None						5		
5/22/2018 3:09:41	PM							
N/A			PMP20220 REV B Bill of Materials INSTRUMENTS					
Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference		
C31	1	100pF	C1608C0G1H101J	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603		
C27	1	330pF	C1608C0G1H331J	TDK	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603		
C20	1	470pF	C1608C0G1H471J	TDK	CAP, CERM, 470 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603		
C2, C3, C9, C10	4	1000pF	C1608X7R2A102K	TDK	CAP, CERM, 1000pF, 100V, +/-10%, X7R, 0603	0603		
C19	1	2200pF	C1608X7R1H222K	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603		
C28, C30	0	DNP	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603		
C4, C5, C6, C7	4	0.01uF	C1608X7R2A103K	TDK	CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0603	0603		
C32	1	0.033uF	GRM188R71E333KA01D	MuRata	CAP, CERM, 0.033uF, 25V, +/-10%, X7R, 0603	0603		
C29	1	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603		
C25	1	0.47uF	GRM188R71C474KA88D	MuRata	CAP, CERM, 0.47 µF, 16 V, +/- 10%, X7R, 0603	0603		
C23	0	DNP	GRM21A5C2E101JW01D	MuRata	CAP, CERM, 100 pF, 250 V, +/- 5%, C0G/NP0, 0805	0805		
C14, C24	2	0.1uF	C2012X7R2A104K	TDK	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805		
C18, C26, C33	3	1uF	C2012X7R1C105K	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0805	0805		
C16, C17	2	100uF	C3225X5R0J107M	TDK	CAP, CERM, 100 µF, 6.3 V, +/- 20%, X5R, 1210	1210		
C13	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210		
C1, C8, C11, C21	4	1000pF	1812GC102KA1	AVX	CAP, CERM, 1000pF, 2000V, +/-10%, X7R, 1812	1812		
C15	1	100uF	6SVP100M	Panasonic	CAP, Aluminum Polymer, 100 μF, 6.3 V, +/- 20%, 0.04 ohm, 6.3x5.8 SMD	6.3x5.8		
C22	1	22uF	20TQC22MYFB	Panasonic	CAP, TA, 22 μF, 20 V, +/- 20%, 0.09 ohm, SMD	SMD, 2-Leads, Body 3.7x3mm		
C12	1	22uF	EEE-FK2A220P	Panasonic	CAP, AL, 22uF, 100V, +/-20%, 1.3 ohm, SMD	SMT Radial F		
D1, D2, D3, D4, D5, D6, D7, D8, D9	9	100V	B2100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 2 A, SMB	SMB		
D10	1	200V	MURA120T3G	ON Semiconductor	Diode, Ultrafast, 200 V, 1 A, SMA	SMA		
D11, D12, D13,	4	200V 100V	MMSD4148T1G	ON Semiconductor	Diode, Switching, 100V, 0.2A, SOD-123	SOD-123		
D14	4							
D15	1	58V	SMAJ58A	Littelfuse	Diode, TVS, Uni, 58V, 400W, SMA	SMA		
D16	1	30V	BAT54S-7-F	Diodes Inc.	Diode, Schottky, 30V, 0.2A, SOT-23	SOT-23		
J1, J2	2		1-406541-1	TE Connectivity	RJ-45, No LED, tab up, R/A, TH	16.26x14.54x15.75		
J3	1		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin plated, TH	Header, 2 PIN, 100mil, Tin		
J4, J5, J6	3		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm		
L1, L2, L3, L4	4	220 ohm	MPZ1608S221A	TDK	Ferrite Bead, 220 ohm @ 100MHz, 2.2A, 0603	0603		
L5	1	3.3uH	LPS4012-332MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 3.3uH, 1.4A, 0.1 ohm, SMD	LPS4012		
L6	1	180nH	XFL4015-181MEB	Coilcraft	Inductor, Shielded, Composite, 180 nH, 12 A, 0.0042 ohm, SMD	SMD, 4x4x1.5mm		
