

PMP30521 REV B Bill of Materials

| Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|---------------------------|----------|--------------|----------------------|----------------------------|--|---------------------------|
| C1, C2 | 2 | 100pF | PFR5101J630J11L4BULK | Kemet | CAP, Film, 100 pF, 630 V, +/- 5%, TH | 7.2x4.5mm |
| C3, C14 | 2 | 2.2uF | C2012X5R1H225K125AB | TDK | CAP, CERM, 2.2 uF, 50 V, +/- 10%, X5R, 0805 | 0805 |
| C4, C17, R17, R18, R19 | 5 | DNP | DNP | N/A | DNP | 0603 |
| C5 | 1 | 0.01uF | C1608NP01H103J080AA | TDK | CAP, CERM, 0.01 uF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C6, C9, C51, C52 | 4 | 0.047uF | GRM32DR72J473KW01L | MuRata | CAP, CERM, 0.047 uF, 630 V, +/- 10%, X7R, 1210 | 1210 |
| C7, C27, C35, C39 | 4 | 0.1uF | C1608X7R1H104K080AA | TDK | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| C8 | 1 | 0.15uF | GRM188R71C154KA01D | MuRata | CAP, CERM, 0.15 uF, 16 V, +/- 10%, X7R, 0603 | 0603 |
| C10, C12 | 2 | 4.7uF | C2012X7R1E475K125AB | TDK | CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 0805 | 0805 |
| C11 | 1 | 3.9pF | 06035A3R9CAT2A | AVX | CAP, CERM, 3.9 pF, 50 V, +/- 6%, C0G/NP0, 0603 | 0603 |
| C13 | 1 | 220pF | GRM188R71H221KA01D | MuRata | CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| C15, C16 | 2 | 0.022uF | 121MPE223J | Rubycon | CAP, Film, 0.022 uF, 1250 V, +/- 5%, TH | 18x8x15.5mm |
| C18 | 1 | 1uF | GRM188R71E105KA12D | MuRata | CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603 | 0603 |
| C19 | 1 | 220uF | EKY-350ELL221MH15D | Chemi-Con | CAP, AL, 220 uF, 35 V, +/- 20%, 0.087 ohm, TH | Cap 8x15mm |
| C20 | 1 | 1000pF | GRM1885C1H102JA01D | MuRata | CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C21 | 1 | 4700pF | VY2472M49Y5US63V7 | Vishay-Bccomponents | CAP, CERM, 4700 pF, 300 VAC, +/- 20%, Y5U, TH, 12.5x5mm | TH, 12.5x5mm |
| C22, C36, C41 | 3 | 0.47uF | ECQ-U2A474ML | Panasonic | CAP, Film, 0.47 uF, 275 V, +/- 20%, TH | Radial 25x8.5x18.5 |
| C23 | 1 | 2200pF | GRM1885C1H222JA01D | MuRata | CAP, CERM, 2200 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C24 | 1 | 47pF | GRM1885C1H470JA01D | MuRata | CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C25, C28 | 2 | 470uF | EKZE800ELL471ML25S | United Chemi-con | CAP, AL, 470 uF, 80 V, 38mOhm, 1.7A, +/- 20%, TH | D16xL25mm |
| C26, C29 | 2 | 1200uF | EKZE350ETS122ML20S | United Chemi-con | CAP, AL, 1200 uF, 35 V, 18mOhm, 3.14A, +/- 20%, TH | D16xL20mm |
| C32 | 1 | 2.2uF | C1210C225K1RACTU | Kemet | CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210 | 1210 |
| C33 | 1 | 10uF | GRM32ER71H106KA12L | MuRata | CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210 | 1210 |
