Infotainment Power System for Automotive
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PMP15014

PMP15014 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		PMP15014	Any	Printed Circuit Board	
C27, C29, C30, C40, C901, C902, CVCC	7	2.2uF	GRM188C81A225KE34D	MuRata	CAP, CERM, 2.2uF, 10V, +/-10%, X6S, 0603	0603
C28	1	1000pF	GCM1555C1H102JA16	MuRata	CAP, CERM, 1000 pF, 6.3 V, +/- 10%, X5R, 0402	0402
C111, C112, C113, C202, C205, C206, CBias, COfh1, COfh2	9	0.01uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	0402
C701, C702	2	10uF	GCM21BR71A106KE22L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805_140	0805_140
C703, CFF	2	100pF	GRM1555C1H101FA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
Cboot	1	0.68uF	C0603C684K8PACTU	Kemet	CAP, CERM, 0.68 µF, 10 V, +/- 10%, X5R, 0603	0603
Cin1	1	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, 1210	1210
Cin2, Cin3, Cin4, Cin5	4	4.7uF	GRM21BR61H475KE51L	MuRata	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X5R, 0805_140	0805_140
Cinbulk	1	470uF	EEU-FR1V471B	Panasonic	CAP, AL, 470 µF, 35 V, +/- 20%, TH	10x16mm
Cinhf1, Cinhf2, Cinhf3	3	0.047uF	GRM188R71H473KA61D	MuRata	CAP, CERM, 0.047 µF, 50 V, +/- 10%, X7R, 0603	0603
CO1, CO2, CO3	3	22uF	GCM21BD70J226M	MuRata	CAP, CERM, 22 µF, 6.3 V, +/- 20%, X7T, 0805	0805
D11, D12	2	26V	SMBJ26A-13-F	Diodes Inc.	Diode, TVS, Uni, 26 V, 600 W, SMB	SMB
D701	1	30V	MBR0530T1G	ON Semiconductor	Diode, Schottky, 30 V, 0.5 A, SOD-123	SOD-123
FB1	1	120 ohm	BLM31PG121SN1	Taiyo Yuden	Ferrite Bead, 120 ohm @ 100 MHz, 3 A, 1206	1206
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	1		TSW-106-07-G-S	Samtec	Header, 100mil, 6x1, Gold, TH	6x1 Header
J7, J10	2		HTSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 100mil, 2x1, TH
J14, JP1	2	2x1	1715721	Phoenix Contact	Conn Term Block, 2POS, 5.08mm, TH	2POS Terminal Block
L1	1	2.2uH	IHLP2525EZER2R2M01	Vishay-Dale	Inductor, Shielded, Ferrite, 2.2 µH, 10 A, 0.0136 ohm, SMD	6.47x5x6.86
L701	1	6.8uH	744025006	Wurth Elektronik	Inductor, Shielded Drum Core, Ferrite, 6.8 µH, 1.1 A, 0.142 ohm, SMD	Inductor, 2.8x2.8x2.8mm
Lin1	1	2.2uH	74408943022	Wurth Elektronik	Inductor, Shielded Drum Core, Ferrite, 2.2 µH, 3 A, 0.026 ohm, SMD	4.8x3.8x4.8mm
Q4	1	40V	SQJ422EP-T1-GE3	Vishay-Siliconix	MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO-8L	PowerPAK_SO-8L
R101	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
R102	1	34.0k	CRCW040234K0FKED	Vishay-Dale	RES, 34.0 k, 1%, 0.063 W, 0402	0402
R103	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R701, R703, RFBB1, RFBT, Rin2	5	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
R702	1	16.2k	CRCW040216K2FKED	Vishay-Dale	RES, 16.2 k, 1%, 0.063 W, 0402	0402
Ren9, Rin3, Rreset	3	100k	CRCW0402100KDHEDP	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402

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RFBB2	1	36.5k	CRCW040236K5FKED	Vishay-Dale	RES, 36.5 k, 1%, 0.063 W, 0402	0402
Rflt	1	1.45k	RT0603BRD071K45L	Yageo America	RES, 1.45 k, 0.1%, 0.1 W, 0603	0603
Rin1	1	22.6k	CRCW040222K6FKED	Vishay-Dale	RES, 22.6 k, 1%, 0.063 W, 0402	0402
Rinj	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, 0402	0402
U1	1		'LM53635-Q1	Texas Instruments	3.5A, 36 V Synchronous, 2.1MHz, Automotive Step Down DC-DC Converter	RNL0022A
U4	1		TPS22965TDSGRQ1	Texas Instruments	5.5-V, 4-A, 16-mΩ On-Resistance Load Switch, DSG0008A	DSG0008A
U5	1		LM74610QDGKRQ1	Texas Instruments	Smart Diode Controller, DGK0008A	DGK0008A
U6	1		TPS3801K33DCK	Texas Instruments	ULTRA-SMALL SUPPLY VOLTAGE SUPERVISOR, DCK0005A	DCK0005A
U7	1		LM27313XMF	Texas Instruments	1.6 MHz Boost Converter With 30V Internal FET Switch, 5-pin SOT-23	MF05A
U9	1		LP5907MFX-3.0/NOPB	Texas Instruments	ULTRA LOW-NOISE, 250-mA LINEAR REGULATOR FOR RF AND ANALOG CIRCUITS REQUIRES NO BYPASS CAPACITOR, DBV0005A	DBV0005A
FB1B	0	600 ohm	FBMH3225HM601NT	Taiyo Yuden	Ferrite Bead, 600 ohm @ 100 MHz, 3 A, 1210	1210
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
L1B	0	2.2uH	DFEH7030D-2R2M=P3	Wurth	Inductor, Metal Alloy, 2.2uH, 9.1A, 9.9mohm, SMD	7x6.6x3mm
R11, R12, R409	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265