

Filename: PMP10652_BOM.xls

Variant: 001

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Surround_View ADAS SMPS

| Designator | Description | Manufacturer | PartNumber | Quantity |
|--|---|---------------------|---------------------|----------|
| IPC1 | Printed Circuit Board | Any | PMP10652 | 1 |
| C1, C2, C5, C24 | CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603 | AVX | 06031C102KAT2A | 4 |
| C3, C4, C8, C9, C19, C27 | CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210 | MuRata | GRM32ER71H106KA12L | 6 |
| C6, C7, C25, C26 | CAP, CERM, 4.7uF, 50V, +/-10%, X7R, 1206 | MuRata | GRM31CR71H475KA12L | 4 |
| C10, C11, C28, C29, C39, C42, C52, C55 | CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603 | AVX | 06035C104KAT2A | 8 |
| C12 | CAP, CERM, 2.2 uF, 50 V, +/- 10%, X5R, 0805 | TDK | C2012X5R1H225K125AB | 1 |
| C13, C20 | CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, 0805 | TDK | C2012X7R2A472K | 2 |
| C14, C30 | CAP, CERM, 0.47uF, 10V, +/-10%, X7R, 0603 | Kemet | C0603C474K8RACTU | 2 |
| C16, C17, C18, C32, C33, C34 | CAP, CERM, 22uF, 16V, +/-20%, X7R, 1210 | TDK | C3225X7R1C226M | 6 |
| C22, C37 | CAP, CERM, 2.2uF, 10V, +/-10%, X7R, 0603 | MuRata | GRM188R71A225KE15D | 2 |
| C23, C38 | CAP, CERM, 0.033uF, 25V, +/-10%, X7R, 0603 | MuRata | GRM188R71E333KA01D | 2 |
| C36 | CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603 | AVX | 06033C104KAT2A | 1 |
| C40, C41, C53, C54 | CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805 | MuRata | GRM21BR71A106KE51L | 4 |
| C43, C44, C45, C46, C56, C57, C58, C59 | CAP, CERM, 47uF, 6.3V, +/-20%, X5R, 1210 | TDK | C3225X5R0J476M | 8 |
| C47, C60 | CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603 | MuRata | GRM188R71H103KA01D | 2 |
| C48, C61, C67, C76 | CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603 | Kemet | C0603C222K5RACTU | 4 |
| C50, C63 | CAP, CERM, 47 pF, 100 V, +/- 5%, C0G/NP0, 0805 | AVX | 08051A470JAT2A | 2 |
| C51, C64 | CAP, CERM, 2200 pF, 100 V, +/- 10%, X7R, 0603 | AVX | 06031C222KAT2A | 2 |
| C65, C66 | CAP, CERM, 10uF, 10V, +/-10%, X5R, 1206 | MuRata | GRM31CR71A106KA01L | 2 |
| C68 | CAP, CERM, 0.47uF, 10V, +/-10%, X7R, 0603 | MuRata | GRM188R71A474KA61D | 1 |
| C69, C71 | CAP, CERM, 2.2 uF, 10 V, +/- 10%, X5R, 0603 | MuRata | GRM188R61A225KE34D | 2 |
| C70 | CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0603 | Kemet | C0603C105K8PACTU | 1 |
| C72, C74 | CAP, CERM, 47uF, 6.3V, +/-20%, X5R, 1206 | MuRata | GRM31CR60J476ME19L | 2 |
| C73, C75 | CAP, CERM, 22uF, 10V, +/-10%, X7R, 1206 | MuRata | GRM31CR71A226KE15L | 2 |
| C77, C78, C80, C81, C82, C83 | CAP, CERM, 1 uF, 10 V, +/- 10%, X7R, 0805 | AVX | 0805ZC105KAT2A | 6 |
| C79, C84, C85 | CAP, CERM, 0.01 uF, 100 V, +/- 5%, X7R, 0603 | AVX | 06031C103JAT2A | 3 |
| D1 | Diode, Zener, 15 V, 500 mW, SOD-123 | Diodes Inc. | MMSZ5245B-7-F | 1 |
| D2 | Diode, TVS, Uni, 28 V, 600 W, SMB | Diodes Inc. | SMBJ28A-13-F | 1 |
| D3 | Diode, TVS, Uni, 14 V, 600 W, SMB | Diodes Inc. | SMBJ14A-13-F | 1 |
| FID4, FID5, FID6 | Fiducial mark. There is nothing to buy or mount. | N/A | N/A | 3 |
| H1, H2, H3, H4 | Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead | B&F Fastener Supply | NY PMS 440 0025 PH | 4 |
| H5, H6, H7, H8 | Standoff, Hex, 0.5"L #4-40 Nylon | Keystone | 1902C | 4 |
| J1 | Standard Banana Jack, Insulated, Red | Keystone | 6091 | 1 |
| J2 | Standard Banana Jack, Insulated, Black | Keystone | 6092 | 1 |

