

PMP11186 REV B Bill of Materials

| Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|--------------------------|----------|---------|--------------------|---------------------------|--|----------------------|
| C1, C2, C14, C15 | 4 | 470uF | 35ZL470MEFC10X20 | Rubycon | CAP, AL, 470 µF, 35 V, 0.023 Ohms, 1.82A, TH | 10x20 |
| C3, C16 | 2 | 1uF | GRM21BR71H105KA12L | MuRata | CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805 | 0805 |
| C4 | 1 | 100pF | GRM21A5C2E101JW01D | MuRata | CAP, CERM, 100 pF, 250 V, +/- 5%, COG/NP0, 0805 | 0805 |
| C5, C13, C17 | 3 | | | | CAP, DNP | 0805 |
| C6, C7, C8, C9, C10, C11 | 6 | 2700uF | 25ZLH2700M12.5X35 | Rubycon | CAP, AL, 2700 µF, 25 V, 0.016 ohm, 4.12A, TH | 12.5x35mm |
| C12 | 1 | 10uF | C3225X7R1E106M | TDK | CAP, CERM, 10 µF, 25 V, +/- 20%, X7R, 1210 | 1210 |
| C18 | 1 | 1500pF | C1608C0G1H152J | TDK | CAP, CERM, 1500 pF, 50 V, +/- 5%, COG/NP0, 0603 | 0603 |
| C19 | 1 | 270pF | C1608C0G1H271J | TDK | CAP, CERM, 270 pF, 50 V, +/- 5%, COG/NP0, 0603 | 0603 |
| C20 | 1 | 1uF | C2012X7R1E105K | TDK | CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0805 | 0805 |
| C21, C27 | 2 | | | | CAP, DNP | 0603 |
| C22, C28 | 2 | 1uF | C1608X7R1C105K | TDK | CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603 | 0603 |
| C23 | 1 | 0.047uF | C1608X7R1H473K | TDK | CAP, CERM, 0.047 µF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| C24, C29 | 2 | 100pF | C1608C0G1H101J | TDK | CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603 | 0603 |
| C25 | 1 | 4.7uF | C2012X7R1A475M | TDK | CAP, CERM, 4.7 µF, 10 V, +/- 20%, X7R, 0805 | 0805 |
| C26 | 1 | 0.01uF | C1608X7R1H103K | TDK | CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| C100, C101 | 2 | 0.01uF | C2012X7R2A103K | TDK | CAP, CERM, 0.01 µF, 100 V, +/- 10%, X7R, 0805 | 0805 |
| C102, C103 | 2 | 470pF | C1608C0G2E471J | TDK | CAP, CERM, 470 pF, 250 V, +/- 5%, COG/NP0, 0603 | 0603 |
| D1 | 1 | 200V | FML22S | Thinki Semiconductor | Diode, Ultrafast, 200 V, 10 A, TH | TO-220-3 Full Pack |
| D2, D4, D5, D6 | 4 | | | | Diode, DNP | SMB |
| D3 | 1 | 100V | MMSD4148T1G | ON Semiconductor | Diode, Switching, 100 V, 0.2 A, SOD-123 | SOD-123 |
| D7 | 1 | 200V | FML22R | Thinki Semiconductor | Diode, Ultrafast, 200 V, 10 A, TH | TO-220-3 Full Pack |
| D8, D9 | 2 | 0.8V | BAT54T1G | ON Semi | Diode, Schottky, 30V, 0.2A, SOD-123 | SOD-123 |
| H1, H2 | 2 | | 513201B02500G | Aavid | HEATSINK TO-218/TO-247 W/PINS 2" | 12.70x50.80x34.92 mm |
| J1 | 1 | | OSTTA034163 | On-Shore Technology | Terminal Block, 3x1, 5.08 mm, 15A, TH | 3x1 Terminal Block |
| J2, J3 | 2 | 50A | CB35-36-CY | Panduit | Terminal 50A Lug | CB35-36-CY |
| L1, L2 | 2 | 35uH | B82559A0353A020 | TDK | Inductor, Wirewound, Ferrite, 35 µH, 9.3 A, 0.007 ohm, SMD | 21.5x21mm |
