

## PMP21479 REV E Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC1	1		PMP21479	Any	Printed Circuit Board	
C1, C2	2	56uF	UCY2G560MHD3	Nichicon	CAP, AL, 56 µF, 400 V, +/- 20%, AEC-Q200 Grade 2, TH	18x20mm
C3	1	0.1uF	890324023023	Wurth Elektronik	CAP, Film, 0.1 µF, V, +/- 10%, TH	13x7mm
C4, C5	2	0.1uF	C1210C104KBRAC7800	Kemet	CAP, CERM, 0.1 uF, 630 V, +/- 10%, X7R, 1210	1210
C6, C7, C8, C9	4	0.22uF	GRM32DR72E224KW01L	MuRata	CAP, CERM, 0.22 uF, 250 V, +/- 10%, X7R, 1210	1210
C10, C18, C26, C43	4	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
C11	1	0.047uF	GRM188R71E473KA01D	MuRata	CAP, CERM, 0.047 uF, 25 V, +/- 10%, X7R, 0603	0603
C12	1	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
C13, C14, C21	3	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C15	1	2200pF	DE1E3RA222MN4AN01F	MuRata	CAP, CERM, 2200 pF, 250 V, +/- 20%, E, Dia 9mm	Dia 9mm
C16	1	4.7uF	UPS2A4R7MDD1TD	Nichicon	CAP, AL, 4.7 µF, 100 V, +/- 20%, TH	D5xL11mm
C17, C28, C102	3	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	0402
C22	1	22uF	GRM21BC8YA106KE11L	TDK	CAP, CERM, 10 µF, 35 V, +/- 10%, X6S, 0805	0805
C23	1	2200pF	GRM155R71H222KA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
C24	1	24pF	GRM1555C1H240JA01D	MuRata	CAP, CERM, 24 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C25	1	0.018uF	GRM155R71H183KA12D	MuRata	CAP, CERM, 0.018 uF, 50 V, +/- 10%, X7R, 0402	0402
C27	1	4700pF	GRM155R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0402	0402
C29	1	10uF	GRM21BR6YA106KE43L	MuRata	CAP, CERM, 10 uF, 35 V, +/- 10%, X5R, 0805	0805
C30	1	0.27uF	GRM155R60J274KE01D	MuRata	CAP, CERM, 0.27 µF, 6.3 V, +/- 10%, X5R, 0402	0402
C31, C32	2	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
C33, C34	2	470pF	GRM155R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0402	0402
C35, C38, C39, C40	4	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
C36	1	0.22uF	GRM31MR71H224KA01L	MuRata	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 1206	1206
C37	1	680uF	687AVG025MGBJ	Illinois Capacitor	CAP, Aluminum Polymer, 680 µF, 25 V, +/- 20%, 0.29256 ohm, TH	D10xL12mm
C42	1	2.2uF	GRM21BR71E225KA73L	MuRata	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7R, 0805	0805
C44	1	0.1uF	12061C104JAT2A	AVX	CAP, CERM, 0.1 uF, 100 V, +/- 5%, X7R, 1206	1206
C100	1	15pF	GRM1555C1H150JA01D	MuRata	CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C101	1	220pF	GRM1555C1H221JA01D	MuRata	CAP, CERM, 220 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
D1	1	10V	MMSZ5240BS-7-F	Diodes Inc.	Diode, Zener, 10 V, 200 mW, SOD-323	SOD-323
D2	1	600V	ES1JAF	Fairchild Semiconductor	Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMAF	SMAF
D3	1	200V	CSFMT104-HF	Comchip Technology	Diode, Superfast Rectifier, 200 V, 1 A, 3.5x1.6mm	3.5x1.6mm
D4	1	800V	RFU02VSM8STR	Rohm	Diode, Standard Recovery Rectifier, 800 V, .2 A, 2x1.4mm	2x1.4mm
D5	1	15V	MMSZ5245BS-7-F	Diodes Inc.	Diode, Zener, 15 V, 200 mW, SOD-323	SOD-323
D6	1	18V	CDSOD323-T18	Bourns	Diode, TVS, Uni, 18 V, 45 Vc, SOD-323	SOD-323
D7	1	22V	BZT52C22T-7	Diodes Inc.	Diode, Zener, 22 V, 300 mW, SOD-523	SOD-523
D8	1	30V	NSR20F30NXT5G	ON Semiconductor	Diode, Schottky, 30 V, 2 A, 2-XFDFN	2-XFDFN
D9	1	100V	SMAJ100CA	Littelfuse	Diode, TVS, Bi, 100 V, SMA	SMA
