

PMP40679 REV E2 Bill of Materials

| Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|---------------------------|----------|---------|---------------------|-----------------------------|---|--|
| !PCB1 | 1 | | PMP40679 | Any | Printed Circuit Board | |
| C1, C2, C16, C17 | 4 | 1500uF | EKY-250ELL152MK25S | Chemi-Con | CAP, AL, 1500 uF, 25 V, +/- 20%, TH | D12.5xL25mm |
| C3, C4, C18, C19 | 4 | 4.7uF | C3216X7R1E475K085AB | TDK | CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 1206 | 1206 |
| C5, C20 | 2 | 2.2uF | 08053C225KAT2A | AVX | CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7R, 0805 | 0805 |
| C6, C21, C29, C31, C34 | 5 | 0.1uF | C0603C104K5RACTU | Kemet | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| C7, C22, C37, C39, C40 | 5 | 1uF | C1608X7R1E105K080AB | TDK | CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603 | 0603 |
| C8, C23 | 2 | 1000pF | GRM2165C2A102JA01D | MuRata | CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0805 | 0805 |
| C9, C10, C24, C25 | 4 | 680uF | EKY-630ELL681ML25S | Chemi-Con | CAP, AL, 680 uF, 63 V, +/- 20%, 0.025 ohm, TH | TH, 2-Leads, Dia 16mm, Pin Spacing 7.5mm |
| C11, C26 | 2 | 1uF | C3216X7R2A105K160AA | TDK | CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, 1206 | 1206 |
| C12, C27 | 2 | 1800pF | GRM1885C1H182JA01D | MuRata | CAP, CERM, 1800 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C13, C28 | 2 | 0.68uF | GRM188R71A684KA61D | MuRata | CAP, CERM, 0.68 uF, 10 V, +/- 10%, X7R, 0603 | 0603 |
| C14, C35 | 2 | 470pF | GRM1885C1H471JA01D | MuRata | CAP, CERM, 470 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C15, C36 | 2 | 0.022uF | C0603C223K3RACTU | Kemet | CAP, CERM, 0.022 uF, 25 V, +/- 10%, X7R, 0603 | 0603 |
| C30 | 1 | 4.7uF | GRM188Z71A475ME15D | MuRata | CAP, CERM, 4.7 uF, 10 V, +/- 20%, X7R, 0603 | 0603 |
| C32 | 1 | 1000pF | GRM1885C1H102FA01J | MuRata | CAP, CERM, 1000 pF, 50 V, +/- 1%, C0G/NP0, 0603 | 0603 |
| C33 | 1 | 22pF | GRM1885C1H220JA01D | MuRata | CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| C38 | 1 | 0.047uF | C1608X7R1H473K080AA | TDK | CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| D1, D2 | 2 | | TST20L60CWC0G | Taiwan Semiconductor | Diode, Schottky, 60 V, 20 A, TH | TO-220AB |
| D3, D4 | 2 | 30V | BAT54T1G | ON Semiconductor | Diode, Schottky, 30 V, 0.2 A, SOD-123 | SOD-123 |
| HS1, HS2 | 2 | | FL12-020 | FL Heatsink | HEATSINK FOR 3 TO-220 | HEATSINK_70MM_15MM |
| J1 | 1 | | 1715721 | Phoenix Contact | Terminal Block, 5.08 mm, 2x1, TH | 2POS Terminal Block |
| J2 | 1 | | PEC03SAAN | Sullins Connector Solutions | Header, 100mil, 3x1, Tin, TH | Header, 3 PIN, 100mil, Tin |
| L1, L2 | 2 | 3.3uH | SER2915L-332KL | Coilcraft | Inductor, Shielded E Core, Ferrite, 3.3 uH, 30 A, 0.0015 ohm, SMD | 29.7x15.36x27.94mm |
| L3 | 1 | 330nH | 744316033 | Würth Elektronik | Inductor, Wirewound, 330 nH, 18.5 A, 0.00175 ohm, SMD | 5.5x5.3mm |
| Q1, Q4 | 2 | 40 V | MMBT2222ALT1G | ON Semiconductor | Transistor, NPN, 40 V, 0.6 A, SOT-23 | SOT-23 |
| Q2, Q5, Q8, Q9 | 4 | 60V | CSD18533KCS | Texas Instruments | MOSFET, N-CH, 60 V, 100 A, KCS0003B (TO-220-3) | KCS0003B |
| Q3, Q6 | 2 | 40 V | MMBT4403LT1G | Fairchild Semiconductor | Transistor, PNP, 40 V, 0.6 A, SOT-23 | SOT-23 |
| Q7 | 1 | 60V | 2N7002ET1G | ON Semiconductor | MOSFET, N-CH, 60 V, 0.26 A, SOT-23 | SOT-23 |
| R1, R2, R3, R14, R15, R28 | 6 | 0 | RC0603JR-070RL | Yageo | RES, 0, 5%, 0.1 W, 0603 | 0603 |
| R4, R16 | 2 | 6.20 | RC0805FR-076R2L | Yageo America | RES, 6.20, 1%, 0.125 W, 0805 | 0805 |
| R5, R17, R41, R42 | 4 | 100 | RC0603FR-07100RL | Yageo | RES, 100, 1%, 0.1 W, 0603 | 0603 |
| R6, R18 | 2 | 300 | RC0603FR-07300RL | Yageo | RES, 300, 1%, 0.1 W, 0603 | 0603 |
| R7, R19 | 2 | 200 | RC0603FR-07200RL | Yageo | RES, 200, 1%, 0.1 W, 0603 | 0603 |
| R8, R20 | 2 | 0.001 | ERJ-M1WTF1M0U | Panasonic | RES, 0.001, 1%, 1 W, 2512 | 2512 |

