

## PMP40933 REV E5 Bill of Materials

| Designator   | Quantity | Value       | PartNumber           | Manufacturer                | Description   | PackageReference              |
|--|----------|-------------|----------------------|-----------------------------|---|-------------------------------|
| !PCB1  | 1        |             | PMP40933             | Any                         | Printed Circuit Board   |                               |
| C1, C19, C20, C21, C22, C37, C38, C46  | 8        | 10uF        | GRT31CD71H106KE13L   | MuRata                      | CAP, CERM, 10 $\mu$ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206                     | 1206_190                      |
| C2, C13, C15, C16, C17, C18, C23, C24, C30, C39, C40, C41, C42, C47, C48, C50, C51, C58, C65, Cback1 | 20       | 0.1uF       | GRT155R71H104KE01D   | MuRata                      | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402                         | 0402                          |
| C3, C6, C44, C45   | 4        | 4.7uF       | CGA5L3X7R1H475K160AE | TDK                         | CAP, CERM, 4.7 $\mu$ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206                    | 1206                          |
| C4, C5   | 2        | 4700pF      | GRT155R71H472KE01D   | MuRata                      | CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603                        | 0603                          |
| C7   | 1        | 150uF       | EEE-FK1H151P         | Panasonic                   | CAP, AL, 150 uF, 50 V, +/- 20%, 0.18 ohm, AEC-Q200 Grade 2, SMD                       | SMT Radial G                  |
| C9   | 1        | 2200pF      | GCM216R72A222KA37D   | MuRata                      | CAP, CERM, 2200 pF, 100 V, +/- 10%, X7R, 0805   | 0805                          |
| C10, C11   | 2        | 10uF        | CGA5L1X7R1H106K160AC | TDK                         | CAP, CERM, 10 $\mu$ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206                     | 1206                          |
| C12, C14, C26  | 3        | 1uF         | CGA3E3X5R1H105M080AB | TDK                         | CAP, CERM, 1 $\mu$ F, 50 V, +/- 20%, X5R, AEC-Q200 Grade 3, 0603                      | 0603                          |
| C25, C43   | 2        | 100uF       | EEH-ZK1V101XP        | Panasonic                   | CAP, AL, 100 uF, 35 V, AEC-Q200 Grade 2, SMD  | D6.3xL7.7mm                   |
| C27, C49   | 2        | 0.22uF      | CGA2B1X7R1V224K050BC | TDK                         | CAP, CERM, 0.22 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402                        | 0402                          |
| C29, C60, C62, C63   | 4        | 4.7uF       | GCM21BR71C475KA73K   | MuRata                      | CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805                         | 0805                          |
| C31  | 1        | 100pF       | CGA2B2C0G1H101J050BA | TDK                         | CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402                      | 0402                          |
| C32  | 1        | 4700pF      | GCM155R71H472KA37D   | MuRata                      | CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402                        | 0402                          |
| C33, C34   | 2        | 3300pF      | GCM188R72A332KA37D   | MuRata                      | CAP, CERM, 3300 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603                       | 0603                          |
| C35, C36, C52, C53   | 4        | 4.7 $\mu$ F | GRT21BC71H475KE13L   | MuRata                      | Cap Ceramic 4.7uF 50V X7R 10% Pad SMD 0805 +125°C Automotive T/R                      | 0805                          |
| C57  | 1        | 0.47uF      | CGA3E3X7R1H474K080AE | TDK                         | CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603                        | 0603                          |
| C59, C61, C64  | 3        | 0.1uF       | GRT155R71C104KE01J   | MuRata                      | CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402   | 0402                          |
| C66, C67, C68, C69   | 4        | 330pF       | GRT155R71H331KE01D   | MuRata                      | CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, 0402   | 0402                          |
| C70  | 1        | 33uF        | EEH-ZA1H330XP        | Panasonic                   | CAP, Polymer Hybrid, 33 uF, 50 V, +/- 20%, 40 ohm, 6.3x7.7 SMD                        | 6.3x7.7                       |
| FB1, FB2   | 2        |             | BLM21SP700SZ1D       | Murata                      | Chip Ferrite Bead, 0805, 70 $\Omega$ @ 100MHz, 0.009 $\Omega$ , 25%, 6A               | 0805                          |
| I2C  | 1        |             | 61300311121          | Würth Elektronik            | Header, 2.54 mm, 3x1, Gold, TH  | Header, 2.54mm, 3x1, TH       |
| J1   | 1        |             | 1757242              | Phoenix Contact             | Header (Shrouded), 5.08 mm, 2x1, Tin, R/A, TH   | Header, 5.08 mm, 2x1, R/A, TH |
| J2, J3   | 2        |             | USB4085-GF-A         | Global Connector Technology | USB - C (Type - C) USB 2.0 Receptacle Connector 16 Position Through Hole, Right Angle | PTH_USB-C                     |
| L1, L3, L4, L5, L7, L9   | 6        | 50 ohm      | BLM31SN500SZ1L       | MuRata                      | Ferrite Bead, 50 ohm @ 100 MHz, 12 A, 1206  | 1206                          |
| L2   | 1        | 1uH         | XAL7070-102MEB       | Coilcraft                   | Inductor, Shielded, Composite, 1 uH, 25 A, 0.00255 ohm, SMD                           | 7.2x7x7.5mm                   |
| L6, L8   | 2        | 4.7uH       | XAL1010-472MEB       | Coilcraft                   | Inductor, Shielded, Composite, 4.7 uH, 24 A, 0.01 ohm, SMD                            | Inductor, 11.3x10x10mm        |

