

PMP20489 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		PMP20489	Any	Printed Circuit Board	
C1	1	4.7uF	GRM155R61A475M	MuRata	CAP, CERM, 4.7 µF, 10 V, +/- 20%, X5R, 0402	0402
C2, C7, C8, C902, C903	5	1uF	C1608X5R1E105K080AC	TDK	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0603	0603
C3, C6	2	1uF	C1005X7S1A105K050BC	TDK	CAP, CERM, 1 µF, 10 V, +/- 10%, X7S, 0402	0402
C4	1	2200pF	C1005X7R1H222K	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
C5, C60	2	1000pF	C1005X7R1H102K	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
C11, C12, C13	3	470uF	35ZL470MEFC10X20	Rubycon	CAP, AL, 470 µF, 35 V, +/- 20%, TH	TH, 2-Leads, Body 10x20mm, Pin Spacing 5mm
C21, C22, C23, C24, C25, C26, C27, C28, C29, C30	10	470uF	EEFSX0E471E4	Panasonic	CAP, Aluminum Polymer, 470 µF, 2.5 V, +/- 20%, 4.5 ohm, 7.3x1.8x4.3mm SMD	7.3x1.8x4.3mm
C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C725, C726, C727, C728, C729, C730	16	100uF	C1210C107M9PACTU	Kemet	CAP, CERM, 100 µF, 6.3 V, +/- 20%, X5R, 1210	1210
C77, C110, C210, C310, C410, C510, C540, C610, C710, C777, C790	11	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X5R, 0402	0402
C100, C200, C300, C400, C500, C600, C700	7	1000pF	C1005C0G1E102J	TDK	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
C101, C102, C103, C104, C105, C201, C202, C203, C204, C205, C301, C302, C303, C304, C305, C401, C402, C403, C404, C405, C501, C502, C503, C504, C505, C601, C602, C603, C604, C605, C701, C702, C703, C704, C705	35	22uF	C3225X5R1C226M	TDK	CAP, CERM, 22 µF, 16 V, +/- 20%, X5R, 1210	1210

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C106, C206, C306, C406, C506, C606, C706	7	3300pF	C1005X7R1H332K	TDK	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0402	0402
C111, C211, C311, C411, C511, C611, C711	7	10uF	C0603C106M9PACTU	Kemet	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0603	0603
C112, C212, C312, C412, C512, C612, C712	7	0.1uF	GRM155R61C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0402	0402
C113, C213, C313, C413, C513, C613, C713	7	1500pF	08051C152KAT2A	AVX	CAP, CERM, 1500 pF, 100 V, +/- 10%, X7R, 0805	0805
C721, C722, C723, C724	4	470uF	6TPF470MAH	Panasonic	CAP, Tantalum Polymer, 470 µF, 6.3 V, +/- 20%, 0.01 ohm, 7343-40 SMD	7343-40
C800, C801, C802, C803	4	0.1uF	C1005X7R1H104M	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 20%, X7R, 0402	0402
C804	1	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402
C900	1	10uF	GRM31CR61E106KA12L	MuRata	CAP, CERM, 10 µF, 25 V, +/- 10%, X5R, 1206	1206
C901	1	22uF	GRM31CR60J226KE19L	MuRata	CAP, CERM, 22 µF, 6.3 V, +/- 10%, X5R, 1206	1206
D500	1	Red	LTST-C170KRKT	Lite-On	LED, Red, SMD	Red 0805 LED
D502, D503, D770, D771	4	30V	MBR0530T1G	ON Semiconductor	Diode, Schottky, 30 V, 0.5 A, SOD-123	SOD-123
D772	1	Green	LTST-C170KGKT	Lite-On	LED, Green, SMD	LED_0805
D800	1	30V	BAT54WS-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
Dyn_Clk, TP1, TP2, VIN, Vout, VoutB	6		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
H1, H2, H3, H4	4		SJ61A2	3M	Bumpon, Hemisphere, 0.375 X 0.235, Black	Black Bumpon
J1, J7	2		PEC05DAAN	Sullins Connector Solutions	Header, 100mil, 5x2, Tin, TH	Header, 5x2, 100mil, Tin
J2, J3, J4	3		PBC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Gold, TH	PBC03SAAN
J5, J8, J800	3		PBC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator
J6	1		5103308-1	TE Connectivity	Header (shrouded), 100mil, 5x2, Gold, TH	5x2 Shrouded header
J11, J12, J701, J702	4		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
J14, J703	2		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
J15, J16, J17, J18	4		CB70-14-CY	Panduit	Terminal 90A Lug	CB70-14-CY
J77, J541, J777, J791	4		U.FL-R-SMT-1	Hirose Electric Co. Ltd.	Connector, Ultra-Mini Coaxial, SMD	Ultra small CO-AX SMD
J540, J790	2		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J803	1		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
L100, L200, L300, L400, L500	5	210nH	FP1308R3-R21-R	Coiltronics	Inductor, Shielded Drum Core, Metal Composite, 210 nH, 68 A, 0.2 ohm, SMD	FP1308
L600, L700	2	680nH	XAL1010-681MEB	Coilcraft	Inductor, Shielded, Composite, 680 nH, 36 A, 0.00087 ohm, SMD	Inductor, 11.3x10x10mm
L900	1	2.2uH	VLF302512MT-2R2M	TDK	Inductor, Shielded, Ferrite, 2.2 µH, 1.26 A, 0.066 ohm, SMD	IND_3x1.2x3mm
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch

