

PMP21112 REV A Bill of Materials

| Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|--|----------|--------|----------------------|---------------------|--|------------------------------|
| I PCB1 | 1 | | PMP21112 | Any | Printed Circuit Board | |
| C2, C3, C4, C5, C6, C7, C20, C21, C22, C23, C26, C27, C28, C29, C30, C31 | 16 | 4.7uF | GRM32ER71K475KE14L | MuRata | CAP, CERM, 4.7 μ F, 80 V, +/- 10%, X7R, 1210 | 1210 |
| C8, C13, C32, C35 | 4 | 0.47uF | CGA3E3X7R1H474K080AE | TDK | CAP, CERM, 0.47 μ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603 | 0603 |
| C9, C18, C33 | 3 | 100pF | GRM1555C1H101JA01D | MuRata | CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402 | 0402 |
| C10, C34 | 2 | 1uF | GRM188R71E105KA12D | MuRata | CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603 | 0603 |
| C11, C16, C17 | 3 | 0.1uF | GRM155R71H104ME14D | MuRata | CAP, CERM, 0.1 μ F, 50 V, +/- 20%, X7R, 0402 | 0402 |
| C12 | 1 | 0.01uF | GRM155R71H103KA88D | MuRata | CAP, CERM, 0.01 μ F, 50 V, +/- 10%, X7R, 0402 | 0402 |
| C14, C15 | 2 | 0.22uF | GRM155R71C224KA12D | MuRata | CAP, CERM, 0.22 μ F, 16 V, +/- 10%, X7R, 0402 | 0402 |
| C19 | 1 | 0.01uF | GRM155R71C103KA01D | MuRata | CAP, CERM, 0.01 μ F, 16 V, +/- 10%, X7R, 0402 | 0402 |
| C25 | 1 | 68uF | EEH-ZA1H680V | Panasonic | CAP, Aluminum Polymer, 68 μ F, 50 V, +/- 20%, 0.03 ohm, AEC-Q200 Grade 2, D8xL10.2mm SMD | D8xL10.2mm |
| C36, C37 | 2 | 180uF | EEE-FK1H181SP | Panasonic | CAP, AL, 180 μ F, 50 V, +/- 20%, 0.34 ohm, AEC-Q200 Grade 2, SMD | SMT Radial F |
| D1, D3 | 2 | 1.8V | MMSZ4678T1G | ON Semiconductor | Diode, Zener, 1.8 V, 500 mW, SOD-123 | SOD-123 |
| D2, D4 | 2 | 60V | PMEG6010CEJ,115 | Nexperia | Diode, Schottky, 60 V, 1 A, SOD-323F | SOD-323F |
| 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 |
| H5, H6, H7, H8 | 4 | | 1902C | Keystone | Standoff, Hex, 0.5"L #4-40 Nylon | Standoff |
| J1, J2, J3, J4 | 4 | | 575-4 | Keystone | Standard Banana Jack, Uninsulated, 5.5mm | Keystone_575-4 |
| L1, L4 | 2 | 10uH | SER2918H-103KL | Coilcraft | Inductor, Shielded E Core, Ferrite, 10 μ H, 28 A, 0.0026 ohm, SMD | 29.7x17.78x27.94mm |
| L3 | 1 | 800nH | XAL7070-801MEB | Coilcraft | Inductor, Shielded, Composite, 800 nH, 25.8 A, 0.00208 ohm, SMD | 7.2x7x7.5mm |
| 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 |
| Q2, Q3, Q4, Q5, Q7, Q8 | 6 | 60V | DMT6005LPS-13 | Diodes Inc. | MOSFET, N-CH, 60 V, 17.9 A, AEC-Q101, 8-PowerTDFN | 8-PowerTDFN |
| R2, R23 | 2 | 0.001 | CRE2512-FZ-R001E-3 | Bourns | RES, 0.001, 1%, 3 W, AEC-Q200 Grade 0, 2512 | 2512 |
| R3, R4, R24, R25 | 4 | 100 | CRCW0402100RFKED | Vishay-Dale | RES, 100, 1%, 0.063 W, 0402 | 0402 |
| R5, R26 | 2 | 6.49k | CRCW04026K49FKED | Vishay-Dale | RES, 6.49 k, 1%, 0.063 W, 0402 | 0402 |
| R6, R27 | 2 | 10.0k | CRCW040210K0FKED | Vishay-Dale | RES, 10.0 k, 1%, 0.063 W, 0402 | 0402 |
| R7 | 1 | 49.9 | CRCW040249R9FKED | Vishay-Dale | RES, 49.9, 1%, 0.063 W, 0402 | 0402 |
| R8, R17, R19, R28, R31, R32 | 6 | 0 | CRCW0402000Z0ED | Vishay-Dale | RES, 0, 5%, 0.063 W, 0402 | 0402 |
| R9, R18 | 2 | 49.9k | CRCW040249K9FKED | Vishay-Dale | RES, 49.9 k, 1%, 0.063 W, 0402 | 0402 |
| R10, R29 | 2 | 3.3 | CRCW06033R30JNEA | Vishay-Dale | RES, 3.3, 5%, 0.1 W, 0603 | 0603 |
| R11 | 1 | 2.87k | CRCW04022K87FKED | Vishay-Dale | RES, 2.87 k, 1%, 0.063 W, 0402 | 0402 |
| R12, R13 | 2 | 1.00k | CRCW04021K00FKED | Vishay-Dale | RES, 1.00 k, 1%, 0.063 W, 0402 | 0402 |
| R14 | 1 | 5.11k | CRCW04025K11FKED | Vishay-Dale | RES, 5.11 k, 1%, 0.063 W, 0402 | 0402 |
| R15 | 1 | 1.96k | CRCW04021K96FKED | Vishay-Dale | RES, 1.96 k, 1%, 0.063 W, 0402 | 0402 |
| R16, R30 | 2 | 174k | CRCW0402174KFKED | Vishay-Dale | RES, 174 k, 1%, 0.063 W, 0402 | 0402 |
| R20 | 1 | 60.4k | CRCW040260K4FKED | Vishay-Dale | RES, 60.4 k, 1%, 0.063 W, 0402 | 0402 |
| R21 | 1 | 9.53k | CRCW04029K53FKED | Vishay-Dale | RES, 9.53 k, 1%, 0.063 W, 0402 | 0402 |
| Sync, TP1, TP2, TP3, TP6 | 5 | White | 5002 | Keystone | Test Point, TH, Miniature, White | Keystone5002 |
| TP4, TP5 | 2 | Black | 5001 | Keystone | Test Point, TH, Miniature, Black | Keystone5001 |

