Switch, 4-pole DIP, Raised Rocker	0.38 x 0.40 incl	76SB04T	Grayhill
1	S5	KSC221J	Switch, Momentary, Sealed Tact, 32V, 50mA	0.394 x 0.260 ir	KSC221J	ITT
5	TH4, TH5, TH6, TH7, TH8		Thru Hole, 15 mil, plated			
4	TP1, TP2, TP3, TP4	5016	Test Point, SM, 0.150 x 0.090	0.185 x 0.135 ir	5016	Keystone

4	TP101, TP201, TP303, TP403	5015	Test Point, SMT		0.105 x 0.040 ir 5015	Keystone
10	TP103, TP105, TP153, TP203, TP205, TP302, TP305, TP402, TP405, TP605	5001	Test Point, Black, Thru Hole Color Keyed		0.100 x 0.100 ir 5001	Keystone
13	TP604	5000	Test Point, Red, Thru Hole Color Keyed		0.100 x 0.100 ir 5000	Keystone
2	TP151, TP152	5002	Test Point, White, Thru Hole Color Keyed		0.100 x 0.100 ir 5002	Keystone
1	U1	UCD9244RGC	IC, Digital PWM System Controller	QFN-64	UCD9244RGC	TI
2	U101, U201	UCD7231RTJ	IC, Digital Control Compatible Sync-Buck Gate Driver W/Curren	QFN-20	UCD7231RTJ	TI
1	U151	TLC555CD	IC, Timer, Low-Power CMOS	SO8	TLC555CD	TI
1	U152	UCC37324DR	IC, Dual 4-A High Speed Low-Side Power MOSFET Drivers	SO-8	UCC37324DR	TI
1	U2	TPS76933DBV	IC, Ultralow-Power 100 mA LDO Regulator	SOT23-5	TPS76933DBV	TI
0	U301, U401	DNP		QFN40		
1	U601	TPS62110RSA	IC, Synchronous Step-Down Converter, 17V, 1.5A	QFN-16	TPS62110RSA	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.
 5. C209 & R211 need to be moved from bottom of Q201 to top of Q201, values updated

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