D100	1	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
D101	1	200V	BAV21W-7-F	Diodes Inc.	Diode, Switching, 200 V, 0.2 A, SOD-123	SOD-123
DB1	1	600V	Z4DGP406L-HF	Comchip Technology	Diode, P-N-Bridge, 600 V, 4 A, Z4-D	Z4-D
F1	1		39213150000	Littelfuse	Fuse, 3.15 A, 250VAC/VDC, TH	8x8.5x4mm
J1	1		632 723 300 011	Wurth Elektronik	Connector, Receptacle, USB Type C, R/A	Connector, Receptacle, USB Type C, R/A, THT/SMT

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
L1	1	22uH	NRS8030T220MJGJ	Taiyo Yuden	Inductor, Shielded, Ferrite, 22 uH, 1.75 A, 0.091 ohm, SMD	8x8mm
L2	1	1.3mH	RLTI-1301	Renco Electronics	Coupled inductor, 1.3 mH, 0.035 ohm, TH	15.24x9.906mm
L3	1	330nH	0630CDMCCDS-R33MC	Sumida	Inductor, Shielded, Metal Composite, 330 nH, 21 A, 0.0035 ohm, SMD	7x6.6mm
L100	1	1uH	LBR2012T1R0M	Taiyo Yuden	Inductor, Wirewound, 1 uH, 0.4 A, 0.091 ohm, SMD	0805
Q1	1	700V	IPN70R2K0P7SATMA1	Infineon Technologies	MOSFET, N-CH, 700 V, 30 A, PG-SOT223	PG-SOT223
Q2	1	600V	IPD60R280P7SAUMA1	Infineon Technologies	MOSFET, N-CH, 600 V, 12 A, DPAK	DPAK
Q3	1	100V	BSS123	Fairchild Semiconductor	MOSFET, N-CH, 100 V, 0.17 A, SOT-23	SOT-23
Q4	1	600V	BSS126H6327XTSA2	Infineon Technologies	MOSFET, N-CH, 600 V, 0.021 A, AEC-Q101, SOT-23	SOT-23
Q5	1	30V	NX3020NAKW,115	NXP Semiconductor	MOSFET, N-CH, 30 V, 0.18 A, SOT-323	SOT-323
Q6	1	30V	CSD17575Q3	Texas Instruments	MOSFET, N-CH, 30 V, 60 A, DQG0008A	DQG0008A
Q7	1	150V	BSC093N15NS5ATMA1	Infineon Technologies	MOSFET, N-CH, 150 V, 87 A, PG-TDSON-8	PG-TDSON-8
Q100, Q101, Q102	3	60V	2N7002KW	Fairchild Semiconductor	MOSFET, N-CH, 60 V, 0.31 A, SOT-323	SOT-323
R5	1	3.3Meg	CRCW12063M30JNEA	Vishay-Dale	RES, 3.3 M, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R6	1	100k	RC0402FR-07100KL	Yageo America	RES, 100 k, 1%, 0.0625 W, 0402	0402
R7	1	4.7	CRCW04024R70JNED	Vishay-Dale	RES, 4.7, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R8, R14, R102	3	200k	CRCW0402200KFKED	Vishay-Dale	RES, 200 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R9	1	130k	CRCW0402130KFKED	Vishay-Dale	RES, 130 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R10	1	15	CRCW040215R0JNED	Vishay-Dale	RES, 15, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R11, R18	2	0	CRCW0402000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R12, R16, R100	3	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R13	1	48.7k	CRCW040248K7FKED	Vishay-Dale	RES, 48.7 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R15	1	47	CRCW080547R0JNEA	Vishay-Dale	RES, 47, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R17	1	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 W, 0402	0402
R19	1	1.78k	CRCW04021K78FKED	Vishay-Dale	RES, 1.78 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R20	1	56.2k	CRCW040256K2FKED	Vishay-Dale	RES, 56.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R21	1	0.15	ERJ-8BSFR15V	Panasonic	RES, 0.15, 1%, 0.5 W, 1206	1206
R22	1	137k	ERJ-2RKF1373X	Panasonic	RES, 137 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
R23	1	13.3k	CRCW040213K3FKED	Vishay-Dale	RES, 13.3 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R24	1	118	CRCW0402118RFKED	Vishay-Dale	RES, 118, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R25, R31	2	150k	ERJ-2RKF1503X	Panasonic	RES, 150 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