| C34 | 1 | 0.1uF | C0805C104K1RACTU | Kemet | CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805 | 0805 |
| C37, C38, C53, C54 | 4 | 1000pF | VY2102M29Y5UG63V7 | Vishay-Bccomponents | CAP, CERM, 1000 pF, 300 V, +/- 20%, Y5U, Radial Disc 7.5mm, Is=7.5 | Radial Disc 7.5mm, Is=7.5 |
| C40 | 1 | 2700pF | GRM1885C1H272JA01D | MuRata | CAP, CERM, 2700 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C42 | 1 | 820pF | 06035A821JAT2A | AVX | CAP, CERM, 820 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C43 | 1 | 0.33uF | C1608X7R1H334K080AC | TDK | CAP, CERM, 0.33 uF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| C44, C45 | 2 | 220uF | 450HXG220MEFCSN30X30 | Rubycon | CAP, AL, 220 uF, 450 V, +/- 20%, TH | D30xL30mm |
| C46 | 1 | 3.3uF | GRM21BR61E335KA12L | MuRata | CAP, CERM, 3.3 uF, 25 V, +/- 10%, X5R, 0805 | 0805 |
| C47 | 1 | 4.7uF | C2012X5R1E475K125AB | TDK | CAP, CERM, 4.7 uF, 25 V, +/- 10%, X5R, 0805 | 0805 |
| C48 | 1 | 82pF | 06035A820JAT2A | AVX | CAP, CERM, 82 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C49 | 1 | 10uF | EMZA350ADA100MD61G | Chemi-Con | CAP, AL, 10 uF, 35 V, +/- 20%, 1.35 ohm, SMD | D61 |
| C50 | 1 | 1000pF | GRM31BR72J102KW01L | MuRata | CAP, CERM, 1000 pF, 630 V, +/- 10%, X7R, 1206 | 1206 |
| C100 | 1 | 100uF | EEE-FC1V101P | Panasonic | CAP, AL, 100 uF, 35 V, +/- 20%, 0.15 ohm, SMD | SMT Radial G |
| D1, D2 | 2 | UFM15PL-TP | UFM15PL-TP | Micro Commercial Component | Diode, Ultrafast, 600 V, 1 A, SOD-123FL | SOD-123FL |
| D3 | 1 | ES1JAF | ES1JAF | Fairchild Semiconductor | Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMAF | SMAF |
| D4, D101 | 2 | B1100-13-F | B1100-13-F | Diodes Inc. | Diode, Schottky, 100 V, 1 A, SMA | SMA |
| D5 | 1 | 6.2V | BZT52C6V2T-7 | Diodes Inc. | Diode, Zener, 6.2 V, 300 mW, SOD-523 | SOD-523 |
| D6 | 1 | TST10H200CW | TST10H200CW | Taiwan Semiconductor | Diode, Schottky, 200 V, 10 A, TH | TO-220AB |
| D7 | 1 | TST20L100CW | TST20L100CW | Taiwan Semiconductor | Diode, Schottky, 100 V, 20 A, TH | TO-220AB |
| D8 | 1 | GBU1006 | GBU1006 | Diodes Inc. | Diode, Switching-Bridge, 600 V, 10 A, TH | GBU |
| D9 | 1 | S3J-E3/57T | S3J-E3/57T | Vishay-Semiconductor | Diode, Switching, 600 V, 3 A, SMC | SMC |
| D10 | 1 | IDH03G65C5 | IDH03G65C5XKSA2 | Infineon Technologies | Diode, Schottky, 600 V, 3 A, TH | TO-220-2 |
| D11 | 1 | MBR0540T1G | MBR0540T1G | ON Semiconductor | Diode, Schottky, 40 V, 0.5 A, SOD-123 | SOD-123 |
| D12 | 1 | BAS40-04-7-F | BAS40-04-7-F | Diodes Inc. | Diode, Schottky, 40 V, 0.2 A, SOT-23 | SOT-23 |
| D100 | 1 | 54V | SMCJ54A | Fairchild Semiconductor | Diode, TVS, Uni, 54 V, SMC | SMC |
| D102 | 1 | 18V | MMSZ5248B-7-F | Diodes Inc. | Diode, Zener, 18 V, 500 mW, SOD-123 | SOD-123 |