| Designator | Description | Manufacturer | PartNumber | Quantity |
|---|--|-------------------|----------------------|----------|
| L1 | Coupled inductor, 6 A, 0.014 ohm, SMD | TDK | ACM1211-102-2PL-TL01 | 1 |
| L2, L3 | Inductor, Shielded, Powdered Iron, 2.2uH, 5.3A, 0.021 ohm, SMD | Toko | FDV0630-2R2M | 2 |
| L4, L5 | Inductor, Drum Core, Ferrite, 1 µH, 7.8 A, 0.01 ohm, SMD | Bourns | SRN8040-1R0Y | 2 |
| L6, L7 | Inductor, Wirewound, Ferrite, 1 µH, 1.8 A, 0.03 ohm, SMD | TDK | NLC565050T-1R0K-PF | 2 |
| LBL1 | Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll | Brady | THT-14-423-10 | 1 |
| LF1, LF2 | Inductor, Shielded Drum Core, Ferrite, 2.2 µH, 3 A, 0.026 ohm, SMD | Würth Elektronik | 74408943022 | 2 |
| Q1 | MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO-8L | Vishay-Siliconix | SQJ422EP-T1-GE3 | 1 |
| Q2 | MOSFET, P-CH, -60 V, 30 A, PowerPAK_SO-8L | Vishay-Siliconix | SQJ461EP | 1 |
| Q3 | MOSFET, N/P-CH, 60 V, 4.4 A, SOT-23 | Vishay-Siliconix | SQ2360EES-T1-GE3 | 1 |
| R1, R5, R9, R14, R16, R22 | RES, 0 ohm, 5%, 0.1W, 0603 | Vishay-Dale | CRCW06030000Z0EA | 6 |
| R2, R6 | RES, 100 k, 0.1%, 0.063 W, 0603 | TE Connectivity | CPF0603B100KE | 2 |
| R3 | RES, 20 k, 5%, 0.1 W, 0603 | Vishay-Dale | CRCW060320K0JNEA | 1 |
| R4, R8, R15, R18, R19, R20, R21, R24, R31 | RES, 100k ohm, 1%, 0.1W, 0603, RES, 100k ohm, 1%, 0.1W, 0603, RES, 100k ohm, 1%, 0.1W, 0603, RES, 100k ohm, 1%, 0.1W, 0603, RES, 100 k, 1%, 0.1 W, 0603, RES, 100 k, 1%, 0.1 W, 0603, RES, 100 k, 1%, 0.1 W, 0603, RES, 100k ohm, 1%, 0.1W, 0603, RES, 100k ohm, 1%, 0.1W, 0603, RES, 100k ohm, 1%, 0.1W, 0603 | Vishay-Dale | CRCW0603100KFKEA | 9 |
| R10 | RES, 30.1 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060330K1FKEA | 1 |
| R11 | RES, 20.0 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060320K0FKEA | 1 |
| R12 | RES, 2.00 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW06032K00FKEA | 1 |
| R25, R32 | RES, 49.9 ohm, 1%, 0.1W, 0603 | Vishay-Dale | CRCW060349R9FKEA | 2 |
| R26, R33, R39, R45 | RES, 4.7 ohm, 5%, 0.125W, 0805 | Vishay-Dale | CRCW08054R70JNEA | 4 |
| R27, R34 | RES, 40.2 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060340K2FKEA | 2 |
| R28, R35 | RES, 84.5 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060384K5FKEA | 2 |
| R29, R36 | RES, 80.6 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060380K6FKEA | 2 |
| R30, R37, R43 | RES, 8.87 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW06038K87FKEA | 3 |
| R38 | RES, 4.99 ohm, 1%, 0.125W, 0805 | Yageo America | RC0805FR-074R99L | 1 |
| R40, R42 | RES, 49.9k ohm, 1%, 0.1W, 0603 | Vishay-Dale | CRCW060349K9FKEA | 2 |
| R41 | RES, 12.4k ohm, 1%, 0.1W, 0603 | Vishay-Dale | CRCW060312K4FKEA | 1 |
| R44, R46 | RES, 10k ohm, 5%, 0.1W, 0603 | Vishay-Dale | CRCW060310K0JNEA | 2 |
| TP1, TP5 | Test Point, Multipurpose, White, TH | Keystone | 5012 | 2 |
| TP2, TP4, TP6, TP8, TP9, TP11, TP12, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26 | Terminal, Turret, TH, Double | Keystone | 1503-2 | 20 |
| TP3, TP7 | Test Point, Multipurpose, Black, TH | Keystone | 5011 | 2 |
| TP10, TP13 | Test Point, Miniature, Red, TH | Keystone | 5000 | 2 |
| U1, U4 | 6th GENERATION BUCK REGULATOR, PWP0016H | Texas Instruments | LM536033QPWP | 2 |

| Designator | Description | Manufacturer | PartNumber | Quantity |
|-------------------|---|---------------------|-------------------|-----------------|
| U2 | Smart diode | Texas Instruments | LM74610-Q1 | 1 |
| U3 | Low-Voltage Adjustable Precision Shunt Regulator, 80 mA, -40 to 125 degC, 5-pin SOT-23 (DBV), Green (RoHS & no Sb/Br) | Texas Instruments | TLVH431AQDBVRA | 1 |
| U5 | Power Sequencer, 6-pin SOT-23, Pb-Free | Texas Instruments | LM3880MF-1AA/NOPB | 1 |
| U6, U7 | IC, DC-DC Converter, xxV xx V, xA | Texas Instruments | TPS57114RTE | 2 |
| U8 | Dual 2.0A, High Frequency Synchronous Step-Down DC-DC Regulator, 16-pin LLP, Pb-Free | Texas Instruments | LM26420XSQ/NOPB | 1 |
| U9 | IC, 150mA Charge Pump | Texas Instruments | TPS60150DRV | 1 |
| U10 | Single Output High PSRR LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 6.5 V Input, with Low IQ, 5-pin SC70 (DCK), -40 to 85 degC, Green (RoHS & no Sb/Br) | Texas Instruments | TPS71733DCKR | 1 |
| U11, U12 | Low Noise, High-Bandwidth PSRR Low-Dropout 150mA Linear Regulator, DCK0005A | Texas Instruments | TPS71718DCKR | 2 |

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