

PMP21318 REV C Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C58	1	33pF	GRM1885C1H330JA01D	MuRata	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C48	1	47pF	06035A470JAT2A	AVX	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C66	1	100pF	885012006057	Wurth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C27, C100	2	470pF	06031C471KAT2A	AVX	CAP, CERM, 470 pF, 100 V, +/- 10%, X7R, 0603	603
C6, C7, C8, C9, C10, C11, C12, C13, C16, C17, C18, C19, C20, C21, C22, C23, C53	17	1000pF	885012206083	Wurth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	603
C14, C15, C24, C25, C102	5	1000pF	GRM188R72A102KA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	603
C59	1	3900pF	GRM188R71H392KA01D	MuRata	CAP, CERM, 3900 pF, 50 V, +/- 10%, X7R, 0603	603
C1, C2, C3, C4	4	0.01uF	885012206114	Wurth Elektronik	CAP, CERM, 0.01 μ F, 100 V, +/- 10%, X7R, 0603	603
C64	1	0.01uF	885012206089	Wurth Elektronik	CAP, CERM, 0.01 μ F, 50 V, +/- 10%, X7R, 0603	603
C50	1	0.047uF	C1608X7R1H473K080AA	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0603	603
C57	1	0.068uF	GRM188R71E683KA01D	MuRata	CAP, CERM, 0.068 uF, 25 V, +/- 10%, X7R, 0603	603
C26, C46, C49, C65	4	0.1uF	885012206071	Wurth Elektronik	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	603
C56	1	1uF	885012206052	Wurth Elektronik	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	603
C47	1	0.047uF	C2012X7R2A473K125AA	TDK	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7R, 0805	805
C29, C69	2	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	805
C55, C60	2	1uF	GRM219R71E105KA88D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	805
C34	1	0.033uF	GRM31CR72E333KW03L	MuRata	CAP, CERM, 0.033 uF, 250 V, +/- 10%, X7R, 1206	1206
C30, C31, C32, C33, C68	5	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
C35, C36	2	22uF	GRM32ER61E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X5R, 1210	1210
C5, C52, C67	3	1000pF	1812GC102KAT1A	AVX	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812	1812
C70, C71, C72	3	4700pF	1812GC472KAT1A	AVX	CAP, CERM, 4700 pF, 2000 V, +/- 10%, X7R, 1812	1812
C37, C101	2	47uF	20TQC47MYF	Panasonic	CAP, Tantalum Polymer, 47 uF, 20 V, +/- 20%, 0.055 ohm, 7343-20 SMD	7343-20
C103	1	22uF	EEE-FK1E220R	Panasonic	CAP, AL, 22 uF, 25 V, +/- 20%, 0.7 ohm, AEC-Q200 Grade 2, SMD	SMT Radial C
C28	1	100uF	EEV-FK2A101M	Panasonic	CAP, AL, 100 uF, 100 V, +/- 20%, 0.17 ohm, AEC-Q200 Grade 2, SMD	SMT Radial J16
D9, D10, D11, D12, D23, D24, D25, D26	8	8.2V	MMSZ5237BS-7-F	Diodes Inc.	Diode, Zener, 8.2 V, 200 mW, SOD-323	SOD-323
D13, D14, D15, D16, D18, D19, D20, D21, D22	9	100V	MMDL914-TP	Micro Commercial Component	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323
D17	1	58V	SMBJ58A-13-F	Diodes Inc.	Diode, TVS, Uni, 58 V, 93.6 Vc, SMB	SMB
D27	1	100V	PDS5100-13	Diodes Inc.	Diode, Schottky, 100 V, 5 A, PowerDI5	PowerDI5
D28, D29, D30, D39	4	Yellow	150060YS75000	Wurth Elektronik	LED, Yellow, SMD	LED_0603
D31, D100	2	100V	MMSD4148T1G	ON Semiconductor	Diode, Switching, 100 V, 0.2 A, SOD-123	SOD-123
D32, D101	2	10V	MMSZ5240B-7-F	Diodes Inc.	Diode, Zener, 10 V, 500 mW, SOD-123	SOD-123
D33, D35, D36	3	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
D34	1	100V	MURA110T3G	ON Semiconductor	Diode, Ultrafast, 100 V, 2 A, SMA	SMA
D38	1	30V	BAT54S-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
H1, H2, H3, H4	4		SJ61A2	3M	Bumpon, Hemisphere, 0.375 X 0.235, Black	Black Bumpon
J1, J2	2		1-406541-1	TE Connectivity	RJ45, No LED, tab up, R/A, TH	16.26x14.54x15.75