| F1 | 1 | 8A | 0216008.MXESPP | Littelfuse | Fuse, 8 A, 250VAC/VDC, TH | Fuse, 20x5.2mm |
| H1 | 1 | | SK 573 84 SA | Fischer Elektronik | Heat Sink, 25x30x84mm, for THFU 1-3+6+7, profile threads | Heat Sink, 25x30x84 mm |
| H2 | 1 | | SK 573 37.5 SA | Fischer Elektronik | Heat Sink, 25x30x37.5mm, for THFU 1-3+6+7, profile threads | Heat Sink, 25x30x37.5 mm |

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|---------------------------------------|----------|---------------|------------------|---------------------------|--|---------------------------------|
| IS1, IS2, IS3, IS4, IS5 | 5 | Insulator | WSC220 | Fischer Elektronik | Silicone insulating sleeve | |
| J1 | 1 | | 39357-0002 | Molex | Terminal Block, 3.5 mm, 2x1, Tin, TH | Terminal Block, 3.5 mm, 2x1, TH |
| J2, J3 | 2 | | ED120/2DS | On-Shore Technology | Terminal Block, 5.08 mm, 2x1, Brass, TH | 2x1 5.08 mm Terminal Block |
| J4 | 1 | | ED120/3DS | On-Shore Technology | Terminal Block, 5.08 mm, 3x1, Brass, TH | 3x1 5.08 mm Terminal Block |
| L1 | 1 | 57.5uH | G184050LF | GCI Technologies | Inductor, 8 A, 0.0101 ohm, TH | Body 27.5x30.5mm |
| L2 | 1 | 7mH | 7448040707 | Würth Elektronik | Coupled inductor, 7 mH, 7 A, 0.02 ohm, TH | 19x28mm |
| L3 | 1 | 1mH | 7448042001 | Würth Elektronik | Coupled inductor, 1 mH, 20 A, 2.4 mohm, TH | 19x28mm |
| L4 | 1 | 498uH | G184049LF | GCI Technologies | Inductor, Toroid, 0.093 ohm, TH | 54.5x48.5mm |
| Q1, Q2 | 2 | IPB65R420CFD | IPB65R420CFD | Infineon Technologies | MOSFET, N-CH, 650 V, 17.5 A, DDPAK | DDPAK |
| Q3 | 1 | DNP | DNP | N/A | Transistor, PNP, 40 V, 0.2 A, SOT-23 | SOT-23 |
| Q4 | 1 | BSS83P | BSS83P | Diodes Inc. | MOSFET, P-CH, -60 V, -0.33 A, SOT-23 | SOT-23 |
| Q5 | 1 | IPP60R180P7 | IPP60R180P7 | Infineon Technologies | MOSFET, N-CH, 600 V, 18 A, TO-220AB | TO-220AB |
| R1, R3, R4 | 3 | 1.65k | CRCW12061K65FKEA | Vishay-Dale | RES, 1.65 k, 1%, 0.25 W, AEC-Q200 Grade 0, 1206 | 1206 |
| R2, R31 | 2 | 221 | RC0603FR-07221RL | Yageo | RES, 221, 1%, 0.1 W, 0603 | 0603 |
| R5 | 1 | 294k | CRCW0603294KFKFA | Vishay-Dale | RES, 294 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| R6 | 1 | 620k | RC0603FR-07620KL | Yageo | RES, 620 k, 1%, 0.1 W, 0603 | 0603 |
| R7, R12, R13, R14, R37, R38, R39, R40 | 8 | 2.21Meg | RC1206FR-072M21L | Yageo America | RES, 2.21 M, 1%, 0.25 W, 1206 | 1206 |
| R8, R9, R15, R35 | 4 | 2.21 | RC0805FR-072R21L | Yageo America | RES, 2.21, 1%, 0.125 W, 0805 | 0805 |
| R10, R11, R20, R23, R24, R26, R34 | 7 | 10.0k | RCG060310K0FKFA | Vishay Draloric | RES, 10.0 k, 1%, 0.1 W, 0603 | 0603 |
| R16 | 1 | 73.2k | CRCW060373K2FKFA | Vishay-Dale | RES, 73.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| R21 | 1 | 47.5k | CRCW060347K5FKFA | Vishay-Dale | RES, 47.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| R22 | 1 | 42.2k | RC0603FR-0742K2L | Yageo | RES, 42.2 k, 1%, 0.1 W, 0603 | 0603 |
