

PMP21552 REV D Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC B1	1		PMP21552	Any	Printed Circuit Board	
C1	1	39uF	EKXJ401ELL390MU20S	Chemi-Con	CAP, AL, 39 uF, 400 V, +/- 20%, AEC-Q200 Grade 2, TH	D14.5xL20mm
C2	1	68uF	400BXW68MEFC18X20	Rubycon	CAP, AL, 68 uF, 400 V, +/- 20%, TH	D18xL20mm
C3	1	0.1uF	890324023023	Wurth Elektronik	CAP, Film, 0.1 uF, V, +/- 10%, TH	13x7mm
C4, C5	2	0.1uF	C1210C104KBRAC7800	Kemet	CAP, CERM, 0.1 uF, 630 V, +/- 10%, X7R, 1210	1210
C6	1	1000pF	GRM31BR72J102KW01L	MuRata	CAP, CERM, 1000 pF, 630 V, +/- 10%, X7R, 1206	1206
C7	1	2.2uF	CGA4J3X7R1E225K125AB	TDK	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C8	1	1uF	C2012X7R1H105K085AC	TDK	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
C9, C26, C39, C40	4	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
C10, C17	2	0.1uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	0402
C11	1	1uF	C3216X7R2A105M160AA	TDK	CAP, CERM, 1 uF, 100 V, +/- 20%, X7R, 1206	1206
C12	1	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
C13, C14, C19, C21	4	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C15	1	2200pF	DE1E3RA222MN4AN01F	MuRata	CAP CER 2200PF 250V RAD	Dia 9mm
C16	1	4.7uF	UPS2A4R7MDD1TD	Nichicon	CAP, AL, 4.7 uF, 100 V, +/- 20%, TH	D5xL11mm
C18, C29	2	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
C22	1	10uF	C3216X5R1H106K160AB	TDK	CAP, CERM, 10 uF, 50 V, +/- 10%, X5R, 1206	1206
C23, C31	2	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
C30	1	1000pF	GRM155R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
C32	1	10uF	GRM21BR6YA106KE43L	MuRata	CAP, CERM, 10 uF, 35 V, +/- 10%, X5R, 0805	0805
C34	1	1500pF	GRM21AR72E152KW01D	MuRata	CAP, CERM, 1500 pF, 250 V, +/- 10%, X7R, 0805	0805
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 uF, 25 V, +/- 20%, 0.29256 ohm, TH	D10xL12mm
C43	1	0.01uF	GRM155R71H103KA88D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0402	0402
C44	1	0.1uF	12061C104JAT2A	AVX	CAP, CERM, 0.1 uF, 100 V, +/- 5%, X7R, 1206	1206
D1, D13	2	10V	MMSZ5240BS-7-F	Diodes Inc.	Diode, Zener, 10 V, 200 mW, SOD-323	SOD-323
D2	1	9.1V	BZT52C9V1S-7-F	Diodes Inc.	Diode, Zener, 9.1 V, 200 mW, SOD-323	SOD-323
D3	1	200V	CSFMT104-HF	Comchip Technology	Diode, Superfast Rectifier, 200 V, 1 A, 3.5x1.6mm	3.5x1.6mm
D4, D21	2	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-T18C	Bourns	Diode, TVS, Bi, 18 V, 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
D10	1	1000V	MRA4007T3G	ON Semiconductor	Diode, Standard Recovery Rectifier, 1000 V, 1 A, AEC-Q101, SMA	SMA
D11	1	150V	SMAJ150A	Littelfuse	Diode, TVS, Uni, 150 V, 243 Vc, 400 W, 1.6 A, SMA	SMA
D14	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
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

