

001						
10/10/2018						
N/A						
PMP20859 REV F Bill of Materials						

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C64	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
C3, C4, C5, C6, C15, C16, C17, C18	8	330pF	GRM1885C1H331JA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
C55	1	470pF	GRM1885C1H471JA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
C1, C2, C13, C14, C33, C34	6	1000pF	C1608X7R2A102K080AA	TDK	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
C28, C29, C38, C39, C65	5	1000pF	GRM188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C56	1	4700pF	GRM188R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0603	0603
C8, C9, C10, C11, C20, C21, C22, C23	8	0.01uF	GRM188R72A103KA01D	MuRata	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	0603
C30, C40, C60, C61	4	0.01uF	C1608X7R1H103K080AA	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
C62	1	0.047uF	C1608X7R1H473K080AA	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0603	0603
C66	1	0.068uF	GRM188R71E683KA01D	MuRata	CAP, CERM, 0.068 uF, 25 V, +/- 10%, X7R, 0603	0603
C63	1	100pF	GRM21A5C2E101JW01D	MuRata	CAP, CERM, 100 pF, 250 V, +/- 5%, COG/NP0, 0805	0805
C58	1	0.1uF	C1608X7R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
C27, C32, C37, C42, C51, C52	6	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
C50, C53, C59, C67	4	1uF	GRM21BR71E105KA99L	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
C54	1	10uF	C3216X7R1C106K160AC	TDK	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 1206_190	1206_190
C43, C44, C45	3	100uF	C3225X5R0J107M250AC	TDK	CAP, CERM, 100 uF, 6.3 V, +/- 20%, X5R, 1210	1210
C47, C48, C49, C100, C101	5	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
C7, C12, C19, C24	4	1000pF	GR443QR73D102KW01L	MuRata	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812	1812
C41, C57	2	2200pF	C4532X7R3D222K130KA	TDK	CAP, CERM, 2200 pF, 2000 V, +/- 10%, X7R, 1812	1812
C46	1	330uF	6SVP330M	Panasonic	CAP, Aluminum Polymer, 330 uF, 6.3 V, +/- 20%, 0.025 ohm, 10x10.3 SMD	10x10.3
C31	1	10uF	EEE-FK1K100P	Panasonic	CAP, AL, 10 uF, 80 V, +/- 20%, 2.4 ohm, AEC-Q200 Grade 2, SMD	SMT Radial E
C25, C26, C35, C36	4	47uF	EEE-FK1K470P	Panasonic	CAP, AL, 47 uF, 80 V, +/- 20%, 0.7 ohm, AEC-Q200 Grade 2, SMD	SMT Radial G
D1, D2, D3, D4, D5, D6, D7, D8, D16, D18, D26	11	100V	B2100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 2 A, SMB	SMB
D9, D10, D19, D20	4	75V	1N4148WT	Fairchild Semiconductor	Diode, Switching, 75 V, 0.3 A, SOD-523F	SOD-523F
D11, D13, D21, D34	4	58V	SMAJ58A	Diodes Inc.	Diode, TVS, Uni, 58 V, SMA	SMA
D12	1	5.1V	MMBZ5231BLT1G	ON Semiconductor	Diode, Zener, 5.1 V, 225 mW, SOT-23	SOT-23
D14, D22	2	100V	BAT46WJ,115	Nexperia	Diode, Schottky, 100 V, 0.25 A, SOD-323F	SOD-323F
D15, D17, D23, D25	4	10V	MMBZ5240BLT1G	ON Semiconductor	Diode, Zener, 10 V, 225 mW, SOT-23	SOT-23
D24	1	5.1V	MMSZ5231B-7-F	Diodes Inc.	Diode, Zener, 5.1 V, 500 mW, SOD-123	SOD-123
D27	1	40V	B340A-13-F	Diodes Inc.	Diode, Schottky, 40 V, 3 A, SMA	SMA
D28	1	200V	ES2D-13-F	Diodes Inc.	Diode, Ultrafast, 200 V, 2 A, SMB	SMB