| Q1, Q2, Q3, Q4 | 4 | 100V | CSD19532Q5B | Texas Instruments | MOSFET, N-CH, 100 V, 17 A, SON 5x6mm | SON 5x6mm |
| Q5 | 1 | 60V | 2N7002P,215 | NXP Semiconductor | MOSFET, N-CH, 60 V, 0.36 A, SOT-23 | SOT-23 |
| R1, R2, R3, R4 | 4 | | | | RES, DNP | 1206 |
| R5 | 1 | 1.00k | CRCW08051K00FKEA | Vishay-Dale | RES, 1.00 k, 1%, 0.125 W, 0805 | 0805 |
| R6 | 1 | 100 | CRCW1206100RFKEA | Vishay-Dale | RES, 100 ohm, 1%, 0.25W, 1206 | 1206 |
| R7 | 1 | 0.5 | CSR1206FKR500 | Stackpole Electronics Inc | RES, 0.5, 1%, 0.5 W, 1206 | 1206 |
| R8, R9 | 2 | | | | RES, DNP | 2512 |
| R10 | 1 | 49.9 | CRCW080549R9FKEA | Vishay-Dale | RES, 49.9, 1%, 0.125 W, 0805 | 0805 |
| R11, R22 | 2 | | | | RES, DNP | 0603 |
| R12 | 1 | 1.00k | CRCW06031K00FKEA | Vishay-Dale | RES, 1.00 k, 1%, 0.1 W, 0603 | 0603 |
| R13, R14 | 2 | 1.00 | CRCW06031R00FKEA | Vishay-Dale | RES, 1.00 ohm, 1%, 0.1W, 0603 | 0603 |
| R15 | 1 | 130k | CRCW0603130KFKEA | Vishay-Dale | RES, 130 k, 1%, 0.1 W, 0603 | 0603 |
| R16 | 1 | 100k | CRCW0603100KFKEA | Vishay-Dale | RES, 100 k, 1%, 0.1 W, 0603 | 0603 |
| R17 | 1 | 10.0k | CRCW060310K0FKEA | Vishay-Dale | RES, 10.0k ohm, 1%, 0.1W, 0603 | 0603 |
| R18 | 1 | 21.0k | CRCW060321K0FKEA | Vishay-Dale | RES, 21.0 k, 1%, 0.1 W, 0603 | 0603 |
| R19 | 1 | 20.0k | CRCW060320K0FKEA | Vishay-Dale | RES, 20.0 k, 1%, 0.1 W, 0603 | 0603 |
| R20 | 1 | 47.5k | CRCW060347K5FKEA | Vishay-Dale | RES, 47.5 k, 1%, 0.1 W, 0603 | 0603 |
| R21 | 1 | 49.9 | CRCW060349R9FKEA | Vishay-Dale | RES, 49.9, 1%, 0.1 W, 0603 | 0603 |
| R23 | 1 | 2.49k | CRCW06032K49FKEA | Vishay-Dale | RES, 2.49k ohm, 1%, 0.1W, 0603 | 0603 |
| R24 | 1 | 49.9k | CRCW060349K9FKEA | Vishay-Dale | RES, 49.9 k, 1%, 0.1 W, 0603 | 0603 |
| R25 | 1 | 29.4k | CRCW060329K4FKEA | Vishay-Dale | RES, 29.4 k, 1%, 0.1 W, 0603 | 0603 |

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| R100, R101 | 2 | 4.7 | CRCW25124R70JNEG | Vishay-Dale | RES, 4.7, 5%, 1 W, 2512 | 2512 |
| R102, R103 | 2 | 180 | CRCW2512180RFKEG | Vishay-Dale | RES, 180, 1%, 1 W, 2512 | 2512 |
| T1 | 1 | 4.7 uH | G154054ALF | GCI Technologies | Transformer, 4.7 uH, TH | D46xH27mm |
| T2 | 1 | 22.4 mH | G154028ALF | GCI Technologies | Transformer, 22.4 mH, 1:200, SMT | 14.2x20mm |
| TP1, TP2, TP3, TP4, TP7, TP9, TP10, TP11, TP12, TP13 | 10 | Red | 5000 | Keystone | Test Point, Miniature, Red, TH | Red Miniature Testpoint |
| TP5, TP6, TP8 | 3 | Black | 5001 | Keystone | Test Point, Miniature, Black, TH | Black Miniature Testpoint |
| U1 | 1 | | LM25037QMT | Texas Instruments | Dual-Mode PWM Controller With Alternating Outputs, Automotive Grade, 16-pin TSSOP | MTC16 |

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