| R25, R36, R42 | 3 | 22.6k | CRCW060322K6FKFA | Vishay-Dale | RES, 22.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| R27 | 1 | 150k | RC0603FR-07150KL | Yageo | RES, 150 k, 1%, 0.1 W, 0603 | 0603 |
| R28 | 1 | 71.5k | CRCW060371K5FKFA | Vishay-Dale | RES, 71.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| R29 | 1 | 4.99k | RC0603FR-074K99L | Yageo | RES, 4.99 k, 1%, 0.1 W, 0603 | 0603 |
| R30 | 1 | DNP | DNP | N/A | DNP | 0805 |
| R32 | 1 | 0.03 | CSR2512C0R03F | RIDEON | RES, 0.03, 1%, 3 W, 2512 | 2512 |
| R33 | 1 | 17.8k | CRCW060317K8FKFA | Vishay-Dale | RES, 17.8 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| R41 | 1 | 115k | CRCW0603115KFKFA | Vishay-Dale | RES, 115 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| R43 | 1 | 0 | RMCF0603ZT0R00 | Stackpole Electronics Inc | RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603 | 0603 |
| RS1, RS2, RS3, RS4, RS5 | 5 | THFU 1 | THFU 1 | Fischer Elektronik | Retaining Spring for Transistors, 60N | |
| RT1 | 1 | 4.7 | B57237S0479M000 | TDK | Thermistor NTC, 4.70 ohm, 20%, 15x7mm | 15x7mm |
| RV1 | 1 | 275VAC | B72214S0271K101 | TDK | SIOV Metal Oxide Varistor 420V, 4.5kA, TH | 15.5x6.1mm |
| SC1, SC2, SC3, SC4 | 4 | M3x10mm | MPMS 003 0008 PH | B&F Fastener Supply | MACH SCREW PAN HEAD PHILLIPS M3 | |
| T1 | 1 | 520uH | G184051LF | GCI Technologies | Transformer, 520 uH, TH | 45x45.5mm |
| TP1 | 1 | | 5002 | Keystone | Test Point, Miniature, White, TH | White Miniature Testpoint |
| TP2 | 1 | | 5000 | Keystone | Test Point, Miniature, Red, TH | Red Miniature Testpoint |
| TP5 | 1 | | 5001 | Keystone | Test Point, Miniature, Black, TH | Black Miniature Testpoint |
| U1 | 1 | UCC256304DDBR | UCC256304DDBR | Texas Instruments | Wide Vin LLC Resonant Controller With High-Voltage Start Up Enabling Low Standby Power, DDB0014A (SOIC-14) | DDB0014A |
| U2, U3 | 2 | TCMT1107 | TCMT1107 | Vishay-Semiconductor | Optocoupler, 3.75 kV, 80-160% CTR, SMT | SOP-4 |
| U4 | 1 | LMV431AIMF | LMV431AIMF | Texas Instruments | Low-Voltage (1.24V) Adjustable Precision Shunt Regulator, 3-pin SOT-23 | DBZ0003A |
| U5 | 1 | UCC28180DR | UCC28180DR | Texas Instruments | 8-PIN CONTINUOUS CONDUCTION MODE (CCM) PFC CONTROLLER, D0008A (SOIC-8) | D0008A |
| W1, W2, W3, W4 | 4 | | MFWZ 003 | B&F Fastener Supply | WASHER FLAT M3 STEEL | 0.53mm M3 Washer |
| WL1, WL2, WL3, WL4 | 4 | | MLWZ 003 | B&F Fastener Supply | WASHER SPLIT LOCK M3 STEEL | 0.81mm M3 Washer Lock |
| WN1 | 1 | | MFW030B | Essentra Components | WASHER FLAT M3 NYLON | 0.51mm M3 Nylon Washer |

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