J3	1		393570002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH
J4, J6, J11, J12, J15	5		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J5	1		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
J7	1		TSW-102-07-G-D	Samtec	Header, 100mil, 2x2, Gold, TH	2x2 Header
J8, J9, J14, J16	4		999-11-110-10-000000	Mill-Max	Shorting Jumper, 2.54mm, 2 Position, Gold, TH	Shorting Jumper, 2.54mm, 2 Position, Gold, TH
J10	1		TSW-105-07-G-D	Samtec	Header, 100mil, 5x2, Gold, TH	5x2 Header
J13	1		1714955	Phoenix Contact	Terminal Block, 2x1, 6.35mm, Green, TH	Terminal Block, 2x1, 6.35mm, Green, TH
L1, L2, L3, L4	4	300 ohm	742792641	Würth Elektronik	Ferrite Bead, 300 ohm @ 100 MHz, 2 A, 0603	603
L5	1		74435581200	Würth Electronics	12µH Shielded Wirewound Inductor 19A 4.3mOhm Nonstandard	SMT_IND_22MM5_22MM0
L6	1	1mH	74404054102	Würth Elektronik	Inductor, Wirewound, 1 mH, 0.2 A, 6 ohm, SMD	5.0x5.0x4.0mm
L7	1	4.9uH	744314490	Würth Elektronik	Inductor, Shielded Drum Core, Superflux, 4.9 uH, 6.5 A, 0.0155 ohm, SMD	6.9x4.8x6.9mm
L8, L9	2	60 ohm	74279267	Würth Elektronik	Ferrite Bead, 60 ohm @ 100 MHz, 0.5 A, 0603	603
Q1, Q11	2	100V	FDMQ8203	Fairchild Semiconductor	MOSFET, 4-CH, N/P-CH, 100 V, 3.4 A, 4.5x5x0.8mm	4.5x5x0.8mm
Q2, Q3, Q4, Q5	4	40 V	MMBT3904-7-F	Diodes Inc.	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
Q6, Q18	2	300 V	MMBTA42	NXP Semiconductor	Transistor, NPN, 300 V, 0.1 A, SOT-23	SOT-23
Q7, Q8, Q9, Q10	4	40 V	MMBT3906-7-F	Diodes Inc.	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
Q12, Q100	2	100 V	FCX493TA	Diodes Inc.	Transistor, NPN, 100 V, 1 A, SOT-89	SOT-89
Q13, Q15	2	60V	CSD18534Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 50 A, DQJ0008A (VSONP-8)	DQJ0008A
Q14	1	-150V	FDMC2523P	Fairchild Semiconductor	MOSFET, P-CH, -150 V, -3 A, QFN-8	QFN-8
Q16	1	150V	FDMS86200	Fairchild Semiconductor	MOSFET, N-CH, 150 V, 35 A, PQFN08A	PQFN08A
R44, R55, R66	3	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R31, R37	2	63.4	CRCW060363R4FKEA	Vishay-Dale	RES, 63.4, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R1, R2, R3, R4, R71, R72, R73, R74	8	75	CRCW060375R0FKEA	Vishay-Dale	RES, 75.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R32, R33	2	90.9	CRCW060390R9FKEA	Vishay-Dale	RES, 90.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R34	1	140	CRCW0603140RFKEA	Vishay-Dale	RES, 140, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R35	1	249	CRCW0603249RFKEA	Vishay-Dale	RES, 249, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R46, R59, R67	3	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R36	1	1.21k	CRCW06031K21FKEA	Vishay-Dale	RES, 1.21 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R57, R61	2	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R26, R27, R28	3	3.74k	CRCW06033K74FKEA	Vishay-Dale	RES, 3.74 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R52	1	4.75k	CRCW06034K75FKEA	Vishay-Dale	RES, 4.75 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R65	1	7.50k	CRCW06037K50FKEA	Vishay-Dale	RES, 7.50 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R53	1	9.31k	CRCW06039K31FKEA	Vishay-Dale	RES, 9.31 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R24	1	9.53k	CRCW06039K53FKEA	Vishay-Dale	RES, 9.53 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R43, R58, R70, R101	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R64	1	13.0k	CRCW060313K0FKEA	Vishay-Dale	RES, 13.