

PMP4468 Bill of Materials

| Item | Qty | Reference | Value | Part Description | Manufacturer | Manufacturer Part Number | PCB Footprint |
|------|-----|------------------------|---------|---|---------------------------|--------------------------|-----------------------|
| 1 | 4 | C1, C2, C3, C4 | 4.7uF | CAP, CERM, 4.7uF, 50V, +/-10%, X7R, 1206 | MuRata | GRM31CR71H475KA12L | 1206L |
| 2 | 1 | C5 | 0.1uF | CAP, CERM, 0.1uF, 250 V, +/- 10%, X7R, 1206 | MuRata | GRM31CR72E104KW03L | 1206 |
| 3 | 2 | C6, C7 | 470pF | CAP, CERM, 470 pF, 100 V, +/- 10%, X7R, 0805 | AVX | 08051C471KAT2A | 0805L |
| 4 | 3 | C8, C26, C29 | 0.22uF | CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71E224KA88D | 0603L |
| 5 | 2 | C9, C21 | 0.1uF | CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71E104KA01D | 0603L |
| 6 | 1 | C10 | 4.7uF | CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 1206 | MuRata | GRM31CR71E475KA88L | 1206L |
| 7 | 3 | C11, C12, C13 | 1000pF | CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71E102KA01D | 0603L |
| 8 | 3 | C15, C16, C17 | 220uF | CAP, AL, 220 uF, 6.3 V, +/- 20%, 0.027 ohm, SMD | Panasonic | 6SVPC220MV | CAPSMT_62_F61 |
| 9 | 2 | C18, C19 | 47uF | CAP, CERM, 47 uF, 10 V, +/- 10%, X7R, 1210 | MuRata | GRM32ER71A476KE15L | 1210 |
| 10 | 1 | C20 | 0.1uF | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0805 | MuRata | GRM21BR71H104KA01L | 0805L |
| 11 | 1 | C22 | 330pF | CAP, CERM, 330 pF, 100 V, +/- 5%, C0G/NP0, 0603 | MuRata | GRM1885C2A331JA01D | 0603L |
| 12 | 1 | C23 | 0.01uF | CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71E103KA01D | 0603L |
| 13 | 1 | C25 | 1000pF | CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0603 | Kemet | C0603C102J5GAC | 0603L |
| 14 | 1 | C27 | 470pF | CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71H471KA01D | 0603L |
| 15 | 1 | C28 | 0.033uF | CAP, CERM, 0.033 uF, 25 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71E333KA01D | 0603L |
| 16 | 1 | C30 | 2.2uF | CAP, CERM, 2.2uF, 25 V, +/- 10%, X7R, 0805 | MuRata | GRM21BR71E225KA73L | 0805L |
| 17 | 1 | C31 | 1000pF | CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812 | AVX | 1812GC102KA1 | 1812 |
| 18 | 1 | C32 | 100pF | CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603 | Kemet | C0603C101J5GAC | 0603L |
| 19 | 6 | D1, D2, D3, D4, D5, D6 | 100V | Diode, Switching, 100 V, 0.25 A, SOD-523 | NXP Semiconductor | BAS516.115 | SOD-523 |
| 20 | 1 | D8 | 40V | Diode, Schottky, 40 V, 1 A, SOD-123FL | ON Semiconductor | MBR140SFT1G | SOD-123FL |
| 21 | 1 | L1 | 1mH | Inductor, Shielded Drum Core, Ferrite, 1 mH, 0.11 A, 16.3 ohm, SMD | Coilcraft | LPS4414-105MLB | LPS4414 |
| 22 | 1 | L2 | 9.2uH | Inductor, Shielded Drum Core, WE-Perm, 9.2 uH, 10.5 A, 0.0078 ohm, SMD | Würth Elektronik eiSos | 7443551920 | WE-HCA1 |
| 23 | 2 | Q1, Q4 | 40V | MOSFET, N-CH, 40 V, 100 A, SON 5x6mm | Texas Instruments | CSD18502Q5B | TRANS_NexFET_Q5B |
| 24 | 1 | Q3 | 100V | MOSFET, N-CH, 100 V, 13 A, SON 5x6mm | Texas Instruments | CSD19533Q5A | TRANS_NexFET_Q5A |
| 25 | 1 | Q5 | -60V | MOSFET, P-CH, -100 V, -1.1A, SOT-223 | Vishay | JRFL9110PBFTR | SOT-223L |
