

**PMP41083 REV E1 Bill of Materials**

| Item # | Designator                                       | Quantity | Value   | PartNumber           | Manufacturer                | Description  | PackageReference                                   |
|--------|--|----------|---------|----------------------|-----------------------------|--|--|
| 1      | IPC8   |          |         | PMP41083             | Any                         | Printed Circuit Board  |  |
| 2      | C1, C8, C9                                       | 3        | 10uF    | CLO5A106MPSNUNC      | Samsung Electro-Mechanics   | CAP. CERM. 10 uF, 10 V, +/- 20%, X5R, 0402   | 0402   |
| 3      | C2   | 1        | 4.7uF   | GRM21BR61H475KE51L   | MuRata                      | CAP. CERM. 4.7 uF, 50 V, +/- 10%, X5R, 0805  | 0805   |
| 4      | C3, C4, C5, C6                                   | 4        | 0.01uF  | C0402C103J5RACCTU    | Kemet                       | CAP. CERM. 0.01 uF, 50 V, +/- 5%, X7R, 0402  | 0402   |
| 5      | C10, C11   | 2        | 330pF   | CGA142X7R1H331M030BA | TDK                         | CAP. CERM. 330 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0201  | 0201   |
| 6      | C12, C13, C20, C70                               | 4        | 10uF    | CL31B106BHNNE        | Samsung                     | CAP. CERM. 10 uF, 50 V, +/- 10%, X7R, 1206   | 1206   |
| 7      | C14  | 1        | 0.1uF   | GCM188R71H104KA57D   | MuRata                      | CAP. CERM. 0.1 uF, 50 V, +/- 10%, X7R, 0603  | 0603   |
| 8      | C15  | 1        | 0.1uF   | GMK105B10KVKVF       | Taiyo Yuden                 | CAP. CERM. 0.1 uF, 35 V, +/- 10%, X5R, 0402  | 0402   |
| 9      | C27, C28   | 2        | 0.47uF  | C0805C474K4RACCTU    | Kemet                       | CAP. CERM. 0.47 uF, 16 V, +/- 10%, X7R, 0603   | 0603   |
| 10     | C29, C48, C61                                    | 3        | 4.7uF   | GCJ32DC72A475KE01L   | Murata                      | 4.7uF +/-10% 100V Ceramic Capacitor X7S 1210 (3225 Metric)   | 1210   |
| 11     | C30, C31, C32, C33, C37, C40, C43, C37, C64, C68 | 10       | 0.1uF   | HMK107B7104KAHT      | Taiyo Yuden                 | CAP. CERM. 0.1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603   | 0603   |
| 12     | C34  | 1        | 100pF   | GCM1885C2A101JA16D   | MuRata                      | CAP. CERM. 100 pF, 100 V, +/- 5%, COG/NP0, AEC-Q200 Grade 1, 0603  | 0603   |
| 13     | C35, C36   | 2        | 33pF    | 06031A330JAT2A       | AVX                         | CAP. CERM. 33 pF, 100 V, +/- 5%, COG/NP0, 0603   | 0603   |
| 14     | C38, C39   | 2        | 0.1uF   | 06033C104KAT2A       | AVX                         | CAP. CERM. 0.1 uF, 25 V, +/- 10%, X7R, 0603  | 0603   |
| 15     | C41, C54, C60, C63, C69                          | 5        | 1uF     | 08051C105K4Z2A       | AVX                         | CAP. CERM. 1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805   | 0805   |
| 16     | C42, C47   | 2        | 4.7uF   | CGA4J1X7R1E475K125AE | TDK Corporation             | Cap Ceramic 4.7uF 25V X7R 10% Pad SMD 0805 +125°C Automotive T/R   | 0805   |
| 17     | C44, C49, C51, C67                               | 4        |         | PCR1J101M1CL1GS      | Nichicon                    | 100uF 63V Polymer ALUM Electrolytic Capacitor, CR Series 4000h   | SMD_RADIAL   |
| 18     | C53, C59   | 2        | 10uF    | C325X7R2A106K250AC   | TDK                         | 10 uF +/-10% 100V Ceramic Capacitor X7R 1210 (3225 Metric)   | 1210   |
| 19     | C56  | 1        | 100pF   | CGA3E2CG2A101J090AA  | TDK                         | Multilayer Ceramic Capacitors MLCG - SMD/SMT CGA 0603 100pF COG 5% AEC-Q200  | 0603   |