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R50	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R30	1	24.9k	CRCW060324K9FKEA	Vishay-Dale	RES, 24.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R40, R62, R63	3	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R25	1	60.4k	CRCW060360K4FKEA	Vishay-Dale	RES, 60.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R9, R10, R11, R12, R15, R16, R17, R18	8	66.5k	CRCW060366K5FKEA	Vishay-Dale	RES, 66.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R51	1	78.7k	CRCW060378K7FKEA	Vishay-Dale	RES, 78.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R56	1	86.6k	CRCW060386K6FKEA	Vishay-Dale	RES, 86.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R54	1	95.3k	CRCW060395K3FKEA	Vishay-Dale	RES, 95.3 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R68	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R69	1	191k	CRCW0603191KFKEA	Vishay-Dale	RES, 191 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R23, R49	2	237k	CRCW0603237KFKEA	Vishay-Dale	RES, 237 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R48	1	243k	CRCW0603243KFKEA	Vishay-Dale	RES, 243 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R5, R6, R7, R8, R14, R19, R20, R21, R22	9	301k	CRCW0603301KFKEA	Vishay-Dale	RES, 301 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R13	1	499k	CRCW0603499KFKEA	Vishay-Dale	RES, 499 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R38	1	1.00k	CRCW20101K00FKEF	Vishay-Dale	RES, 1.00 k, 1%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R41, R100	2	2.0k	CRCW20102K00JNEF	Vishay-Dale	RES, 2.0 k, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R47	1	0.056	RLP73N3AR056FTDF	TE Connectivity	RES, 0.056, 1%, 2 W, AEC-Q200 Grade 0, 2512	2512
R102	1	100	CRCW2512100RJNEG	Vishay-Dale	RES, 100, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R45	1	10k	CRCW251210K0JNEG	Vishay-Dale	RES, 10 k, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R39	1	2k	3386P-1-202LF	Bourns	TRIMMER, 2k ohm, 0.5W, TH	375x190x375mil
SH-J2, SH-J3, SH-J4, SH-J5, SH-J6, SH-J7, SH-J8, SH-J9	8	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
T1	1	350uH	7490220122	Würth Elektronik	Transformer, 350 uH, SMT	14.7x18.29mm
T2	1	100uH	750341794	Würth Elektronik	Transformer, 100 uH, SMT	23.37x21.08mm
TP1, TP2, TP3, TP4, TP5, TP7, TP9, TP10, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26, TP27, TP28, TP29, TP30	25		5019	Keystone	Test Point, Miniature, SMT	Test Point, Miniature, SMT
TP11, TP12, TP13	3		5015	Keystone Electronics	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
U1	1		TPS2373-4RGWR	Texas Instruments	High-Power PoE PD Interface with Advanced Startup, RGW0020B (VQFN-20)	RGW0020B
U2	1		UCC2897ARGPR	Texas Instruments	Advanced Active Clamp PWM Controller with Current Control, -40 to +125 degC, 20-pin QFN (RGP), Green (RoHS & no Sb/Br)	RGP0020D
U3	1		TCMT1107	Vishay-Semiconductor	Optocoupler, 3.75 kV, 80-160% CTR, SMT	SOP-4
U4	1		TL431AIDBVR	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 5-pin SOT-23 (DBV), Green (RoHS & no Sb/Br)	DBV0005A
C62	0	100uF	EEV-FK2A101M	Panasonic	CAP, AL, 100 uF, 100 V, +/- 20%, 0.17 ohm, AEC-Q200 Grade 2, SMD	SMT Radial J16
C63	0	1000pF	1812GC102KAT1A	AVX	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812	1812
D1, D2, D3, D4, D5, D6, D7, D8	0	100V	PDS5100-13	Diodes Inc.	Diode, Schottky, 100 V, 5 A, PowerDI5	PowerDI5
L10, L11	0	250uH	744272251	Würth Elektronik	Coupled inductor, 250 uH, A, 0.035 ohm, SMD	8.7x10mm

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