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|-------------------|----------|---------|---------------------|-----------------------|---|-------------------------|
| PA_CC1, PB_CC1    | 2        |         | 61300211121         | Würth Elektronik      | Header, 2.54 mm, 2x1, Gold, TH  | Header, 2.54mm, 2x1, TH |
| Q1, Q2            | 2        | 40V     | IPZ40N04S5L4R8ATMA1 | Infineon Technologies | MOSFET, N-CH, 40 V, 40 A, AEC-Q101, SON-8   | SON-8                   |
| R1, R5            | 2        | 1.00    | CRCW06031R00FKEA    | Vishay-Dale           | RES, 1.00, 1%, 0.1 W, AEC-Q200 Grade 0, 0603  | 0603                    |
| R2                | 1        | 0       | CRCW06030000Z0EA    | Vishay-Dale           | RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603   | 0603                    |
| R4, R15, R17, R18 | 4        | 2.20    | ERJ-8RQF2R2V        | Panasonic             | RES, 2.20, 1%, 0.25 W, AEC-Q200 Grade 0, 1206   | 1206                    |
| R6, R20           | 2        |         | CRF1206-FZ-R010ELF  | Bourns                | 10 mOhms ±1% 1W Chip Resistor 1206 (3216 Metric) Automotive AEC-Q200, Current Sense, Moisture Resistant Metal Element | 1206                    |
| R7, R9, R21       | 3        | 10.0    | CRCW040210R0FKED    | Vishay-Dale           | RES, 10.0, 1%, 0.063 W, 0402  | 0402                    |
| R8, R19           | 2        | 0       | CRCW04020000Z0EDHP  | Vishay-Dale           | RES, 0, 0%, 0.2 W, AEC-Q200 Grade 0, 0402   | 0402                    |
| R10, R14          | 2        | 20.0k   | CRCW040220K0FKED    | Vishay-Dale           | RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402  | 0402                    |
| R11               | 1        | 49.9k   | CRCW040249K9FKED    | Vishay-Dale           | RES, 49.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402  | 0402                    |
| R12               | 1        | 14.3k   | CRCW040214K3FKED    | Vishay-Dale           | RES, 14.3 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402  | 0402                    |
| R13               | 1        | 150k    | CRCW0402150KFKED    | Vishay-Dale           | RES, 150 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402   | 0402                    |
| R16               | 1        | 47.0k   | CRCW060347K0FKEA    | Vishay-Dale           | RES, 47.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603  | 0603                    |
| R22, R24          | 2        | 10k     | ERJ-2GEJ103X        | Panasonic             | RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0402  | 0402                    |
| R23               | 1        | 10.0    | RC1206FR-0710RL     | Yageo America         | RES, 10.0, 1%, 0.25 W, 1206   | 1206                    |
| R25, R26          | 2        | 3.30k   | RK73H1ETTP3301F     | KOA Speer             | RES, 3.30 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402  | 0402                    |
| R27, R28          | 2        | 5.1k    | CRCW06035K10JNEA    | Vishay-Dale           | RES, 5.1 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603   | 0603                    |
| RT1               | 1        |         | TMP6131QDECRQ1      | Texas Instruments     | Thermistor, DEC0002A (X1SON-2)  | DEC0002A                |
| U1                | 1        |         | TPS55288QRPMRQ1     | Texas Instruments     | 36-V, 16-A Buck-Boost Converter, RPM0026A (VQFN-HR-26)  | RPM0026A                |
| U2                | 1        |         | TPS25772CQRQLRQ1    | Texas Instruments     | Automotive Single/Dual USB Type-C Power Delivery Controller with Buck-  | VQFN-HR29               |
| U3                | 1        |         | 24LC256-I/ST        | Microchip             | 256K I2C CMOS Serial EEPROM, TSSOP-8  | TSSOP-8                 |
| C7_1              | 0        | 100uF   | EEE-FK1H101P        | Panasonic             | CAP, AL, 100 uF, 50 V, +/- 20%, 0.34 ohm, AEC-Q200 Grade 2, SMD   | SMT Radial F            |
| C8                | 0        | 2200pF  | GCM21AR72E222KX01   | MuRata                | CAP, CERM, 2200 pF, 250 V, +/- 10%, X7R, 0805   | 0805                    |
| C28               | 0        | 0.022uF | GCM155R71H223KA55D  | MuRata                | CAP, CERM, 0.022 uF, 50 V, +/- 10%, COG/NP0, 0402   | 0402                    |
| C54, C55, C56     | 0        | 10uF    | GRT31CD71H106KE13   | MuRata                | CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206  | 1206_190                |
| R3                | 0        | 2.20    | ERJ-8RQF2R2V        | Panasonic             | RES, 2.20, 1%, 0.25 W, AEC-Q200 Grade 0, 1206   | 1206                    |

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