| 20     | C58, C62   | 2        | 56uF    | EEH2C1J560P          | Panasonic                   | CAP. Polymer Hybrid, 56 uF, 63 V, +/- 20%, 30 ohm, 10x10 SMD   | 10x10  |
| 21     | D1, D2   | 2        | 5V      | CDS0323-T05C         | Bourns                      | Diode, TVS, Bi, 5 V, SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark  | SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark |
| 22     | D4, D5   | 2        |         | V1FM10-M3H           | Vishay                      | Diode Schottky 1A Surface Mount DO-219AB (SMF)   | DO-219AB   |
| 23     | J2   | 1        |         | DX07S024J2R1300      | JAE Electronics             | Receptacle, USB 3.1 Type C, R/A, Gold, SMT   | Receptacle, USB 3.1 Type C, R/A, SMT               |
| 24     | J3   | 1        |         | OSTTE030161          | On-Shore Technology         | Terminal Block, 3.5mm, 3x1, Tin, R/A, TH   | Terminal Block, 3.5mm, 3x1, TH                     |
| 25     | J6   | 1        |         | PEC05DAAN            | Sullins Connector Solutions | Header, 100mil, 5x2, Tin, TH   | Header, 5x2, 100mil, Tin                           |
| 26     | JP1  | 1        |         | PEC03SAAN            | Sullins Connector Solutions | Header, 100mil, 3x1, Tin, TH   | Header, 3 PIN, 100mil, Tin                         |
| 27     | L1   | 1        | 21 ohm  | FBMJ215HM210NT       | Taiyo Yuden                 | Ferrite Bead, 21 ohm @ 100 MHz, 6 A, 0805  | 0805   |
| 28     | L3   | 1        | 10uH    | CMLB135T-100MS       | Cymtec                      | Power Choke Coil 10uH 20% 9A 22mOhm  | SMT2, 13MMx45, 12M rfs                             |
| 29     | LBL1   | 1        |         | THT-14-423-10        | Brady                       | Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll   | PCB Label 0.650 x 0.200 inch                       |
| 30     | Q1, Q2, Q3, Q4                                   | 4        |         | SIR880BDP-T1-RE3     | Vishay                      | N-Channel 80 V 18.6A (Ta), 70.6A (Tc) 5W (Ta), 71.4W (Tc) Surface Mount PowerPAK® SO-8   | SO-8   |
| 31     | R2, R8, R9, R10, R11, R32                        | 6        | 0       | RC0402JR-070RL       | Yageo America               | RES, 0, 5%, 0.063 W, 0402  | 0402   |
| 32     | R6   | 1        | 100k    | RMCF0402F1100K       | Stackpole Electronics Inc   | RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402  | 0402   |
| 33     | R12, R13   | 2        | 3.3k    | CRCW04023K30JNED     | Vishay-Dale                 | RES, 3.3 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402  | 0402   |
| 34     | R22, R23, R24, R74                               | 4        | 10k     | CRCW040210K0JNED     | Vishay-Dale                 | RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402   | 0402   |
| 35     | R29, R31   | 2        | 5m      | WSL2512S100FEA       | Vishay                      | Res Metal Strip 2512 0.005 Ohm 1% 1W 110ppm/C Molded SMD SMD Embossed Plastic T/R  | 2512   |
| 36     | R33, R34, R36, R37                               | 4        | 10      | CRCW060310R0FKEB     | Vishay                      | RES Thick Film, 10Ω, 1%, 0.1W, 100ppm/C, 0603  | 0603   |
| 37     | R36, R38, R44, R45, R50, R51, R55, R56, R58      | 9        | 0       | CRCW06030000Z0EA     | Vishay                      | Thick Film Resistors - SMD 1/10watt ZEROohm Jumper   | 0603   |
| 38     | R39  | 1        | 30.1k   | RT0603BR00730K1L     | Yageo America               | RES, 30.1 k, 0.1%, 0.1 W, 0603   | 0603   |
| 39     | R40  | 1        | 1.1     | CRCW06031R10JNEA     | Vishay-Dale                 | RES, 1.1, 5%, 0.1 W, 0603  | 0603   |
