001 2/9/2017 10:06:46	AM		TEXAS			I
N/A			PMP2	Materials	INSTRUMENTS	
Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C34		68pF	GRM1885C1H680JA01D	MuRata	CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C29, C32	2	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	0603
C37	1	470pF	GRM1885C1H471JA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C38, C40, C42, C46, C48	5	0.01uF	GRM188R72A103KA01D	MuRata	CAP, CERM, 0.01 μF, 100 V, +/- 10%, X7R, 0603	0603
C33	1	0.022uF	GRM188R71H223KA01D	MuRata	CAP, CERM, 0.022 µF, 50 V, +/- 10%, X7R, 0603	0603
C26, C36, C39, C41, C43, C47, C50	7	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 μF, 50 V, +/- 10%, X7R, 0603	0603
C27	1	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
C35	1	0.047uF	C2012X7R2A473K125AA	TDK	CAP, CERM, 0.047 µF, 100 V, +/- 10%, X7R, 0805	0805
C6, C7, C51, C52	1	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0805	0805
C15	1	0.22uF	C2012X7R1H224K125AA	TDK	CAP, CERM, 0.22 μF, 50 V, +/- 10%, X7R, 0805	0805
C45	1	10uF	C0805C106K8PACTU	Kemet	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	0805
C24	1	1uF	C2012X7R1H105K085AC	TDK	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0805	0805
C23	1	100pF	VJ1206Y101KXEAT5Z	Vishay-Vitramon	CAP, CERM, 100 pF, 500 V, +/- 10%, X7R, 1206	1206
C8	1	2.2uF	GRM31MR71C225KA35L	MuRata	CAP, CERM, 2.2 µF, 16 V, +/- 10%, X7R, 1206	1206
C17, C18, C19, C20, C21, C22, C44		2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 μF, 100 V, +/- 10%, X7R, 1210	1210
C11, C12, C13, C14, C28	5	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 μF, 50 V, +/- 10%, X7R, 1210	1210
C49	1	1000pF	1812GC102KA1	AVX	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812	1812
C9, C30	2	2200pF	C4532X7R3D222K130KA	TDK	CAP, CERM, 2200 pF, 2000 V, +/- 10%, X7R, 1812	1812
C16	1	33uF	EEE-FK1J330P	Panasonic	CAP, AL, 33uF, 63V, +/-20%, 0.65 ohm, SMD	SMT Radial F
C1, C2, C3, C4, C5, C10	6	220uF	EEE-FK1H221P	Panasonic	CAP, AL, 220 μF, 50 V, +/- 20%, 0.18 ohm, AEC-Q200 Grade 2, SMD	SMT Radial G
D1, D2, D5, D6	4		FSV1060V	Fairchild Semiconductor	Diode, Schottky, 60 V, 10 A, TO-277A	TO-277A
D3, D9, D11	3		MMSD4148T1G	ON Semiconductor	Diode, Switching, 100V, 0.2A, SOD-123	SOD-123
D4	1	10V	MMSZ5240BS-7-F	Diodes Inc.	Diode, Zener, 10 V, 200 mW, SOD-323	SOD-323
D7	1		ES3BB-13-F	Diodes Inc.	Diode, Superfast Rectifier, 100V, 3A, SMB	SMB
D8	1		VS-6ESH06HM3/86A	Vishay-Semiconductor	Diode, Hyperfast, 600 V, 6 A, AEC-Q101, TO-277A	TO-277A
D12	1	12V	MMSZ5242B-7-F	Diodes Inc.	Diode, Zener, 12V, 500mW, SOD-123	SOD-123
D13, D14	2		BAS516,115	NXP Semiconductor	Diode, Switching, 100 V, 0.25 A, SOD-523	SOD-523
D15, D16	2	58V	SMBJ58A-13-F	Diodes Inc.	Diode, TVS, Uni, 58V, 600W, SMB	SMB
D17	1	22V	MMSZ5251B-7-F	Diodes Inc.	Diode, Zener, 22 V, 500 mW, SOD-123	SOD-123
D18	1		LB Q39G-L2N2-35-1	OSRAM	LED, Blue, SMD	BLUE 0603 LED
F1	1	1	C1S 1.5	Bel Fuse	Fuse, 1.5A, 63V, SMD	1206
J1	1	1	TSW-104-07-G-S	Samtec	Header, 100mil, 4x1, Gold, TH	4x1 Header
J2	1		1-406541-1	TE Connectivity	RJ-45, No LED, tab up, R/A, TH	16.26x14.54x15.75
J3	1		SS-7188V-A-NF	Stewart Connector	RJ-45, Vertical, TH	RJ-45 Jack, 8Pos Right Angle
L1, L4	2	uH	ACM7060-301-2PL-TL	TDK	Coupled inductor, 5A, 0.01 ohm, SMD	6x3.5x7 mm
L2	1	1uH	SPM6530T-1R0M120	TDK	Inductor, Shielded, Ferrite, 1 µH, 11.1 A, 0.0078 ohm, SMD	SMD 7.1x3.0x6.5mm
L3	1	2.2uH	VLS4012ET-2R2M	TDK	Inductor, Shielded, Ferrite, 2.2 µH, 1.7 A, 0.081 ohm, SMD	Inductor, 4x1.2x4mm
Q1	1		CSD19537Q3	Texas Instruments	MOSFET, N-CH, 100 V, 50 A, DQG0008A (VSON-CLIP-8)	DQG0008A
Q2	1		CSD19533Q5A	Texas Instruments	MOSFET, N-CH, 100 V, 13 A, DQJ0008A (VSONP-8)	DQJ0008A