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
J1	1		632 723 300 011	Würth Elektronik	Connector, Receptacle, USB Type C, R/A	Connector, Receptacle, USB Type C, R/A, THT/SMT
J2	1		GRPB051VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x1, Gold, TH	Header, 50mil, 5x1, TH
J3	1		GRPB021VWVN-RC	Sullins Connector Solutions	Header, 50mil, 2x1, Gold, TH	2x1 Header
L1	1		7447052	Würth	WE-FI Leaded Toroidal Line Choke	PTH D10MM0
L2	1	1.3mH	RLTI-1301	Renco Electronics	Coupled inductor, 1.3 mH, 0.035 ohm, TH	15.24x9.906mm
Q1	1	20V	SI1553CDL-T1-GE3	Vishay-Siliconix	MOSFET, 2-CH, N/P-CH, 20 V, 0.7 A, SOT-363	SOT-363
Q2	1	600V	IPD60R280P7SAUMA1	Infineon Technologies	MOSFET, N-CH, 600 V, 12 A, DPAK	DPAK
Q3, Q8	2	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	150V	BSC093N15NS5ATMA1	Infineon Technologies	MOSFET, N-CH, 150 V, 87 A, PG-TDSON-8	PG-TDSON-8
Q9	1	25V	FDV301N	Fairchild Semiconductor	MOSFET, N-CH, 25 V, 0.22 A, SOT-23	SOT-23
R1	1	7.50k	CRCW04027K50FKED	Vishay-Dale	RES, 7.50 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R2	1	470k	CRCW0805470KJNEA	Vishay-Dale	RES, 470 k, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R4	1	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R5, R7	2	15	CRCW080515R0JNEA	Vishay-Dale	RES, 15, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R6, R12, R42	3	100k	RC0402FR-07100KL	Yageo America	RES, 100 k, 1%, 0.0625 W, 0402	0402
R8, R14, R17	3	200k	CRCW0402200KFKED	Vishay-Dale	RES, 200 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R9	1	75.0k	CRCW040275K0FKED	Vishay-Dale	RES, 75.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R11	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R13	1	30.1k	CRCW040230K1FKED	Vishay-Dale	RES, 30.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R15	1	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R16	1	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R18, R38	2	511	CRCW0402511RFKED	Vishay-Dale	RES, 511, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R19	1	750	CRCW0402750RFKED	Vishay-Dale	RES, 750, 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	0.22	MCR25JZHFLR220	Rohm	RES, 0.22, 1%, 0.5 W, 1210	1210
R22, R24, R34	3	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 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
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	681	CRCW0402681RFKED	Vishay-Dale	RES, 681, 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	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R32	1	15.0k	CRCW040215K0FKED	Vishay-Dale	RES, 15.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R33	1	1.00	ERJ-6RQF1R0V	Panasonic	RES, 1.00, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R35	1	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, 0402	0402
R36, R39	2	475k	CRCW0402475KFKED	Vishay-Dale	RES, 475 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R37, R44	2	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
R51	1	2.21Meg	CRCW04022M21FKED	Vishay-Dale	RES, 2.21 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R52	1	1.0	CRCW04021R00JNED	Vishay-Dale	RES, 1.0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R55	1	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 W, 0402	0402
R56	1	4.7	CRCW04024R70JNED	Vishay-Dale	RES, 4.7, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R200	1	61.9k	CRCW040261K9FKED	Vishay-Dale	RES, 61.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
RT1	1	47k	NCP18WB473J03RB	MuRata	Thermistor NTC, 47k ohm, 5%, 0603	0603
T1	1		RLTI-1324	Renco Electronics	MODIFIED RLTI-1324 TRANSFORMER	PTH 0IN980 0IN766
TP1, TP4	2		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
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, U7	2		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	High Frequency Active Clamp Flyback Controller, RTE0016C (WQFN-16)	RTE0016C
U3	1		UCC27517DBVR	Texas Instruments	4A/4A Single Channel High-speed Low-side Gate Driver, DBV0005A (SOT-23-5)	DBV0005A
U4	1		UCC5304DWW	Texas Instruments	4-A/6-A, Single-Channel Reinforced Isolation Gate Driver with High Noise Immunity, DWV0008A (SOIC-8)	DWV0008A
U5	1		ATL431AIDBZR	Texas Instruments	2.5V Low Iq Adjustable Precision Shunt Regulator, DBZ0003A (SOT-23-3)	DBZ0003A
U8	1		VOL618A-2T	Vishay-Semiconductor	Optocoupler, 5 kV, 63-125% CTR, SMT	8x2x4mm
U9	1		TLV7021DCKR	Texas Instruments	Small-Size Micropower Low-Voltage Comparator, DCK0005A (SOT-SC70-5)	DCK0005A
C20	0	3.3pF	GRM1555C1H3R3CA01D	MuRata	CAP, CERM, 3.3 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C28	0	1000pF	GRM155R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
C33	0	1000pF	GRM21AR72E102KW01D	MuRata	CAP, CERM, 1000 pF, 250 V, +/- 10%, X7R, 0805	0805
D12	0	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
R3	0	15.0k	CRCW040215K0FKED	Vishay-Dale	RES, 15.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R10	0	26.7k	CRCW040226K7FKED	Vishay-Dale	RES, 26.7 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R29	0	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R40	0	10Meg	CRCW060310M0JNEA	Vishay-Dale	RES, 10 M, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R41, R43, R54	0	5.1Meg	CRCW08055M10JNEA	Vishay-Dale	RES, 5.1 M, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R45	0	301k	CRCW0402301KFKED	Vishay-Dale	RES, 301 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R46, R47	0	100k	RC0402FR-07100KL	Yageo America	RES, 100 k, 1%, 0.0625 W, 0402	0402
R48	0	392k	CRCW0402392KFKED	Vishay-Dale	RES, 392 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R49	0	267k	CRCW0402267KFKED	Vishay-Dale	RES, 267 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R50	0	90.9k	CRCW040290K9FKED	Vishay-Dale	RES, 90.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R53	0	10	CRCW120610R0JNEA	Vishay-Dale	RES, 10, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
U10	0		TLV7021DCKR	Texas Instruments	Small-Size Micropower Low-Voltage Comparator, DCK0005A (SOT-SC70-5)	DCK0005A

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