



PMP22220 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB100	1		PMP22220	Any	Printed Circuit Board	
B100	1		FFB03612EHN-BGA	Delta Electronics Inc.	12V DC axial fan, 36 x 28 mm	
C100, C115	2	1uF	C3216X7R1E105K085AA	TDK	CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 1206	1206
C101, C102, C112, C113	4	2200pF	DE2E3KY222MA2BM01	MuRata	CAP, CERM, 2200pF, 250V, +/-20%, KY, Radial D8x5mm	Radial D8x5mm
C103, C105, C109, C111	4	0.047uF	GRM32DR72J473KW01L	MuRata	CAP, CERM, 0.047 uF, 630 V, +/- 10%, X7R, 1210	1210
C104, C110	2	0.22uF	GRM55DR72J224KW01L	MuRata	CAP, CERM, 0.22 μ F, 630 V, +/- 10%, X7R, 2220	2220
C106	1	0.47uF	ECQ-U2A474ML	Panasonic	CAP, Film, 0.47 μ F, 275 V, +/- 20%, TH	Radial 25x8.5x18.5
C107, C108	2	0.47uF	890324024005	Würth Elektronik	CAP, Film, 0.47 uF, 275 V, +/- 10%, TH	15x10mm
C114, C209, C210, C211	4	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
C116, C117	2	100pF	0402YC101KAT2A	AVX	CAP, CERM, 100 pF, 16 V, +/- 10%, X7R, 0402	0402
C118	1	0.1uF	C1206H104J3GACTU	Kemet	CAP, CERM, 0.1 μ F, 25 V, +/- 5%, C0G/NP0, 1206	1206
C119	1	2.2uF	GRM31MR71E225KA93L	MuRata	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7R, 1206	1206
C120	1	1000pF	GRM188R71E102KA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0603	0603
C121	1	0.1uF	0402YC104KAT2A	AVX	CAP, CERM, 0.1 μ F, 16 V, +/- 10%, X7R, 0402	0402
C135, C136	2	100uF	ELXZ250ELL101MFB5D	Chemi-Con	CAP, AL, 100 μ F, 25 V, +/- 20%, AEC-Q200 Grade 2, TH	D6.3xL11.5mm
C138	1	10uF	TMK316B7106KL-TD	Taiyo Yuden	CAP, CERM, 10 μ F, 25 V, +/- 10%, X7R, 1206	1206
C139	1	0.1uF	CGA3E2X8R1E104K080AA	TDK	CAP, CERM, 0.1 μ F, 25 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0603	0603
C140	1	22uF	JMK212BJ226MG-T	Taiyo Yuden	CAP, CERM, 22 μ F, 6.3 V, +/- 20%, X5R, 0805	0805
C202, C207	2	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0402	0402
C208, C214	2	0.01uF	SR0603X7R103K1NT95(F)#M123A	Presidio Components	CAP, CERM, 0.01 μ F, 25 V, +/- 10%, X7R, 0603	0603
C212	1	0.1uF	C1005X7R1E104M050BB	TDK	CAP, CERM, 0.1 μ F, 25 V, +/- 20%, X7R, 0402	0402
C213, C231, C232, C239	4	1000pF	885012205044	Würth Elektronik	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0402	0402
C215	1	100uF	T495X107K016ATE100	Kemet	CAP, TA, 100 μ F, 16 V, +/- 10%, 0.1 ohm, SMD	7343-43
C216	1	2.2uF	12063D225KAT2A	AVX	CAP, CERM, 2.2 μ F, 25 V, +/- 10%, X5R, 1206	1206
C217, C230	2	2.2uF	C1005X5R1A225K050BC	TDK	CAP, CERM, 2.2uF, 10V, +/-10%, X5R, 0402	0402
C218, C221	2	4.7uF	CL05A475MQ5NRNC	Samsung Electro-Mechanics	CAP, CER, 4.7UF, 6.3V, 20%, X5R, 0402	0402
C219, C222	2	2.2uF	0805YD225KAT2A	AVX	CAP, CERM, 2.2 μ F, 16 V, +/- 10%, X5R, 0805	0805
C220, C223	2	0.1uF	GRM155R60J104KA01D	MuRata	CAP, CERM, 0.1uF, 6.3V, +/-10%, X5R, 0402	0402
C224	1	0.01uF	GRM155R70J103KA01D	MuRata	CAP, CERM, 0.01uF, 6.3V, +/-10%, X7R, 0402	0402
C225, C226	2	1uF	C0603C105K4PACTU	Kemet	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	0603
C227	1	0.01uF	0603ZC103KAT2A	AVX	CAP, CERM, 0.01 μ F, 10 V, +/- 10%, X7R, 0603	0603
C228	1	10uF	C0805C106K8PACTU	Kemet	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	0805
C229	1	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	0402