| 40     | R41  | 1        | 249k    | ERJ-PB62493V         | Panasonic                   | Thick Film Resistors - SMD 0805 Anti-Surge Res, 0.1%, 249Kohm  | 0805   |
| 41     | R42, R43   | 2        | 3.3     | CRCW12103R30FKEAHP   | Vishay-Dale                 | RES, 3.3Ω, 1%, 0.75 W, AEC-Q200 Grade 0, 1210  | 1210   |
| 42     | R46  | 1        | 1.00Meg | CRCW06051M00FKEAC    | Vishay / Dale               | Thick Film Resistors - SMD 1/8Watt 1Mohms 1% Commercial Use  | 0805   |
| 43     | R47  | 1        | 24.9k   | RT0603BR00724K9L     | Yageo America               | RES, 24.9 k, 0.1%, 0.1 W, 0603   | 0603   |
| 44     | R48  | 1        | 294k    | RC0603FR-07294KL     | Yageo                       | RES, 294 k, 1%, 0.1 W, 0603  | 0603   |
| 45     | R49, R64, R68                                    | 3        | 0       | CRCW06050000Z0EA     | Vishay                      | Thick Film Resistors - SMD 1/8Watt ZEROohm Jumper  | 0805   |
| 46     | R52  | 1        | 64.9k   | RC0603FR-07649KL     | Yageo                       | RES, 64.9 k, 1%, 0.1 W, 0603   | 0603   |
| 47     | R53  | 1        | 15.2k   | RT0603BR00715K2L     | Yageo America               | RES, 15.2 k, 0.1%, 0.1 W, 0603   | 0603   |
| 48     | R54  | 1        | 2.49k   | RC0603FR-07249KL     | Yageo                       | RES, 2.49 k, 1%, 0.1 W, 0603   | 0603   |
| 49     | R57  | 1        | 5.23k   | RC0603FR-075K23L     | Yageo                       | RES, 5.23 k, 1%, 0.1 W, 0603   | 0603   |
| 50     | R60  | 1        | 10.1k   | M55342E12B10BIT      | TT Electronics/IRC          | RES, 10.1 k, 0.1%, 0.1 W, 0603   | 0603   |
| 51     | R61  | 1        | 3.01k   | CRCW06033K01FKEA     | Vishay-Dale                 | RES, 3.01 k, 1%, 0.1 W, 0603   | 0603   |
| 52     | R62  | 1        | 30.1k   | RC0603FR-0730K1L     | Yageo                       | RES, 30.1 k, 1%, 0.1 W, 0603   | 0603   |
| 53     | R63  | 1        | 100k    | RC0603FR-07100KL     | Yageo                       | RES, 100 k, 1%, 0.1 W, 0603  | 0603   |
| 54     | R67  | 1        | 1.1     | CRCW04021R10FKEB     | Vishay-Dale                 | RES, 1.1Ω, 1%, 0.063 W, AEC-Q200 Grade 0, 0402   | 0402   |
| 55     | R69, R70, R71, R73                               | 4        | 10.5k   | RC0402FR-0710K5L     | Yageo America               | RES, 10.5 k, 1%, 0.063 W, 0402   | 0402   |
| 56     | R111   | 1        | 10.0k   | M55342K12B10EOT      | TT Electronics/IRC          | RES, 10.0 k, 1%, 0.1 W, 0603   | 0603   |
| 57     | U1   | 1        |         | TPS25751DREFR        | Texas Instruments           | USB Type-C and USB PD Controller with Integrated Power Switches Optimized for Power Applications   | WQFN38   |
| 58     | U2   | 1        |         | TVS2200DRVR          | Texas Instruments           | 22-V Precision Surge Protection Clamp, DRV0006A (WSON-6)   | DRV0006A   |
| 59     | U6   | 1        |         | BQ25756RRVT          | Texas Instruments           | BQ25756RRVT  | VOFN36   |
| 60     | U8   | 1        |         | CAT24C512WI-GT3      | ON Semi                     | EEPROM Memory IC 512Kb (64K x 8) PC 1MHz 900ns 8-SOIC  | SOIC8  |
| 61     | C7   | 0        | 0.1uF   | 0603Y104JA12A        | AVX                         | CAP. CERM. 0.1 uF, 16 V, +/- 5%, X7R, 0603   | 0603   |
| 62     | C16  | 0        | 2.2uF   | GRM21BR71A222KA01L   | MuRata                      | CAP. CERM. 2.2 uF, 10 V, +/- 10%, X7R, 0805  | 0805   |
| 63     | C17  | 0        | 0.47uF  | GRM156R60J474KE19D   | MuRata                      | CAP. CERM. 0.47 uF, 6.3 V, +/- 10%, X5R, 0402  | 0402   |
