

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
001						
4/11/2019 8:50:32 AM						
N/A						
PMP20878 REV C Bill of Materials						
C58	1	33pF	GRM1885C1H330JA01D	MuRata	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C48	1	47pF	06035A470JAT2A	AVX	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C66	1	100pF	885012006057	Wurth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C27, C100, C102	3	470pF	GRM188R72E471KW07D	MuRata	CAP, CERM, 470 pF, 250 V, +/- 10%, X7R, 0603	0603
C6, C7, C8, C9, C10, C11, C12, C13, C16, C17, C18, C19, C20, C21, C22, C23, C53	17	1000pF	GRM188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C14, C15, C24, C25	4	1000pF	GRM188R72A102KA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
C59	1	3900pF	GRM188R71H392KA01D	MuRata	CAP, CERM, 3900 pF, 50 V, +/- 10%, X7R, 0603	0603
C1, C2, C3, C4	4	0.01uF	GRM188R72A103KA01D	MuRata	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	0603
C26, C64	2	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
C50, C57	2	0.047uF	C1608X7R1H473K080AA	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0603	0603
C46, C49, C65	3	0.1uF	885012206071	Wurth Elektronik	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
C56	1	1uF	885012206052	Wurth Elektronik	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
C29, C69	2	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
C55	1	1uF	GRM21BR71E105KA99L	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
C60	1	1uF	C2012X7R1H105K085AC	TDK	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
C34	1	0.033uF	GRM31CR72E333KW03L	MuRata	CAP, CERM, 0.033 uF, 250 V, +/- 10%, X7R, 1206	1206
C47	1	0.047uF	GRM31CR72E473KW03L	MuRata	CAP, CERM, 0.047 uF, 250 V, +/- 10%, X7R, 1206	1206
C35, C36	2	10uF	C3216X7R1V106K160AC	TDK	CAP, CERM, 10 uF, 35 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
C5, C52, C67	3	1000pF	1812GC102KA1	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	15uF	35TQC15MYF	Panasonic	CAP, Tantalum Polymer, 15 uF, 35 V, +/- 20%, 0.15 ohm, 7.3x2.0x4.3mm SMD	7.3x2.0x4.3mm
C103	1	100uF	EEE-FK1C101P	Panasonic	CAP, AL, 100 uF, 16 V, +/- 20%, 0.36 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D
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	200V	RF081M2STR	Rohm	Diode, Fast Rectifier, 200 V, 0.8 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, D102	4	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
D34	1	200V	MURA120T3G	ON Semiconductor	Diode, Ultrafast, 200 V, 1 A, SMA	SMA

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D38	1	30V	BAT54S-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
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		39357-0002	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		TSM-103-01-L-SV	Samtec	Header, 100mil, 3x1, Gold, SMT	Samtec_TSM-103-01-X-SV
J7	1		15-91-2040	Molex	Header, 100mil, 2x2, Tin, SMT	2x2 100mil Tin Header
J10	1		TSM-105-01-T-DV-P	Samtec	Header, 100mil, 5x2, Tin, SMT	500x180x290mil
J13	1		1714955	Phoenix Contact	Terminal Block, 2x1, 6.35mm, Green, TH	Terminal Block, 2x1, 6.35mm, Green, TH
L5	1	33uH	74435583300	Würth Elektronik	Inductor, Wirewound, Metal Composite, 33 uH, 11.5 A, 0.0132 ohm, SMD	22.5x22mm
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	0603
L10, L11	2	250uH	744272251	Würth Elektronik	Coupled inductor, 250 uH, A, 0.035 ohm, SMD	8.7x10mm
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	150 V	FCX495TA	Diodes Inc.	Transistor, NPN, 150 V, 1 A, AEC-Q101, SOT-89	SOT-89
Q13, Q15, Q16	3	150V	FDMS86200	Fairchild Semiconductor	MOSFET, N-CH, 150 V, 35 A, PQFN08A	PQFN08A
Q14	1	-150V	FDMC2523P	Fairchild Semiconductor	MOSFET, P-CH, -150 V, -3 A, QFN-8	QFN-8
R44, R55, R66	3	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R31, R37	2	63.4	CRCW060363R4FKEA	Vishay-Dale	RES, 63.4, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R1, R2, R3, R4, R71, R72, R73, R74	8	75.0	CRCW060375R0FKEA	Vishay-Dale	RES, 75.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R32, R33	2	90.9	CRCW060390R9FKEA	Vishay-Dale	RES, 90.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R34	1	140	CRCW0603140RFKEA	Vishay-Dale	RES, 140, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R35	1	249	CRCW0603249RFKEA	Vishay-Dale	RES, 249, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R46, R59, R67	3	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R36	1	1.21k	CRCW06031K21FKEA	Vishay-Dale	RES, 1.21 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R61	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R26, R27, R28	3	3.74k	CRCW06033K74FKEA	Vishay-Dale	RES, 3.74 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R52	1	4.75k	CRCW06034K75FKEA	Vishay-Dale	RES, 4.75 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R57	1	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R64	1	5.76k	CRCW06035K76FKEA	Vishay-Dale	RES, 5.76 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R53	1	9.31k	CRCW06039K31FKEA	Vishay-Dale	RES, 9.31 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R24	1	9.53k	CRCW06039K53FKEA	Vishay-Dale	RES, 9.53 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R43, R58, R70, R101	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R50	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R65	1	20k	CRCW060320K0JNEA	Vishay-Dale	RES, 20 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R30	1	24.9k	CRCW060324K9FKEA	Vishay-Dale	RES, 24.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R40, R62, R63	3	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R25	1	60.4k	CRCW060360K4FKEA	Vishay-Dale	RES, 60.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
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	0603

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R51	1	78.7k	CRCW060378K7FKEA	Vishay-Dale	RES, 78.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R56	1	86.6k	CRCW060386K6FKEA	Vishay-Dale	RES, 86.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R54	1	95.3k	CRCW060395K3FKEA	Vishay-Dale	RES, 95.3 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R68	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R69	1	191k	CRCW0603191KFKEA	Vishay-Dale	RES, 191 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R23, R49	2	237k	CRCW0603237KFKEA	Vishay-Dale	RES, 237 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R48	1	243k	CRCW0603243KFKEA	Vishay-Dale	RES, 243 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
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	0603
R13	1	499k	CRCW0603499KFKEA	Vishay-Dale	RES, 499 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R38	1	1.00k	CRCW20101K00FKEF	Vishay-Dale	RES, 1.00 k, 1%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R41, R100	2	3.9k	CRCW20103K90JNEF	Vishay-Dale	RES, 3.9 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
R45	1	30k	CRCW251230K0JNEG	Vishay-Dale	RES, 30 k, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R102	1	51	CRCW251251R0JNEG	Vishay-Dale	RES, 51, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R39	1	2k	3386P-1-202LF	Bourns	TRIMMER, 2k ohm, 0.5W, TH	375x190x375mil
T1	1	350uH	7490220122	Würth Elektronik	Transformer, 350 uH, SMT	14.7x18.29mm
T2	1	100uH	750343576	Würth Elektronik	Transformer, 100 uH, SMT	23.37x21.08mm
TP1, TP2, TP3, TP4, TP5, TP7, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26, TP27, TP28, TP29, TP30	28		5015	Keystone	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		HMHA2801A	Fairchild Semiconductor	Optocoupler, 3.75 kV, 80-160% CTR, SMT	Mini Flat Package
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	1812GC102KA1	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
L1, L2, L3, L4	0	300 ohm	742792641	Würth Elektronik	Ferrite Bead, 300 ohm @ 100 MHz, 2 A, 0603	0603

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