Q3	1	1	CSD19538Q3A	Texas Instruments	MOSFET, N-CH, 100 V, 5 A, DNH0008A (VSONP-8)	DNH0008A

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R14, R17, R24,	4	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
R29						
R6, R7	2	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7 ohm, 5%, 0.1W, 0603	0603
R39	1	22.1	CRCW060322R1FKEA	Vishay-Dale	RES, 22.1, 1%, 0.1 W, 0603	0603
R38	1	47	CRCW060347R0JNEA	Vishay-Dale	RES, 47, 5%, 0.1 W, 0603	0603
R30, R33, R36, R37	4	75.0	CRCW060375R0FKEA	Vishay-Dale	RES, 75.0, 1%, 0.1 W, 0603	0603
R16, R22	2	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00k ohm, 1%, 0.1W, 0603	0603
R20	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00k ohm, 1%, 0.1W, 0603	0603
R18	1	3.83k	CRCW06033K83FKEA	Vishay-Dale	RES, 3.83 k, 1%, 0.1 W, 0603	0603
R25	1	4.42k	CRCW06034K42FKEA	Vishay-Dale	RES, 4.42 k, 1%, 0.1 W, 0603	0603
R26	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R12, R23	2	25.5k	CRCW060325K5FKEA	Vishay-Dale	RES, 25.5 k, 1%, 0.1 W, 0603	0603
R34	1	32.4k	CRCW060332K4FKEA	Vishay-Dale	RES, 32.4 k, 1%, 0.1 W, 0603	0603
R15, R27, R35	3	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R19	1	113k	CRCW0603113KFKEA	Vishay-Dale	RES, 113k ohm, 1%, 0.1W, 0603	0603
R32	1	182k	CRCW0603182KFKEA	Vishay-Dale	RES, 182 k, 1%, 0.1 W, 0603	0603
R1	1	200k	CRCW0603200KFKEA	Vishay-Dale	RES, 200 k, 1%, 0.1 W, 0603	0603
R31	1	825k	CRCW0603825KFKEA	Vishay-Dale	RES, 825 k, 1%, 0.1 W, 0603	0603
R8	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
R40, R41	2	0.51	CRM0805-FX-R510ELF	Bourns	RES, 0.51, 1%, 0.25 W, 0805	0805
R9	1	20	CRCW080520R0JNEA	Vishay-Dale	RES, 20 ohm, 5%, 0.125W, 0805	0805
R21	1	75.0k	CRCW080575K0FKEA	Vishay-Dale	RES, 75.0 k, 1%, 0.125 W, 0805	0805
R28	1	7.5k	CRCW12067K50JNEA	Vishay-Dale	RES, 7.5 k, 5%, 0.25 W, 1206	1206
R3	1	10k	CRCW120610K0JNEA	Vishay-Dale	RES, 10k ohm, 5%, 0.25W, 1206	1206
R4	1	0	CRCW20100000Z0EF	Vishay-Dale	RES, 0, 5%, 0.75 W, 2010	2010
R13	1	7.5k	CRCW20107K50JNEF	Vishay-Dale	RES, 7.5 k, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R11	1	0.025	CSRN2512FK25L0	Stackpole Electronics Inc	RES, 0.025, 1%, 2 W, 2512	2512
R2	1	51	CRCW251251R0JNEG	Vishay-Dale	RES, 51, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R5, R44	2	200	CRCW2512200RJNEG	Vishay-Dale	RES, 200, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
Γ1	1	9	PA6582-AL	Coilcraft	Transformer, 9uH, SMT	32.65x13.6x26.75mm
Γ2	1		H6096NL	Pulse Engineering	TRANSFORMER/CMC MOD, GIGABIT POE+, SMT	12.2X6.6X18.16 mm
J2	1		FOD817AS	Fairchild Semiconductor	Optocoupler, 5 kV, 80-160% CTR, SMT	DIP-4L Gullwing
J1	1		LM5022MM/NOPB	Texas Instruments	60V Low Side Controller for Boost and SEPIC, 10-pin MSOP, Pb-Free	MUB10A
J3	1		TL431AIDBZR	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
J4	1		TPS7A4001DGNR	Texas Instruments	Single Output LDO, 50 mA, Adjustable 1.175 to 90 V Output, 7 to 100 V Input, 8-pin MSOP (DGN), -40 to 125 degC, Green (RoHS & no Sb/Br)	DGN0008B
J5	1		TPS23861PWR	Texas Instruments	QUAD IEEE 802.3at POWER-OVER-ETHERNET PSE CONTROLLER, PW0028A (TSSOP-28)	PW0028A
C25	0	4700pF	VJ1206Y472KXEAT5Z	Vishay-Vitramon	CAP, CERM, 4700pF, 500V, +/-10%, X7R, 1206	1206
C31	0	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C54	0	100pF	GRM1885C2A101JA01D	MuRata	CAP, CERM, 100 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
D10	0	400V	ES1G	Diodes Inc.	Diode, Ultrafast, 400V, 1A, SMA	SMA
R10, R43	0	100k	CRCW2512100KJNEG	Vishay-Dale	RES, 100 k, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
						2010
R42	0	75	CRCW201075R0JNEF	Vishay-Dale	RES, 75, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	

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