

PMP23117 REV A Bill of Materials

| Item # | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|--------|--------------------------------------|----------|---------|----------------------|-----------------------------|---|-------------------------------|
| 1 | IPC B1 | 1 | | PMP23117 | Any | Printed Circuit Board | |
| 2 | C1, C2 | 2 | 47uF | EEEFT1H470AP | Panasonic | CAP, AL, 47 uF, 50 V, +/- 20%, 0.68 ohm, AEC-Q200 Grade 2, SMD | D6.3xL5.8mm |
| 3 | C3, C4, C27, C28, C101 | 5 | 10uF | CGA5L1X7R1H106K160AC | TDK | CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206 | 1206 |
| 4 | C5, C6, C29, C30, C45, C53, C54 | 7 | 0.1uF | GCM155R71H104KE02D | MuRata | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402 | 402 |
| 5 | C7, C17, C25, C31, C39 | 5 | 0.1uF | GCM188R71C104KA37J | MuRata | CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603 | 603 |
| 6 | C8, C9, C18, C19, C21, C22, C34, C35 | 8 | 47uF | GRT32EC81A476KE13K | Murata | Multi-Layer Ceramic Capacitor 47uF 10VDC X6S 10% 1210 Emboss T/R | 1210 |
| 7 | C13, C23 | 2 | 1uF | GCM188R71E105KA64D | MuRata | CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603 | 603 |
| 8 | C14, C37 | 2 | 0.1uF | C1608X5R1H104K080AA | TDK | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X5R, 0603 | 603 |
| 9 | C15, C38 | 2 | 1uF | GCM188R71C105MA64D | MuRata | CAP, CERM, 1 uF, 16 V, +/- 20%, X7R, AEC-Q200 Grade 1, 0603 | 603 |
| 10 | C26 | 1 | 4700pF | GCM188R71H472KA37D | MuRata | CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603 | 603 |
| 11 | C46, C49, C50, C51, C52 | 5 | 2.2uF | CGA4J3X7R1H225K125AB | TDK | CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805 | 805 |
| 12 | C47, C48 | 2 | 0.022uF | CGA2B3X7R1H223K050BB | TDK | CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402 | 402 |
| 13 | FB2 | 1 | | BLM31SN500SH1L | Murata | Chip Ferrite Bead Array, 1206, 50Ω @ 100MHz, 0.0016Ω, 25%, 12A | 1206 |
| 14 | H1, H2, H3, H4 | 4 | | NY PMS 440 0025 PH | B&F Fastener Supply | Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead | Screw |
| 15 | H5, H6, H7, H8 | 4 | | 1902C | Keystone | Standoff, Hex, 0.5"L #4-40 Nylon | Standoff |
| 16 | J1, J6 | 2 | | 691 101 710 002 | Wurth Elektronik | Terminal Block, 5 mm, 2x1, Tin, TH | Terminal Block, 5 mm, 2x1, TH |
| 17 | J2, J3 | 2 | | 108-0740-001 | Cinch Connectivity | Standard Banana Jack, Uninsulated, 15A | Banana Jack |
| 18 | J4 | 1 | | TSW-102-07-G-S | Samtec | Header, 100mil, 2x1, Gold, TH | 2x1 Header |
| 19 | J5 | 1 | | PBC03SAAN | Sullins Connector Solutions | Header, 100mil, 3x1, Gold, TH | PBC03SAAN |
| 20 | L1, L2, L3, L4 | 4 | 3.3uH | XGL6060-332MEC | Coilcraft | Shielded Power Inductors 3.3uH 20% tol, 6.5mOhm 16.6A | SMT_6MM51_6MM71 |
| 21 | L5 | 1 | | XEL5030-102MEB | Coilcraft | Inductor, Shielded, Composite, 1.0H, 16.9 A, 0.0084 ohm, AEC-Q200 Grade 1 | SMT_5MM28_5MM48 |
| 22 | R1, R15 | 2 | 0 | CRCW04020000Z0EDHP | Vishay-Dale | RES, 0, 0%, 0.2 W, AEC-Q200 Grade 0, 0402 | 402 |
| 23 | R2, R5, R9, R11 | 4 | 200k | CRCW0603200KFKEA | Vishay-Dale | RES, 200 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 603 |
| 24 | R3 | 1 | 100k | TNPW0603100KBEEA | Vishay-Dale | RES, 100 k, 0.1%, 0.1 W, AEC-Q200 Grade 1, 0603 | 603 |
| 25 | R4 | 1 | 49.9 | CRCW080549R9FKEA | Vishay-Dale | RES, 49.9, 1%, 0.125 W, AEC-Q200 Grade 0, 0805 | 805 |
| 26 | R6 | 1 | 32.0k | RT0603BRD0732KL | Yageo America | RES, 32.0 k, 0.1%, 0.1 W, 0603 | 603 |
| 27 | R7, R12, R20, R23 | 4 | 100k | CRCW0603100KFKEA | Vishay-Dale | RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 603 |
| 28 | R8 | 1 | 100k | RC0603FR-07100KL | Yageo | RES, 100 k, 1%, 0.1 W, 0603 | 603 |
| 29 | R10, R16 | 2 | 31.6k | CRCW060331K6FKEA | Vishay-Dale | RES, 31.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 603 |
| 30 | R13 | 1 | 6.49k | CRCW06036K49FKEA | Vishay-Dale | RES, 6.49 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 603 |
| 31 | R14 | 1 | 73.2k | CRCW060373K2FKEA | Vishay-Dale | RES, 73.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 603 |
| 32 | R17 | 1 | 41.2k | CRCW060341K2FKEA | Vishay-Dale | RES, 41.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 603 |
| 33 | S1, S2 | 2 | | 218-2LPST | CTS Electrocomponents | Switch, SPST, 2 Pos, 25mA, 24VDC, SMD | 3.71x5.8mm |
| 34 | SH-J1 | 1 | 1x2 | SNT-100-BK-G | Samtec | Shunt, 100mil, Gold plated, Black | Shunt |
| 35 | T1, T2 | 2 | | CXS70-14-C | Panduit | Terminal 70A Lug | LUG, 32.3x14.5x11.7 |

