Filename: PMP4687 MAIN REV_C_bom.xls
Date: 12/11/2009

# PMP4687 MAIN REV_C BOM

| COUNT | RefDes | Value | Description | SIZE | Part Number | MFR | AREA |
|---|---|---|---|---|---|---|---|
| 1 | C1 | 220p | Capacitor, Ceramic, 50V, NPO, 5% | 0603 | std | std | 5650 |
| 1 | C2 | 0.22u | Capacitor, Ceramic, 16V, [temp], [tol] | 0603 | std | std | 5650 |
| 1 | C3 | 47nF | Capacitor, Ceramic, 50V, [temp], [tol] | 0603 | std | std | 5650 |
| 1 | C4 | DNP | Capacitor, Ceramic, 50V, [temp], [tol] | 0603 | std | std | 5650 |
| 1 | C5 | 0.1u | Capacitor, Ceramic, 25V, [temp], [tol] | 0603 | std | std | 5650 |
| 1 | C7 | 1u | Capacitor, Ceramic, 16V, X7R, 20% | 0603 | std | std | 5650 |
| 2 | C8 | 1uF | Capacitor, Ceramic, 100V, X7R, 10% | 1206 | C3216X7R2A105K | TDK | 15390 |
| 1 | C9 | 100p | Capacitor, Ceramic, vvV, [temp], [tol] | 0603 | std | std | 5650 |
|  | C10 | 1uF | Capacitor, Ceramic, 100V, X7R, 10% | 1206 | C3216X7R2A105K | TDK | 15390 |
| 2 | C11 | 2.2uF | Capacitor, Ceramic, 100V, X7R, 10% | 1210 | Std | Std | 83,600 |
|  | C12 | 2.2uF | Capacitor, Ceramic, 100V, X7R, 10% | 1210 | Std | Std | 83,600 |
| 1 | C100 | 0.1uF | Capacitor, Ceramic, 50V, X7R, 10% | 0603 | C1608X7R1H104K | TDK | 5650 |
| 1 | C101 | 0.1u | Capacitor, Ceramic, 16V, [temp], [tol] | 0603 | std | std | 5650 |
| 1 | D1 | MBRS360 | Diode, 3A, 60V | SMC | STD | STD | 95000 |
| 1 | D2 | 30V | Diode, Zener, 30-V, yy-mA, 225-mW, 5% | SOT23 | MMBZ5256BLT1 | ON SEMI | 13419 |
| 1 | D100 | 5.1V | Diode, Zener, 5.1-V, yy-mA, 225-mW, 5% | SOT23 | MMBZ5231BLT1 | ON SEMI | 13419 |
| 3 | D101 | BAS16 | Diode, Switching, 150-mA, 75-V, 350mW | SOT23 | BAS16 | Vishay-Liteon | 14105 |
|  | D102 | BAS16 | Diode, Switching, 150-mA, 75-V, 350mW | SOT23 | BAS16 | Vishay-Liteon | 14105 |
|  | D103 | BAS16 | Diode, Switching, 150-mA, 75-V, 350mW | SOT23 | BAS16 | Vishay-Liteon | 14105 |
| 3 | J1 | D120/2DS | Terminal Block, 2-pin, 15-A, 5.1mm | 0.40 x 0.35 inch | D120/2DS | OST | 141600 |
|  | J2 | D120/2DS | Terminal Block, 2-pin, 15-A, 5.1mm | 0.40 x 0.35 inch | D120/2DS | OST | 141600 |
|  | J101 | D120/2DS | Terminal Block, 2-pin, 15-A, 5.1mm | 0.40 x 0.35 inch | D120/2DS | OST | 141600 |
| 1 | L1 | 10u | Inductor, SMT, 2.5Asat, 1.8Arms, 100milliohm | 0.236 x 0.236 inch | LPS6225-103ML | Coilcraft | 84000 |
| 1 | Q1 | Si3458DV | MOSFET, N-ch, 60-V,3.2-A, 100-milliOhms | TSOP-6 | Si3458DV | Vishay | 19454 |
| 1 | Q100 | BSS138 | MOSFET, N-ch, 50-V, 200-mA, 1.4-Ohms | SOT23 | 2N7002 | Diodes | 14105 |
| 1 | R1 | 154k | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 1 | R2 | DNP | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 2 | R3 | 10k | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 1 | R5 | 0 | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 1 | R7 | 4.7 | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 1 | R8 | 0.06 | Resistor, Metal Film, 1/4 watt, ± 1% | 1206 | CRCW1206-xxxx-F | Vishay | 20,000 |
| 1 | R9 | 4.32k | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 1 | R10 | 1k | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 1 | R11 | 0.068 | Resistor, Metal Film, 1/4 watt, ± 1% | 1206 | CRCW1206-xxxx-F | Vishay | 20,000 |
|  | R100 | 10k | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 1 | R101 | 100K | Resistor, Chip, 1/16W, x% | 0603 | Std | Std | 5,650 |
| 2 | R103 | 100 | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
|  | R104 | 100 | Resistor, Chip, 1/16W, 1% | 0603 | std | std | 9100 |
| 3 | TP1 | 5011 | Test Point, Black, Thru Hole | 0.125 x 0.125 inch | 5011 | Keystone |  |
| 2 | TP2 | 5010 | Test Point, Red, Thru Hole | 0.125 x 0.125 inch | 5010 | Keystone |  |
| 4 | TP4 | 5002 | Test Point, White, Thru Hole Color Keyed | 0.100 x 0.100 inch | 5002 | Keystone | 10 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | TP5 | 5002 | Test Point, White, Thru Hole Color Keyed | 0.100 x 0.100 inch | 5002 | Keystone | 10 |
| 1 | TP7 | 5000 | Test Point, Red, Thru Hole Color Keyed | 0.100 x 0.100 inch | 5000 | Keystone | 10 |
| | TP8 | 5011 | Test Point, Black, Thru Hole | 0.125 x 0.125 inch | 5011 | Keystone | |
| | TP10 | 5010 | Test Point, Red, Thru Hole | 0.125 x 0.125 inch | 5010 | Keystone | |
| | TP11 | 5011 | Test Point, Black, Thru Hole | 0.125 x 0.125 inch | 5011 | Keystone | |
| | TP100 | 5002 | Test Point, White, Thru Hole Color Keyed | 0.100 x 0.100 inch | 5002 | Keystone | 10 |
| | TP101 | 5002 | Test Point, White, Thru Hole Color Keyed | 0.100 x 0.100 inch | 5002 | Keystone | 10 |
| | TP102 | 5002 | Test Point, White, Thru Hole Color Keyed | 0.100 x 0.100 inch | 5002 | Keystone | 10 |
| 1 | U1 | TPS40210DGS | IC, Low Cost Non-Synchronous Boost Controller | DGS10 | TPS40210DGS | TI | 26780 |
| 1 | U100 | INA193AIDBV | IC, Current Shunt Monitor, -16V to 80V Common-Mode Range | SOT23-5 | INA193AIDBV | TI | 23200 |

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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