

# PMP7451\_REVB BOM

| COUNT | RefDes                           | Value                   | Description   | Size               | Part Number             | MFR               |
|-------|----------------------------------|-------------------------|---|--------------------|-------------------------|-------------------|
| 1     | C1                               | 0.1uF                   | Capacitor, Ceramic, 50V, X7R, 15%                     | 0603               | STD                     | STD               |
| 1     | C10                              | 0.047uF                 | Capacitor, Ceramic, 250V, X7R, 15%                    | 1206               | STD                     | STD               |
| 2     | C11, C18                         | 0.1uF                   | Capacitor, Ceramic, 25V, X7R, 15%                     | 0402               | STD                     | STD               |
| 1     | C15                              | 330pF                   | Capacitor, Ceramic, 3kV, NP0, C0G, 10%                | 1808               | Std                     | Std               |
| 1     | C16                              | 1uF                     | Capacitor, Ceramic, 6.3V, X5R, 15%                    | 0402               | STD                     | STD               |
| 1     | C17                              | 47pF                    | Capacitor, Ceramic, 50V, C0G, 5%                      | 0402               | STD                     | STD               |
| 1     | C19                              | 1000pF                  | Capacitor, Ceramic, 50V, C0G, 5%                      | 0402               | STD                     | STD               |
| 4     | C2, C3, C4, C5                   | 2.2uF                   | Capacitor, Ceramic, 100V, X7R, 15%                    | 1210               | STD                     | STD               |
| 1     | C20                              | 0.047uF                 | Capacitor, Ceramic, 25V, X7R, 15%                     | 0402               | STD                     | STD               |
| 1     | C22                              | 4700pF                  | Capacitor, Ceramic, 50V, C0G, 5%                      | 0402               | STD                     | STD               |
| 1     | C23                              | 4.7uF                   | Capacitor, Ceramic, 16V, X7R, 15%                     | 1206               | STD                     | STD               |
| 6     | C6, C7, C8, C12, C13, C14        | 22uF                    | Capacitor, Ceramic, 16V, X5R, 15%                     | 1206               | STD                     | STD               |
| 1     | C9                               | 470uF                   | CAP ALUM 470UF 16V 20% RADIAL                         | 0.315 inch         | EEU-FR1C471             | Panasonic         |
| 8     | D1, D3, D4, D5, D6, D7, D10, D11 | MMDL914T1               | Diode, Switching, 100-V, 200-mA, 200-mW,              | SOD-323            | MMDL914T1               | On Semi           |
| 1     | D2                               | ES1D                    | DIODE ULTRAFAST 200V 1A DO-214AC                      | SMA                | ES1D-13-F               | Diodes Inc.       |
| 2     | D8, D9                           | 8.2V                    | Diode, Zener, 8.2V                                    | SOD-323            | BZT52B8V2S              | STD               |
| 5     | J1, J2, J5, J6, J7               | 8600-0-05-01-00-00-03-0 | Header, Single pin                                    | 0.072 x 1 inch     | 8600-0-05-01-00-00-03-0 | Mill-Max          |
| 2     | J3, J4                           | 8952-0-05-01-00-00-03-0 | Header, Single pin                                    | 0.125 x 1 inch     | 8952-0-05-01-00-00-03-0 | Mill-Max          |
| 1     | L1                               | 6.8uH                   | Inductor, Shielded Power, ±20%                        | 0.394 x 0.445 inch | XAL1010-682ME           | Coilcraft         |
| 1     | L2                               | 1mH                     | Inductor, SMT, 0.1A, ±20%                             | 0.189 x 0.189 inch | LPS5015-105ML           | Coilcraft         |
| 2     | Q1, Q6                           | CSD18531Q5A             | MOSFET N-CH 60V 100A                                  | TDSON-8            | CSD18531Q5A             | Texas Instruments |
| 1     | Q100                             | MMBT2907ALT1            | Transistor, PNP, -60V, -600mA, 225-W                  |                    | MMBT2907ALT1            |                   |
| 1     | Q2                               | FDMS86200               | MOSFET N-CH 150V POWER56                              | QFN                | FDMS86200               | Fairchild         |
| 1     | Q3                               | SI1411DH                | MOSFET P-CH 150V 420MA SC70-6                         | TSOP-6             | SI1411DH                | Vishay            |
| 2     | Q4, Q5                           | BCX5616TA               | TRANSISTOR NPN 80V SOT-89                             | SOT-89             | BCX5616TA               | Zetex             |
| 1     | Q7                               | 2N7002W                 | MOSFET, Nch, 60V, 115mA                               | SOT323 [SC70]      | 2N7002W                 | Diodes            |
| 1     | R1                               | 4.3                     | Resistor, Chip, 1/16W, 1%                             | 0603               | STD                     | STD               |
| 1     | R12                              | 66.5k                   | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 5     | R13, R15, R21, R27, R29          | 100k                    | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 1     | R14                              | 52.3k                   | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 1     | R16                              | 2.21k                   | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 1     | R17                              | 0                       | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 1     | R19                              | 3.74k                   | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 4     | R2, R8, R10, R24                 | 1k                      | Resistor, Chip, 1/16W, 1%                             | 0603               | STD                     | STD               |
| 1     | R20                              | 1.65k                   | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 1     | R22                              | 2k                      | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 1     | R23                              | 100                     | Resistor, Chip, 1/16W, 1%                             | 0603               | STD                     | STD               |
| 1     | R3                               | 7.15k                   | Resistor, Chip, 1/2W, 5%                              | 2010               | STD                     | STD               |
| 1     | R31                              | 2.61k                   | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 2     | R4, R6                           | 2k                      | Resistor, Chip, 1/16W, 1%                             | 0603               | STD                     | STD               |
| 5     | R5, R11, R25, R26, R28           | 10k                     | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 2     | R7, R18                          | 1k                      | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 1     | R9                               | 15k                     | Resistor, Chip, 1/16W, 1%                             | 0402               | Std                     | Std               |
| 1     | T1                               | CST2-100L               | Transformer, Current Sense, 100:1                     | 0.315 x 0.320 inch | CST2-100L               | Coilcraft         |
| 1     | T2                               | 150 uH                  | Xfmr, 140W  |                    | PA0801.004              |                   |
| 2     | U1, U4                           | TCMT1107                | IC, Photocoupler                                      | MF4                | TCMT1107                | Vishay            |
| 1     | U2                               | UCC2897ARTJ             | IC, Advanced Current-Mode Active Clamp PWM Controller | QFP-20             | UCC2897ARTJ             | TI                |
| 2     | U3, U5                           | TL431AIDBZR             | IC, Precision Adjustable Shunt Regulator              | SOT23-3            | TL431AIDBZR             | TI                |

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