R26	1	3.01k	CRCW04023K01FKED	Vishay-Dale	RES, 3.01 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R27	1	150	CRCW0402150RFKED	Vishay-Dale	RES, 150, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R28	1	24.9k	CRCW040224K9FKED	Vishay-Dale	RES, 24.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R30	1	39.2k	CRCW040239K2FKED	Vishay-Dale	RES, 39.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R32, R47	2	15.0k	CRCW040215K0FKED	Vishay-Dale	RES, 15.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R33	1	511k	CRCW0402511KFKED	Vishay-Dale	RES, 511 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R34	1	0.005	WSL12065L000FEA	Vishay-Dale	RES, 0.005, 1%, 0.25 W, 1206	1206
R35	1	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, 0402	0402
R36	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
R37	1	140k	CRCW0402140KFKED	Vishay-Dale	RES, 140 k, 1%, 0.063 W, 0402	0402
R38	1	86.6k	CRCW040286K6FKED	Vishay-Dale	RES, 86.6 k, 1%, 0.063 W, 0402	0402
R39	1	120	RG2012P-121-B-T5	Susumu Co Ltd	RES, 120, 0.1%, 0.125 W, 0805	0805
R40	1	10Meg	CRCW060310M0JNEA	Vishay-Dale	RES, 10 M, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R42, R43	2	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R44, R45	2	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
R46	1	69.8k	CRCW040269K8FKED	Vishay-Dale	RES, 69.8 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R101	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R103	1	301k	CRCW0402301KFKED	Vishay-Dale	RES, 301 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
RT1	1	100k	NCP21WF104J03RA	MuRata	Thermistor NTC, 100k ohm, 5%, 0805	0805
T1	1	110uH	RLTI-1273	Renco Electronics	Transformer, 110 uH, TH	23.749x31.9659x16.764mm

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP1, TP4	2		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP2	1		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP3, TP5	2		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
U1	1		TPS7B4250QDBVRQ1	Texas Instruments	50-mA 40-V Voltage-Tracking LDO With 5-mV Tracking Tolerance, DBV0005A (SOT-23-5)	DBV0005A
U2	1		UCC28780RTER	Texas Instruments	Active-Clamp Flyback Controller, RTE0016C (WQFN-16)	RTE0016C
U3	1		UCC27710DR	Texas Instruments	620-V High-Side Low-Side Gate Driver with 0.5/1.0A Peak Output and RobustDrive, D0008B (SOIC-8)	D0008B
U4	1		VOL618A-2T	Vishay-Semiconductor	Optocoupler, 5 kV, 63-125% CTR, SMT	8x2x4mm
U5	1		ATL431AIDBZR	Texas Instruments	2.5V Low Iq Adjustable Precision Shunt Regulator, DBZ0003A (SOT-23-3)	DBZ0003A
U6	1		TPS25740BRGER	Texas Instruments	USB Type-C and USB PD Source Controller, RGE0024H (VQFN-24)	RGE0024H
U7	1		UCC24612-2DBVT	Texas Instruments	High-Frequency Multi-Mode Synchronous Rectifier Controller, DBV0005A (SOT-23-5)	DBV0005A
C20	0	3.3pF	GRM1555C1H3R3CA01D	MuRata	CAP, CERM, 3.3 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
C41	0	100pF	GRM21A5C2E101JW01D	MuRata	CAP, CERM, 100 pF, 250 V, +/- 5%, COG/NP0, 0805	0805
R29	0	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R41	0	1.0k	CRCW12061K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R104	0	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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