| 64     | C18  | 0        | 1uF     | C0603C105K8PACTU     | Kemet                       | CAP. CERM. 1 uF, 10 V, +/- 10%, X5R, 0603  | 0603   |
| 65     | C19, C21, C22                                    | 0        | 47uF    | GRM32ER61C475KE15L   | MuRata                      | CAP. CERM. 47 uF, 16 V, +/- 10%, X5R, 1210   | 1210   |
| 66     | C23, C26   | 0        | 4.7uF   | GCM188R72A475KE02L   | MuRata                      | CAP. CERM. 4.7 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210   | 1210   |
| 67     | C24  | 0        | 1uF     | C2012X7S2A105K125AB  | TDK                         | CAP. CERM. 1 uF, 100 V, +/- 10%, X7S, 0805   | 0805   |
| 68     | C25  | 0        | 2.2uF   | CGA3E3X5R1A122K080AB | TDK                         | CAP. CERM. 2.2 uF, 10 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603  | 0603   |
| 69     | C71  | 0        | 0.47uF  | GRM21BR72A474KA73L   | MuRata                      | CAP. CERM. 0.47 uF, 100 V, +/- 10%, X7R, 0805  | 0805   |
| 70     | C72  | 0        | 0.47uF  | C1608R61H474K080AB   | TDK                         | CAP. CERM. 0.47 uF, 50 V, +/- 10%, X5R, 0603   | 0603   |
| 71     | C73  | 0        | 0.012uF | GRM188R71C123KA01D   | MuRata                      | CAP. CERM. 0.012 uF, 16 V, +/- 10%, X7R, 0603  | 0603   |
| 72     | C74  | 0        | 12pF    | C0603C120J5GACTU     | Kemet                       | CAP. CERM. 12 pF, 50 V, +/- 5%, COG/NP0, 0603  | 0603   |
| 73     | D3   | 0        | 9.1V    | BZT52C9V1T1-7        | Diodes Inc.                 | Diode, Zener, 9.1 V, 300 mW, SOD-523   | SOD-523  |
| 74     | H1   | 0        |         | TSN-104-014-07-S     | Samtec                      | Header, 100mil, 4x1, Gold, TH  | 3x1 Header   |
| 75     | J4   | 0        |         | 90120-0122           | Molex                       | Header, 100mil, 2x1, Tin, TH   | Header 2x1   |
| 76     | L6   | 0        | 4.7uH   | XAL5030-472MEB       | Coilcraft                   | Inductor, Shielded, Composite, 4.7 uH, 5.9 A, 0.04 ohm, AEC-Q200 Grade 1, SMD  | 5.3x31.x5mm  |
| 77     | R3, R4   | 0        | 3.3k    | CRCW04023K30JNED     | Vishay-Dale                 | RES, 3.3 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402  | 0402   |
| 78     | R5, R17, R21, R27, R77                           | 0        | 0       | RC0402JR-070RL       | Yageo America               | RES, 0, 5%, 0.063 W, 0402  | 0402   |
| 79     | R16, R59, R72                                    | 0        | 0       | CRCW06030000Z0EA     | Vishay                      | Thick Film Resistors - SMD 1/10watt ZEROohm Jumper   | 0603   |
| 80     | R19  | 0        | 3.3     | RC0603JR-073K3L      | Yageo                       | RES, 3.3 k, 5%, 0.125 W, 0805  | 0805   |
| 81     | R20  | 0        | 78.7k   | RC0603FR-0778K7L     | Yageo                       | RES, 78.7 k, 1%, 0.1 W, 0603   | 0603   |
| 82     | R26  | 0        | 24.9k   | RC0603FR-0724K9L     | Yageo                       | RES, 24.9 k, 1%, 0.1 W, 0603   | 0603   |
| 83     | R28  | 0        | 100k    | RC0603FR-07100KL     | Yageo                       | RES, 100 k, 1%, 0.1 W, 0603  | 0603   |
| 84     | R75  | 0        | 7.50k   | RC1206FR-077K5L      | Yageo America               | RES, 7.5 k, 1%, 0.25 W, 1206   | 1206   |
| 85     | U5   | 0        |         | LM76003RNP           | Texas Instruments           | SIMPLE SWITCHER 3.5V to 60V 3.5A Synchronous Step-Down Voltage Regulator, RNP030B (WQFN-30)  | RNP030B  |
| 86     | U6   | 0        |         | TPS76333DBVR         | Texas Instruments           | Single Output LDO, 150 mA, Fixed 3.3 V Output, 2.7 to 10 V Input, with Low IQ, 5-pin SOT23 (DBV), -40 to 125 degC, Green (RoHS and no Sn/Bi) | DBV0005A   |