C233	1	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	0603
C234, C235, C236, C237	4	2200pF	GRM155R61E222KA01D	MuRata	CAP, CERM, 2200 pF, 25 V, +/- 10%, X5R, 0402	0402
C238	1	1uF	VJ1206Y105KCXAT	Vishay-Vitramon	CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 1206	1206
D101, D102, D105, D106	4	600V	C6D10065A	Cree	10A 650V G6 ZREC SIC SCHOTTKY DI	TO-220-2
D104, D107	2	40V	SS14FL	Fairchild Semiconductor	Diode, Schottky, 40 V, 1 A, AEC-Q101, SOD-123F	SOD-123F
D200, D203	2	250V	BAV21WS-7-F	Diodes Inc.	Diode, Switching, 250 V, 0.25 A, AEC-Q101, SOD-323	SOD-323
D201, D202	2	0.65V	BAT54S-7-F	Diodes Inc.	Diode, Schottky, 30V, 0.2A, SOT-23	SOT-23
D204, D205, D206, D207	4	130V	KDZLVTFTR130	Rohm	Diode, Zener, 130 V, 1 W, AEC-Q101, SOD-123FL	SOD-123FL

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
F100	1		0217015.MXEP	Littelfuse	Fuse, 15 A, 250 V, TH	D5.5xL21.5mm
H100, H102, H104, H106, H108, H110	6		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H101, H103, H105, H107, H109, H111	6		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
J100, J103	2		0312-0-15-15-34-27-10-0	Mill-Max	Pin Receptacle, .032-.046" .075" Dia, Gold, TH	Pin Receptacle
J101	1		282841-2	TE Connectivity	Terminal Block, 2x1, 5.08mm, TH	10.16x15.2x9mm
J102	1		703W-00/54	Qualtek Electronics Corporation	AC Receptacle, 10A 250VAC	20X50X28.7mm
J104	1		SSW-104-24-G-D	Samtec	Receptacle, 2.54mm, 4x2, Gold, TH	Receptacle, 2.54mm, 4x2, TH
J105	1		215307-3	TE Connectivity	Receptacle, 2.54mm, 3x2, Tin, TH	Receptacle, 2.54mm, 3x2, TH
J200	1		TSW-105-07-G-D	Samtec	Header, 100mil, 5x2, Gold, TH	5x2 Header
J201	1		851-43-004-20-001000	Mill-Max	SOCKET .050" GRID SIP 4 POS R/A, TH	R/A 4x1 receptacle
L100	1		RLTI-1336	Renco Electronics	MOD RLTI-1328 TO CMC	PTH CMC
L101, L102	2	1.68mH	750318527	Würth	Coupled inductor, 1.68 mH, A, ohm, TH	D1064xT570mil
L103	1	2.2uH	744025002	Würth Elektronik eiSos	Inductor, Shielded Drum Core, Ferrite, 2.2 µH, 1.8 A, 0.057 ohm, SMD	Inductor, 2.8x2.8x2.8mm
MP100	1		CR301-50AE	Ohmite	ALUMINUM HEATSINK 50MM BLK ANODI	PTH HEATSINK
Q100	1	650V	IPW65R019C7	Infineon Technologies	MOSFET N-CH 650V 75A TO247-3	TO-247
Q101, Q102	2		IPP60R040C7XKSA1	Infineon Technologies	MOSFET N-CH 600V 50A TO220-3	TO-220AB
R100	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R102	1	5.11	CRCW06035R11FKEA	Vishay-Dale	RES, 5.11, 1%, 0.1 W, 0603	0603
R103	1	10.0	CRCW080510R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.125 W, 0805	0805
R104, R106	2	20.5k	CRCW080520K5FKEA	Vishay-Dale	RES, 20.5 k, 1%, 0.125 W, 0805	0805
R105	1	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
R107, R108, R206, R207, R210, R240	6	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R127	1	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, 0402	0402
R201, R211	2	10.0k	RC1206FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.25 W, 1206	1206
R203, R204	2	2.0k	CRCW06032K00JNEA	Vishay-Dale	RES, 2.0k ohm, 5%, 0.1W, 0603	0603
R205, R227	2	12.0	RC0603FR-0712RL	Yageo	RES, 12.0, 1%, 0.1 W, 0603	0603
R209	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R213	1	97.6k	CRCW060397K6FKEA	Vishay-Dale	RES, 97.6 k, 1%, 0.1 W, 0603	0603