Q1	1	30V	CSD17579Q3A	Texas Instruments	MOSFET, N-CH, 30 V, 20 A, SON 3.3x3.3mm	SON 3.3x3.3mm		
Q2	1	40 V	MMBT3906-7-F	Diodes Inc.	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23		
Q3	1	150V	FDS86242	Fairchild Semiconductor	MOSFET, N-CH, 150V, 4.1A, SOIC-8	SOIC-8		
R1, R2, R4, R5, R6, R7, R8, R9	8	75.0	CRCW060375R0FKEA	Vishay-Dale	RES, 75.0 ohm, 1%, 0.1W, 0603	0603		
R25, R27	2	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603		
R11	1	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, 0603	0603		
R15	1	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, 0603	0603		
R21	1	63.4	CRCW060363R4FKEA	Vishay-Dale	RES, 63.4 ohm, 1%, 0.1W, 0603	0603		
R17	1	332	CRCW0603332RFKEA	Vishay-Dale	RES, 332, 1%, 0.1 W, 0603	0603		
R31	1	357	CRCW0603357RFKEA	Vishay-Dale	RES, 357, 1%, 0.1 W, 0603	0603		
R29	1	665	CRCW0603665RFKEA	Vishay-Dale	RES, 665, 1%, 0.1 W, 0603	0603		
R33	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603		

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R28	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
R34	1	3.24k	CRCW06033K24FKEA	Vishay-Dale	RES, 3.24 k, 1%, 0.1 W, 0603	0603
R23	1	4.42k	CRCW06034K42FKEA	Vishay-Dale	RES, 4.42 k, 1%, 0.1 W, 0603	0603
R14	1	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, 0603	0603
R30, R32	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R3	1	24.9k	CRCW060324K9FKEA	Vishay-Dale	RES, 24.9k ohm, 1%, 0.1W, 0603	0603
R18	1	27.4k	CRCW060327K4FKEA	Vishay-Dale	RES, 27.4 k, 1%, 0.1 W, 0603	0603
R24	1	34.0k	CRCW060334K0FKEA	Vishay-Dale	RES, 34.0 k, 1%, 0.1 W, 0603	0603
R20	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R26	0	DNP	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R22	0	DNP	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
R19	1	0.1	ERJ-6RSFR10V	Panasonic	RES, 0.1, 1%, 0.125 W, 0805	0805
R12	1	10	CRCW080510R0JNEA	Vishay-Dale	RES, 10, 5%, 0.125 W, 0805	0805
R10	1	39k	CRCW080539K0JNEA	Vishay-Dale	RES, 39k ohm, 5%, 0.125W, 0805	0805
R13	1	3.3	CRCW12063R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.25 W, 1206	1206
R16	0	DNP	CRCW1206100RJNEA	Vishay-Dale	RES, 100, 5%, 0.25 W, 1206	1206
T1	1	350uH	H6096NL	Pulse Engineering	TRANSFORMER/CMC MOD, GIGABIT POE+, SMT	12.2X6.6X18.16 mm
Т2	1	48uH	PA3855.002NLT	Pulse Engineering	Transformer, 48 uH, SMT	SMD, 10-Leads, Body 14.5x14.5mm
TP1	1		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
U1	1		PC357N4J000F	Sharp Microelectronics	Optocoupler, 3.75 kV, 300-600% CTR, SMT	4.4x2.6x3.6mm
U2	1		TPS23751PWP	Texas Instruments	IEEE 802.3at PoE Interface with Wide Range High Efficiency DC-DC Controller, PWP0016D	PWP0016D
U3	1		HMHA2801A	Fairchild Semiconductor	Optocoupler, 3.75kV RMS, SMT	Mini Flat Package
U4	1		TLV431AIDBVR	Texas Instruments	LOW-VOLTAGE ADJUSTABLE PRECISION SHUNT REGULATOR, DBV0005A	DBV0005A

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