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|------------|----------|-------|--------------------|-------------------|--|------------------|
| U1, U2 | 2 | | LM25122QPWPTQ1 | Texas Instruments | Automotive Grade, 3-42V Wide Vin, Synchronous Boost Controller with Multiphase Capability, PWP0020A (TSSOP-20) | PWP0020A |
| Vin1, Vout | 2 | Red | 5000 | Keystone | Test Point, TH, Miniature, Red | Keystone5000 |
| C1, C24 | 0 | 470pF | GRM2165C2A471JA01D | MuRata | CAP, CERM, 470pF, 100V, +/-5%, C0G/NP0, 0805 | 0805 |
| L2, L5 | 0 | 10uH | IHLP8787MZER100M5A | Vishay-Dale | Inductor, Shielded, 10 uH, 28 A, 0.00404 ohm, AEC-Q200 Grade 0, SMD | 22x22.48mm |
| Q1, Q6 | 0 | 60V | DMT6005LPS-13 | Diodes Inc. | MOSFET, N-CH, 60 V, 17.9 A, AEC-Q101, 8-PowerTDFN | 8-PowerTDFN |
| R1, R22 | 0 | 7.5 | ERJ-12ZYJ7R5U | Panasonic | RESISTOR 7.5 OHM 3/4W 5% 2010 | 2010 |

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