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Q500, Q520, Q770	3	25V	CSD16408Q5C	Texas Instruments	MOSFET, N-CH, 25 V, 113 A, DualCool SON 5x6mm	DualCool SON 5x6mm
Q540, Q790	2	25V	CSD16325Q5	Texas Instruments	MOSFET, N-CH, 25 V, 100 A, SON 5x6mm	SON 5x6mm
R1, R10, R16, R540, R771, R772, R790	7	1.0	CRCW04021R00JNED	Vishay-Dale	RES, 1.0, 5%, 0.063 W, 0402	0402
R2, R6	2	9.76Meg	CRCW04029M76FKED	Vishay-Dale	RES, 9.76 M, 1%, 0.063 W, 0402	0402
R3	1	121k	CRCW0402121KFKED	Vishay-Dale	RES, 121 k, 1%, 0.063 W, 0402	0402
R4	1	412k	CRCW0402412KFKED	Vishay-Dale	RES, 412 k, 1%, 0.063 W, 0402	0402
R5	1	154k	CRCW0402154KFKED	Vishay-Dale	RES, 154 k, 1%, 0.063 W, 0402	0402
R7, R8, R14, R23, R24, R25	6	4.75k	CRCW04024K75FKED	Vishay-Dale	RES, 4.75 k, 1%, 0.063 W, 0402	0402
R9, R11	2	200	CRCW0402200RFKED	Vishay-Dale	RES, 200, 1%, 0.063 W, 0402	0402
R20, R21, R22, R516, R536, R541, R788, R791, R811	9	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R41, R42	2	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
R43	1	0.001	ERJ-M1WTF1M0U	Panasonic	RES, 0.001, 1%, 1 W, 2512	2512
R62	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R66, R67	2	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
R71, R72, R77, R543, R787, R793	6	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, 0402	0402
R101, R201, R301, R401, R501	5	150k	CRCW0402150KFKED	Vishay-Dale	RES, 150 k, 1%, 0.063 W, 0402	0402
R110, R210, R310, R410, R510, R610, R710	7	2.2	CRCW04022R20JNED	Vishay-Dale	RES, 2.2, 5%, 0.063 W, 0402	0402
R113, R213, R313, R413, R513, R613, R713	7	1.0	CRM1206-JW-1R0ELF	Bourns	RES, 1.0, 5%, 0.5 W, 1206	1206
R505, R506, R507, R508, R509, R511, R512, R514, R515, R525, R526, R527, R528, R529, R530, R531, R532, R533, R534, R535, R550, R553	22	0.15	CSRN2512FKR150	Stackpole Electronics Inc	RES, 0.15, 1%, 2 W, 2512	2512
R521, R551, R773	3	75.0	CRCW060375R0FKEA	Vishay-Dale	RES, 75.0, 1%, 0.1 W, 0603	0603
R522, R552, R774	3	249	CRCW0603249RFKEA	Vishay-Dale	RES, 249, 1%, 0.1 W, 0603	0603
R523, R770	2	330	CRCW0402330RJNED	Vishay-Dale	RES, 330, 5%, 0.063 W, 0402	0402
R542, R792	2	0.01	ERJ-M1WSF10MU	Panasonic	RES, 0.01, 1%, 1 W, 2512	2512
R601, R701	2	402k	CRCW0402402KFKED	Vishay-Dale	RES, 402 k, 1%, 0.063 W, 0402	0402

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R775, R776, R777, R778, R780, R781, R782, R783, R784, R785, R786	11	1.50	ERJ-1TRQF1R5U	Panasonic	RES, 1.50, 1%, 1 W, 2512	2512
R800	1	8.06k	CRCW04028K06FKED	Vishay-Dale	RES, 8.06 k, 1%, 0.063 W, 0402	0402
R812	1	200k	CRCW0402200KFKED	Vishay-Dale	RES, 200 k, 1%, 0.063 W, 0402	0402
RTN1, RTN6, TP199	3		5016	Keystone	Test Point, Compact, SMT	Testpoint_Keystone_ Compact
SW1, SW2, SW3, SW4, SW5, SW6, SW-B	7		5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_ Miniature
U1	1		TPS53679RSB	Texas Instruments	Dual-Channel (6+1 or 5+2 Phases) D-CAP+ Step-Down Multiphase Controller with Non-Volatile Memory and PMBus Interface for VR13 Server VCORE, RSB0040E	RSB0040E
U100, U200, U300, U400, U500, U600, U700	7		CSD95490Q5MC	Texas Instruments	Synchronous Buck NexFET Power Stage, DMC0012A	DMC0012A
U800	1		TLC555CD	Texas Instruments	LinCMOS Timer, D0008A	D0008A
U801	1		UCC27324D	Texas Instruments	DUAL 4-A PEAK HIGH SPEED LOW- SIDE POWER MOSFET DRIVERS, D0008A	D0008A
U900	1		TPS62163DSGR	Texas Instruments	Buck Step Down Regulator with 3 to 17 V Input and 5 V Output, -40 to 85 degC, 8-Pin WSON (DSG), Green (RoHS & no Sb/Br)	DSG0008A
U901	1		TPS73233DBV	Texas Instruments	Cap-Free, NMOS, 250mA Low Dropout Regulator with Reverse Current Protection, DBV0005A	DBV0005A
Vin_rtn, Vout_rtn, VoutB_rtn	3		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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