

# Bill of Materials

TI DESIGNS  
Part # 8896  
Literature # PMP

COUNT	RefDes	Value	Description	Size	Part Number	MFR
1	C23	100pF	Capacitor, Ceramic, 50V, C0G, 10%	603	STD	Std
4	C1, C2, C3, C4	330pF	Capacitor, Ceramic, 50V, C0G, 10%	603	STD	Std
1	C12	1000pF	Capacitor, Ceramic, 50V, C0G, 10%	603	STD	Std
2	C17, C18	1000pF	Capacitor, Ceramic, 100V, X7R, 10%	603	STD	Std
1	C25	6800pF	Capacitor, Ceramic, 50V, X7R, 10%	603	STD	Std
1	C28	0.047uF	Capacitor, Ceramic, 50V, X7R, 10%	603	STD	Std
2	C11, C22	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	603	STD	Std
2	C10, C26	1uF	Capacitor, Ceramic, 10V, X5R, 20%	603	STD	Std
2	C16, C27	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	805	STD	Std
1	C24	1uF	Capacitor, Ceramic, 25V, X7R, 10%	805	STD	Std
3	C7, C8, C9	100uF	Capacitor, Ceramic, 6.3V, 20%	1210	C3225X5R0J107M	TDK
2	C14, C15	2.2uF	Capacitor, Ceramic, 100V, X7R, 10%	1210	STD	Std
2	C19, C21	2200pF	Capacitor, Ceramic, 2KV, X7R, 20%	1812	STD	Std
1	C20	22uF	Capacitor, Aluminum, 16V, ±20%	4x5.8mm	EEVFK1C220UR	Panasonic
1	C13	22uF	Capacitor, Aluminum, 100V, 20%	8x10.2mm	EEVFK2A220P	Panasonic
4	D1, D2, D3, D4		Diode, Schottky, 1A, 100V	SMA	B1100	Diodes, Inc
0	D5, D6, D7, D8	DNP	Diode, Schottky, 1A, 100V	SMA	B1100	Diodes, Inc
2	D10, D11	15V	Diode, Zener, 15V, 500mW	SOD123	MMSZ5245BT3G	On Semi
1	D12		Rectifier, Ultrafast Power, 200V 1A	SMA	MURA120T3	On Semi
1	D13		Diode, Switching, 100V, 200mA, 400mW,	SOD-123	MMSD4148	On Semi
1	D14		Diode, Dual Schottky, 200-mA, 30-V	SOT23	BAT54S	Zetex
1	D15		Diode, TVS, 58-V, 1W	SMA	SMAJ58A	Diodes Inc.
1	D9		Diode, Schottky, 0.5A, 30V	SOD-123	MBR0530	On Semi
2	FB1, FB2		Bead, Ferrite, SMT, 600 Ohms, 2A	805	MPZ2012S601A	TDK
1	J1		Connector, RJ45, PoE+ Enabled, 10/100/1000 B	0.670 x 1.300 inch	7499511611A	WE
1	J2		Connector, Jack, Modular, 8 POS	0.705 x 0.820	520252-4	AMP
1	J4		Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
1	J5		Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST
1	L1	10uH	Inductor, SMT, 1.25A, 200milliohm	4x4mm	LPS4018-103ML	Coilcraft
2	Q1, Q2		MOSFET, Dual NChan 100V, 2.7A , 105 milliOhm	SO8	FDS89161	Fairchild
1	Q3		MOSFET, N-Chan, 30V, 65A, 11.8milli-ohm	SON5x6	CSD17527Q5A	TI
1	Q4		Trans, Nch, 150V, 2.3A, 144 milliohm	SuperSOT-6	FDC86244	Fairchild
2	R14, R24	0	Resistor, Chip, 1/16W, 1%	603	STD	Std
2	R10, R22	10	Resistor, Chip, 1/16W, 5%	603	STD	Std
1	R25	90.9	Resistor, Chip, 1/16W,1%	603	STD	Std
2	R17, R30	681	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R26	1K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R29	2K	Resistor, Chip, 1/16W, 1%	603	STD	Std
2	R18, R23	10K	Resistor, Chip, 1/16W, 1%	603	STD	Std

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1	R28	14.3K	Resistor, Chip, 1/16W,1%	603	STD	Std
1	R15	24.9K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R19	44.2K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R20	59K	Resistor, Chip, 1/16W,1%	603	STD	Std
1	R21	80.6K	Resistor, Chip, 1/16W,1%	603	STD	Std
4	R5, R6, R7, R8	150K	Resistor, Chip, 1/16W, 1%	603	STD	Std
4	R1, R2, R3, R4	499K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R11	10	Resistor, Chip, 1/10W, 5%	805	Std	Std
1	R16	20	Resistor, Chip, 1/10W, 5%	805	Std	Std
1	R13	39K	Resistor, Chip, 1/10W, 5%	805	Std	Std
1	R27	0.5	Resistor, Chip, 1/4W, 1%	1206	Std	Std
1	T1		Transformer, Flyback	13.5x17.8 mm	NA6223-AL	Coilcraft
2	TP3, TP5		Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
2	TP4, TP6		Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
1	U3		IC, Photocoupler, 3750VRMS, 80-160% CTR	MF4	TCMT1107	Vishay
1	U2		IC, IEEE 802.3af Integrated Primary Side Control	TSSOP14	TPS23753APW	TI
1	U4		IC, Precision Adjustable Shunt Regulator	SOT23-5	TLV431AIDBVR	TI

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