| 26 | 3 | R1, R7, R9 | 2.2 | RES, 2.2, 5%, 0.125 W, 0805 | Yageo America | RC0805JR-072R2L | 0805L |
| 27 | 2 | R2, R6 | 10 | RES, 10.0, 1%, 0.25 W, 1206 | Yageo America | RC1206FR-0710RL | 1206 |
| 28 | 4 | R3, R4, R10, R23 | 10 | RES, 10, 5%, 0.125 W, 0805 | Yageo America | RC0805JR-0710RL | 0805L |
| 29 | 1 | R5 | 1.00k | RES, 1.00 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-071KL | 0603L |
| 30 | 1 | R8 | 100k | RES, 100k ohm, 0.5%, 0.1W, 0603 | Yageo America | RT0603DRE07100KL | 0603L |
| 31 | 2 | R11, R12 | 0.3 | RES, 0.3, 1%, 0.5 W, 1206 | Stackpole Electronics Inc | CSR1206FKR300 | 1206 |
| 32 | 1 | R13 | 10.0k | RES, 10.0k ohm, 1%, 0.1W, 0603 | Yageo America | RC0603FR-0710KL | 0603L |
| 33 | 1 | R14 | 30.0k | RES, 30.0 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0730KL | 0603L |
| 34 | 1 | R15 | 49.9 | RES, 49.9, 1%, 0.25 W, 1206 | Yageo America | RC1206FR-0749R9L | 1206 |
| 35 | 1 | R16 | 1.0k | RES, 1.0 k, 5%, 0.1 W, 0603 | Yageo America | RC0603JR-071KL | 0603L |
| 36 | 1 | R17 | 4.70k | RES, 4.70 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-074K7L | 0603L |
| 37 | 1 | R18 | 47.0k | RES, 47.0 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0747KL | 0603L |
| 38 | 1 | R19 | 47 | RES, 47, 5%, 0.125 W, 0805 | Vishay-Dale | CRCW080547R0JNEA | 0805L |
| 39 | 1 | R22 | 200 | RES, 200, 1%, 0.25 W, 1206 | Yageo America | RC1206FR-07200RL | 1206 |
| 40 | 1 | R24 | 2.20k | RES, 2.20 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-072K2L | 0603L |
| 41 | 1 | R25 | 2.00k | RES, 2.00 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-072KL | 0603L |
| 42 | 1 | R26 | 1.20k | RES, 1.20 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-071K2L | 0603L |
| 43 | 2 | R27, R30 | 10.0k | RES, 10.0k ohm, 1%, 0.1W, 0603, RES, 10.0 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060310K0FKEA | 0603L |
| 44 | 1 | R29 | 100k | RES, 100 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-07100KL | 0603L |
| 45 | 1 | R31 | 5.60k | RES, 5.60 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-075K6L | 0603L |
| 46 | 1 | R32 | 27.0k | RES, 27.0 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0727KL | 0603L |
| 47 | 1 | R33 | 16.9k | RES, 16.9 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0716K9L | 0603L |
| 48 | 1 | R34 | 3.30k | RES, 3.30 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-073K3L | 0603L |
| 49 | 1 | R35 | 510k | RES, 510 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-07510KL | 0603L |
| 50 | 1 | R36 | 15.0k | RES, 15.0 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0715KL | 0603L |
| 51 | 1 | T1 | | Transformer, 30W, ACF SMPS, EFD20, TDG TP5 | Würth | 750342756 | EFD20 ACF Transformer |
| 52 | 1 | U1 | | Active Clamp Voltage Mode PWM Controller, 16-pin TSSOP, Pb-Free | Texas Instruments | LM5025AMTC/NOPB | MTC16_N |
| 53 | 1 | U2 | | General Purpose Photocoupler with Transistor Output, 100%-200% CTR, 3750 VRMS | Toshiba | TLP291(GB-TPE)TR-ND | SO4 |
| 54 | 1 | U3 | | LOW-VOLTAGE ADJUSTABLE PRECISION SHUNT REGULATOR, DBZ0003A | Texas Instruments | TLV431B0DBZT | DBZ0003A_N |

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