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|-----------------------|----------|-------|------------------|-------------------|--|------------------|
| R9, R22, R37 | 3 | 100k | RC0603FR-07100KL | Yageo | RES, 100 k, 1%, 0.1 W, 0603 | 0603 |
| R10 | 1 | 30.0 | RC0603FR-0730RL | Yageo | RES, 30.0, 1%, 0.1 W, 0603 | 0603 |
| R11, R21 | 2 | 147k | RC0603FR-07147KL | Yageo | RES, 147 k, 1%, 0.1 W, 0603 | 0603 |
| R12, R40 | 2 | 39.0k | RC0603FR-0739KL | Yageo | RES, 39.0 k, 1%, 0.1 W, 0603 | 0603 |
| R13, R39 | 2 | 2.21k | RC0603FR-072K21L | Yageo | RES, 2.21 k, 1%, 0.1 W, 0603 | 0603 |
| R23 | 1 | 4.75k | RC0603FR-074K75L | Yageo | RES, 4.75 k, 1%, 0.1 W, 0603 | 0603 |
| R24 | 1 | 1.80k | RC0603FR-071K8L | Yageo | RES, 1.80 k, 1%, 0.1 W, 0603 | 0603 |
| R25 | 1 | 11.0k | RC0603FR-0711KL | Yageo | RES, 11.0 k, 1%, 0.1 W, 0603 | 0603 |
| R26, R27 | 2 | 7.50 | CRCW25127R50FKEG | Vishay-Dale | RES, 7.50, 1%, 1 W, AEC-Q200 Grade 0, 2512 | 2512 |
| R29, R30, R33, R34 | 4 | 0.004 | ERJ-M1WTF4M0U | Panasonic | RES, 0.004, 1%, 1 W, 2512 | 2512 |
| R31, R32, R35, R36 | 4 | 2.20 | RC0805FR-072R2L | Yageo America | RES, 2.20, 1%, 0.125 W, 0805 | 0805 |
| R38 | 1 | 200k | RC0603FR-07200KL | Yageo | RES, 200 k, 1%, 0.1 W, 0603 | 0603 |
| T1, T2 | 2 | | CB35-36-CY | Panduit | Terminal 50A Lug | CB35-36-CY |
| U1, U2 | 2 | | LM5155DSSR | Texas Instruments | 2.2-MHz Wide Input Nonsynchronous Boost, Sepic, Flyback Controller, DSS0012B (WSON-12) | DSS0012B |
| U3 | 1 | | TPS70950DBVR | Texas Instruments | 150-mA, 30-V, Ultra-Low IQ, Wide Input Low-Dropout Regulator with Reverse Current Protection, DBV0005A (SOT-23-5) | DBV0005A |
| U4 | 1 | | LMC555CMX/NOPB | Texas Instruments | CMOS Timer, 8-pin Narrow SOIC | D0008A |
| U5 | 1 | | TLV2711DBVR | Texas Instruments | 550 uA/Ch, 3 MHz, Rail-to-Rail Output Operational Amplifier, 2.7 to 16 V, -40 to 125 degC, 5-pin SOT23 (DBV5), Green (RoHS & no Sb/Br) | DBV0005A |

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