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D29, D30, D31, D32	4	100V	MMSD4148T1G	ON Semiconductor	Diode, Switching, 100 V, 0.2 A, SOD-123	SOD-123
D33	1	30V	BAT54S-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
D43	1	24V	SMAZ24-13-F	Diodes Inc.	Diode, Zener, 24V, 1W, SMA	SMA
J1, J2, J3, J4	4		1-406541-1	TE Connectivity	RJ45, No LED, tab up, R/A, TH	16.26x14.54x15.75
J5, J6, J9, J10	4		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
J7, J8	2		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
L1, L2, L3, L4, L5, L6	6	220 ohm	MPZ1608S221A	TDK	Ferrite Bead, 220 ohm @ 100 MHz, 2.2 A, 0603	0603
L7	1	330nH	XAL5030-331MEB	Coilcraft	Inductor, Shielded, Composite, 330 nH, 19.2 A, 0.0032 ohm, SMD	5.3x31.x5.5mm
L8	1	3.3uH	LPS4018-332MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 3.3 uH, 1.9 A, 0.08 ohm, SMD	LPS4018
Q1, Q2, Q3, Q4, Q20, Q21, Q22, Q23	8	100V	CSD19538Q3A	Texas Instruments	MOSFET, N-CH, 100 V, 5 A, DNH0008A (VSONP-8)	DNH0008A
Q5, Q6, Q7, Q13	4	100 V	BSS63	Fairchild Semiconductor	Transistor, PNP, 100 V, 0.2 A, SOT-23	SOT-23
Q8, Q9, Q10, Q12, Q14, Q15	6	100V	BSS123	Fairchild Semiconductor	MOSFET, N-CH, 100 V, 0.17 A, SOT-23	SOT-23
Q11, Q16	2	100V	CSD19534Q5A	Texas Instruments	MOSFET, N-CH, 100 V, 10 A, DQJ0008A (VSONP-8)	DQJ0008A
Q17	1	40V	CSD18504Q5A	Texas Instruments	MOSFET, N-CH, 40 V, 15 A, DQJ0008A (VSONP-8)	DQJ0008A
Q18	1	60 V	DXT2907A-13	Diodes Inc.	Transistor, PNP, 60 V, 0.6 A, AEC-Q101, SOT-89	SOT-89
Q19	1	150V	FDMS86252	Fairchild Semiconductor	MOSFET, N-CH, 150 V, 4.6 A, PQFN08A	PQFN08A
R92	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R80	1	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R88	1	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R1, R2, R7, R12, R13, R14, R15, R16, R17, R18, R23, R28, R29, R30, R31, R32	16	75.0	CRCW060375R0FKEA	Vishay-Dale	RES, 75.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R91	1	332	CRCW0603332RFKEA	Vishay-Dale	RES, 332, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R95	1	665	CRCW0603665RFKEA	Vishay-Dale	RES, 665, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R89	1	750	CRCW0603750RFKEA	Vishay-Dale	RES, 750, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R56, R98	2	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R77	1	1.02k	CRCW06031K02FKEA	Vishay-Dale	RES, 1.02 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R44, R45	2	1.78k	CRCW06031K78FKEA	Vishay-Dale	RES, 1.78 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R99	1	3.24k	CRCW06033K24FKEA	Vishay-Dale	RES, 3.24 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R86	1	3.83k	CRCW06033K83FKEA	Vishay-Dale	RES, 3.83 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R84	1	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R34, R53, R55, R57, R60, R69, R96, R97	8	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R33, R74	2	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R87	1	25.5k	CRCW060325K5FKEA	Vishay-Dale	RES, 25.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R35, R62	2	27.4k	CRCW060327K4FKEA	Vishay-Dale	RES, 27.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R100, R101	2	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R36, R38, R58, R59	4	35.7k	RC0603FR-0735K7L	Yageo	RES, 35.7 k, 1%, 0.1 W, 0603	0603
R49, R52	2	44.2k	CRCW060344K2FKEA	Vishay-Dale	RES, 44.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R54, R75	2	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R42, R67	2	60.4k	CRCW060360K4FKEA	Vishay-Dale	RES, 60.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R37, R40, R41, R43, R61, R66, R76, R82	8	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R39, R65	2	137k	CRCW0603137KFKEA	Vishay-Dale	RES, 137 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603

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R8, R9, R10, R11, R24, R25, R26, R27	8	232k	CRCW0603232KFKEA	Vishay-Dale	RES, 232 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R3, R4, R5, R6, R19, R20, R21, R22	8	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R81	1	20	CRCW080520R0JNEA	Vishay-Dale	RES, 20, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R47, R71	2	63.4	CRCW080563R4FKEA	Vishay-Dale	RES, 63.4, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R48, R72	2	1.21k	CRCW08051K21FKEA	Vishay-Dale	RES, 1.21 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R50, R70	2	1.3k	CRCW08051K30JNEA	Vishay-Dale	RES, 1.3 k, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R93, R94	2	0.27	ERJ-8RQFR27V	Panasonic	RES, 0.27, 1%, 0.25 W, 1206	1206
R85	1	3.3	CRCW20103R30JNEF	Vishay-Dale	RES, 3.3, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R90	1	75	CRCW201075R0JNEF	Vishay-Dale	RES, 75, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R79	1	2.0k	CRCW20102K00JNEF	Vishay-Dale	RES, 2.0 k, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R78	1	30k	CRCW201030K0JNEF	Vishay-Dale	RES, 30 k, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
T1, T2	2	350uH	7490220122	Würth Elektronik	Transformer, 350 uH, SMT	14.7x18.29mm
T3	1	35uH	PA4577NL	Pulse Engineering	Transformer, 35 uH, SMT	21.84x21.6mm
U2, U3, U4, U8, U10, U11	6		HMHA2801A	Fairchild Semiconductor	Optocoupler, 3.75 kV, 80-160% CTR, SMT	Mini Flat Package
U1, U5	2		TPS2372-3RGWR	Texas Instruments	IEEE 802.3bt PoE High-Power PD Interface with Automatic MPS & Autoclass, RGW0020B (VQFN-20)	RGW0020B
U6	1		TPS3808G01DBVR	Texas Instruments	Low Quiescent Current, Programmable-Delay Supervisory Circuit, 1 Supply Monitored, -40 to 125 degC, 6-pin SOT-23 (DBV), Green (RoHS & no Sb/Br)	DBV0006A
U7	1		LM5020MM-1/NOPB	Texas Instruments	13-100V Wide Vin, Current Mode PWM Boost Controller, DGS0010A (VSSOP-10)	DGS0010A
U9	1		TLV431AIDBVR	Texas Instruments	Low Voltage Adjustable Precision Shunt Regulator, 39 ppm / degC, 15 mA, 40 to 85 degC, 5-pin SOT-23 (DBV), Green (RoHS & no Sb/Br)	DBV0005A
C68, C69	0	0.047uF	C2012X7R2A473K125AA	TDK	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7R, 0805	0805
C70	0	47uF	EEE-FK1K470P	Panasonic	CAP, AL, 47 uF, 80 V, +/- 20%, 0.7 ohm, AEC-Q200 Grade 2, SMD	SMT Radial G
D35, D36, D37, D38, D39, D40, D41, D42	0	100V	B2100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 2 A, SMB	SMB

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