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|--------|--|----------|-------|--------------------|-------------------|--|-------------------------------|
| 36 | TP1, TP2, TP4, TP6, TP7, TP8, TP10, TP11, TP12, TP17, TP18 | 11 | | S2751-46R | Harwin | Test Point, SMT | Test Point, SMT |
| 37 | TP3 | 1 | | 5010 | Keystone | Test Point, Multipurpose, Red, TH | Red Multipurpose Testpoint |
| 38 | TP5 | 1 | | 5013 | Keystone | Test Point, Multipurpose, Orange, TH | Orange Multipurpose Testpoint |
| 39 | TP13, TP14, TP15, TP16 | 4 | | 5011 | Keystone | Test Point, Multipurpose, Black, TH | Black Multipurpose Testpoint |
| 40 | U1, U2 | 2 | | LMQ644A2QRXARQ1 | Texas Instruments | LMQ644A2-Q1 3-V to 36-V, 12A, Low Iq dual buck converter | WQFN-FCRLF24 |
| 41 | C10, C11, C12, C20, C32, C33, C36, C40 | 0 | 47µF | GRT32EC81A476KE13K | Murata | Multi-Layer Ceramic Capacitor 47uF 10VDC X6S 10% 1210 Emboss T/R | 1210 |
| 42 | C16 | 0 | 22pF | 06035A220JAT2A | AVX | CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 603 |
| 43 | C24 | 0 | 10pF | GRM1885C2A100JA01D | MuRata | CAP, CERM, 10 pF, 100 V, +/- 5%, C0G/NP0, 0603 | 603 |
| 44 | FID1, FID2, FID3 | 0 | | N/A | N/A | Fiducial mark. There is nothing to buy or mount. | N/A |

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