

## PMP22165 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		PMP22165	Any	Printed Circuit Board	
C50, C51	2	2.2uF	CL05A225KQ5NNNC	Samsung	CAP, CERM, 2.2 uF, 6.3 V, +/- 10%, X5R, 0402	0402
C52, C53, C54, C55	4	10uF	GRM155R61A106ME11	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	0402
C56, C57, C62, C63, C65	5	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0402	0402
C58	1	1uF	GRM155R6YA105KE11D	MuRata	CAP, CERM, 1 uF, 35 V, +/- 10%, X5R, 0402	0402
C59, C64, C212, C217, C222, C232, C242, C254, C262, C268, C280	11	0.1uF	GRM155R61A104KA01D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X5R, 0402	0402
C60, C61	2	4.7uF	GRM188R61A475ME15	MuRata	CAP, CERM, 4.7 uF, 10 V, +/- 20%, X5R, 0603	0603
C210, C211, C220, C221, C260, C261	6	22uF	C2012X5R1C226M125AC	TDK	CAP, CERM, 22 uF, 16 V, +/- 20%, X5R, 0805	0805
C213, C215, C218, C219	4	47uF	C3216X7S0J476M160AC	TDK	CAP, CERM, 47 uF, 6.3 V, +/- 20%, X7S, 1206	1206
C214, C224, C264	3	330pF	GRM1885C2A331JA01D	MuRata	CAP, CERM, 330 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C216, C229, C231, C241, C253, C267	6	4.7uF	GRM188R60J475ME19D	MuRata	CAP, CERM, 4.7 uF, 6.3 V, +/- 20%, X5R, 0603	0603
C223, C225, C226, C227, C228, C230, C240, C243, C250, C251, C252, C255, C256, C263, C265, C266	16	47uF	GRM21BR60J476ME15L	MuRata	CAP, CERM, 47 uF, 6.3 V, +/- 20%, X5R, 0805	0805
C401	1	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C402	1	22uF	GRM31CR61C226KE15L	MuRata	CAP, CERM, 22 uF, 16 V, +/- 10%, X5R, 1206	1206
C403	1	270uF	EEHZA1V271P	Panasonic	CAP, Polymer Hybrid, 270 uF, 35 V, +/- 20%, 20 ohm, 10x10 SMD	10x10
C412	1	22uF	C2012X5R0J226M085AB	TDK	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0805	0805
C421, C422, C451, C452, C461, C462, C471	7	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C472	1	4.7uF	GRT188C81E475KE13D	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X6S, AEC-Q200 Grade 2, 0603	0603
C490	1	10uF	C1608X5R1E106M080AC	TDK	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
C491	1	10uF	C2012X5R1E106K125AB	TDK	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 0805	0805
C493, C494	2	2.2uF	CGA3E3X5R1A225K080AB	TDK	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603	0603
D99	1	30V	BAT54C-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
D488	1	30V	BAT54-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
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

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J50	1		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
J99, J491, J492, J493, J494, J495, J496	7		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J211, J221, J430, J440	4		691214110002	Würth Elektronik	Terminal Block, 3.5mm, 2x1, Tin, TH	Receptacle, 3.5mm, 2x1, TH
J400, J450	2		ED120/2DS	On-Shore Technology	Terminal Block, 5.08 mm, 2x1, Brass, TH	2x1 5.08 mm Terminal Block
J401	1		TSW-105-07-G-D	Samtec	Header, 100mil, 5x2, Gold, TH	5x2 Header
J410, J420, J460	3		1935776	Phoenix Contact	Terminal Block, 2x1, 5mm, Green, TH	Terminal Block, 2x1, 5mm, TH
J421, J451, J461, J471	4		5-146261-1	TE Connectivity	Header, 100mil, 2x1, Gold, TH	Header, 2x1, 100mil
J422, J423, J452, J453, J462, J463, J472, J473	8		U.FL-R-SMT-1(01)	Hirose Electric Co. Ltd.	Receptacle, Ultra Miniature Coaxial, Male Pin, 50 ohm, SMT	Ultra small CO-AX SMD
J481	1		TSW-105-07-G-S	Samtec	Header, 100mil, 5x1, Gold, TH	5x1 Header
L210, L220, L260	3	1uH	XAL4020-102MEB	Coilcraft	Inductor, Shielded, Composite, 1 µH, 8.75 A, 0.01 ohm, AEC-Q200 Grade 1, SMD	4x2.1x4mm
L230, L240, L250	3	470nH	744383360047	Würth Elektronik	Inductor, Wirewound, 470 nH, 4.8 A, 0.018 ohm, SMD	SMD, 2-Leads, Body 3.2x3.2mm
L400	1	jumper	jumper by hand on rev A PCB			
L410	1	2.2uH	XPL2010-222MLB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 1.3 A, 0.16 ohm, SMD	XPL2010
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
Q210, Q220, Q260	3		CSD87381P	Texas Instruments	Synchronous Buck NexFET Power Block II, MPC0005A (PTAB-5)	MPC0005A
Q420	1	30V	CSD17579Q3A	Texas Instruments	MOSFET, N-CH, 30 V, 20 A, DNH0008A (VSONP-8) <b>Test Interface only</b>	DNH0008A
Q450, Q460, Q470	3	25V	CSD16301Q2	Texas Instruments	MOSFET, N-CH, 25 V, 5 A, DQK0006C (WSON-6) <b>Test Interface only</b>	DQK0006C
R50, R51, R52, R54, R55, R56, R211, R212, R215, R221, R222, R225, R226, R230, R240, R250, R261, R262, R265	19	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R57, R58, R59, R60, R61, R62, R63, R64, R66, R67	10	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R65, R213, R223, R263, R422, R452, R462, R472, R495	9	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R210, R220, R260	3	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R214, R224, R264	3	5.1	CRCW06035R10JNEA	Vishay-Dale	RES, 5.1, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R401	0	DNP			placeholder	0603

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R402, R403, R404	3	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R421, R451, R461, R471	4	1.0	CRCW04021R00JNED	Vishay-Dale	RES, 1.0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R423, R424, R429, R453, R454, R463, R464	7	1.00	CRCW12061R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R425, R426, R455, R456, R465, R466, R475, R476	8	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R473	1	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R490	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R491, R493	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R494	1	4.22k	CRCW04024K22FKED	Vishay-Dale	RES, 4.22 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
TP99	1		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
TP211, TP221, TP400, TP410, TP420, TP430, TP440, TP450, TP460	9		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP212, TP222, TP401, TP411, TP421, TP431, TP441, TP451, TP461	9		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP490	1		5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
U50	1		TPS65086100RSKR	Texas Instruments	Configurable Multi-Rail PMIC for 2S & 3S Li-Ion Battery-Operated Devices or Non Battery Operated, RSK0064C (VQFN-64)	RSK0064C
U490	1		TPS62173DSGR	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
U491	1		TPS74501PDRVR	Texas Instruments	500-mA LDO With Power-Good, DRV0006A (WSON-6) <b>Test Interface only</b>	DRV0006A
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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