R214, R216	2	100	CRCW0603100RJNEA	Vishay-Dale	RES, 100 ohm, 5%, 0.1W, 0603	0603
R217, R220	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R218, R232	2	3.24k	CRCW06033K24FKEA	Vishay-Dale	RES, 3.24 k, 1%, 0.1 W, 0603	0603
R222, R223, R224, R229, R230, R231	6	330k	RC1206FR-07330KL	Yageo America	RES, 330 k, 1%, 0.25 W, 1206	1206
R225	1	511	RC0603FR-07511RL	Yageo	RES, 511, 1%, 0.1 W, 0603	0603
R228	1	4.99	CRCW12064R99FKEA	Vishay-Dale	RES, 4.99, 1%, 0.25 W, 1206	1206
R233	1	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10k ohm, 5%, 0.063W, 0402	0402
R234	1	3.0	CRCW06033R00JNEA	Vishay-Dale	RES, 3.0, 5%, 0.1 W, 0603	0603
R235	1	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3k ohm, 5%, 0.063W, 0402	0402
R236	1	0.5	RL0603FR-070R5L	Yageo America	RES, 0.5 ohm, 1%, 0.1W, 0603	0603
R239	1	2.21k	CRCW04022K21FKED	Vishay-Dale	RES, 2.21 k, 1%, 0.063 W, 0402	0402
R241, R242, R243	3	348k	RT0805BRD07348KL	Yageo America	RES, 348k ohm, 0.1%, 0.125W, 0805	0805
R244	1	5.11k	RT0805BRD075K11L	Yageo America	RES, 5.11k ohm, 0.1%, 0.125W, 0805	0805
RT100	1	50 ohm	B59751B0120A070	TDK	Thermistor NTC, 50 ohm, 25%, D12.5xH16.5mm	D12.5xH16.5mm
RV100	1		S10K275E2	EPCOS Inc	Varistor 275V RMS 10MM Radial, TH	10mm Radial

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
S200	1		SKRKAEE020	Alps	Switch, Push Button, SMD	2.9x2x3.9mm SMD
T100, T101	2	2mH	749251100	Würth Elektronik	Transformer, 2000 uH, SMT	7.7x6.9mm
TP100	1	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP101, TP201	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP103	1		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP104	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U100	1		UCC21220DR	Texas Instruments	4-A, 6-A, 3.0-kVRMS Isolated Dual-Channel Gate Driver, D0016B (SOIC-16)	D0016B
U103	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
U201	1		REF2025AIDDCR	Texas Instruments	8 ppm/degC Drift, Low-Power, Dual-Output Vref and Vref/2 Voltage Reference, DDC0005A (SOT-23-T-5)	DDC0005A
U202	1		OPA2330AIDR	Texas Instruments	35 uA, MicroPower, Precision, Zero Drift CMOS Operational Amplifier, 1.8 to 5.5 V, -40 to 125 degC, 8-pin SOIC (D8), Green (RoHS & no Sb/Br)	D0008A
U204	1		LP3985IM5-3.3/NOPB	Texas Instruments	Micropower, 150mA Low-Noise Ultra Low-Dropout CMOS Voltage Regulator, 5-pin SOT-23	MF05A
U205	1		UCD3138RJAT	Texas Instruments	Highly Integrated Digital Controller for Isolated Power with 3 Feedback Loops and 8 DPWM Outputs, RJA0040A (VQFN-40)	RJA0040A
C200, C203	0	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
C201, C204	0	1uF	C3216X7R1E105K085AA	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 1206	1206
C205	0	330pF	GRM1885C1H331JA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C206	0	0.22uF	06033D224KAT2A	AVX	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X5R, 0603	0603
R200, R202, R208	0	1.00Meg	CRCW12061M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.25 W, 1206	1206
U200	0		ISO224DWVR	Texas Instruments	Reinforced Isolated Amplifier with Wide Input Voltage Range and Differential Output, DWV0008A (SOIC-8)	DWV0008A