

Variant: None
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PMP41042 GaN Daughter Card REV A Bill of Materials

| Item # | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|--------|----------------------------------|----------|---------|----------------------------|-----------------------------|--|------------------------------|
| 1 | IPCBB1 | 1 | | PMP41042 GaN Daughter Card | Any | Printed Circuit Board | |
| 2 | C1, C7, C8, C9, C10 | 5 | 0.1uF | C1005X7R1H104K050BB | TDK | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402 | 0402 |
| 3 | C3, C28 | 2 | 68pF | C1005C0G1H680J050BA | TDK | CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, 0402 | 0402 |
| 4 | C4 | 1 | 4.7uF | GCM21BR71C475KA73L | MuRata | CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805 | 0805 |
| 5 | C5, C6, C15, C16, C17, C19 | 6 | 100pF | 04025A101FAT2A | AVX | CAP, CERM, 100 pF, 50 V, +/- 1%, C0G/NP0, 0402 | 0402 |
| 6 | C11, C12, C23 | 3 | 4.7uF | C1608X5R1V475K080AC | TDK | CAP, CERM, 4.7 uF, 35 V, +/- 10%, X5R, 0603 | 0603 |
| 7 | C13, C14 | 2 | 10uF | C3216X7R1E106M160AE | TDK | CAP, CERM, 10 uF, 25 V, +/- 20%, X7R, 1206_190 | 1206_190 |
| 8 | C18, C21 | 2 | 0.22uF | CL05B224KO5NNNC | Samsung Electro-Mechanics | CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0402 | 0402 |
| 9 | C20, C22 | 2 | 2.2uF | GRT155R61E225KE13D | MuRata | CAP, CERM, 2.2 uF, 25 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0402 | 0402 |
| 10 | C24, C25 | 2 | 0.022uF | C1206C223KDRACTU | Kemet | CAP, CERM, 0.022 uF, 1000 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206 | 1206 |
| 11 | C26, C27 | 2 | 0.1uF | C1812W104KDRACTU | Kemet | CAP, CERM, 0.1 uF, 1000 V, +/- 10%, X7R, 1812 | 1812 |
| 12 | D1, D2 | 2 | 20V | MBR0520LT1G | ON Semiconductor | Diode, Schottky, 20 V, 0.5 A, SOD-123 | SOD-123 |
| 13 | D3 | 1 | 600V | ES1JAF | Fairchild Semiconductor | Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMAF | SMAF |
| 14 | J1 | 1 | | GRPBO42MWCN-RC | Sullins Connector Solutions | Header, 1.27mm, 4x2, Gold, R/A, TH | Header, 1.27mm, 4x2, R/A, TH |
| 15 | J2 | 1 | | M50-3900242 | Harwin | | HDR4 |
| 16 | L1, L2 | 2 | | SDEM20161T-4R7MS | Cyntec | 4.7uH Unshielded Inductor 1.1A 426mOhm Max 0806 (2016 Metric) | SMD2 |
| 17 | L3 | 1 | | ACM2520-601-2P-T002 | TDK | Coupled inductor, 0.2 A, 0.45 ohm, SMD | 2.5x2mm |
| 18 | PGND, SW1, TP1, TP2, TP3, Vbulk+ | 6 | | 3621-0-32-15-00-00-08-0 | Mill-Max | | |
| 19 | R1, R3, R4, R5 | 4 | 49.9 | RC0402FR-0749R9L | Yageo America | RES, 49.9, 1%, 0.063 W, 0402 | 0402 |
| 20 | R2, R10 | 2 | 300 | CRCW0402300RJNED | Vishay-Dale | RES, 300, 5%, 0.063 W, AEC-Q200 Grade 0, 0402 | 0402 |
| 21 | R6, R7 | 2 | 200k | ERJ-2RKF2003X | Panasonic | RES, 200 k, 1%, 0.1 W, 0402 | 0402 |
| 22 | T1 | 1 | 475uH | 760390014 | Würth Elektronik | Transformer, 475uH, SMT | 10.05x4.19x6.73 mm |
| 23 | U1 | 1 | | SN6505BDBVR | Texas Instruments | Low-Noise 1 A, 420 kHz Transformer Driver, DBV0006A (SOT-23-6) | DBV0006A |
| 24 | U3, U4 | 2 | | ISO7721FDWV | Texas Instruments | High Speed, Robust EMC Reinforced Dual-Channel Digital Isolator, DWV0008A (SOIC-8) | DWV0008A |
| 25 | U5, U6 | 2 | | XMG3522R050QRQSTQ1 | Texas Instruments | 650-V 30-mΩ GaN FET with Integrated Driver, Protection, and Temperature Reporting | VQFN52 |

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