

Bill of Materials

TI DESIGNS
Part # 8407
Literature # PMP

COUNT	RefDes	Value	Description	Size	Part Number	MFR
1	C35	100pF	Capacitor, Ceramic, 50V, C0G, 10%	603	STD	Std
4	C5, C6, C7, C8	330pF	Capacitor, Ceramic, 50V, C0G, 10%	603	STD	Std
1	C30	1000pF	Capacitor, Ceramic, 50V, C0G, 10%	603	STD	Std
2	C4, C9	1000pF	Capacitor, Ceramic, 100V, X7R, 10%	603	STD	Std
2	C1, C2	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	603	STD	Std
1	C38	0.047uF	Capacitor, Ceramic, 50V, X7R, 10%	603	STD	Std
4	C13, C19, C29, C36	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	603	STD	Std
1	C34	0.1uF	Capacitor, Ceramic, 25V, X7R, 10%	603	STD	Std
2	C32, C33	0.47uF	Capacitor, Ceramic, 16V, X7R, 10%	603	STD	Std
4	C12, C18, C28, C39	1uF	Capacitor, Ceramic, X7R, 16V, 10%	603	STD	Std
0	C20	DNP	Capacitor, Ceramic, 50V, C0G, 10%	603	STD	Std
2	C24, C40	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	805	STD	Std
1	C37	1uF	Capacitor, Ceramic, 25V, X7R, 10%	805	STD	Std
1	C10	10uF	Capacitor, Ceramic, 16V, X5R, 20%	805	STD	Std
0	C11	DNP	Capacitor, Ceramic, 16V, X7R, 10%	805	STD	Std
3	C3, C14, C15	1000pF	Capacitor, Ceramic, 2KV, X7R, 10%	1210	STD	Std
1	C22	2.2uF	Capacitor, Ceramic, 100V, X7R, 10%	1210	C3225X7R2A225K	TDK
0	C23	DNP	Capacitor, Ceramic, 100V, X7R, 10%	1210	C3225X7R2A225K	TDK
2	C16, C25	100uF	Capacitor, Ceramic, 6.3V, 20%	1210	C3225X5R0J107M	TDK
0	C17, C26, C27	DNP	Capacitor, Ceramic, 6.3V, 20%	1210	C3225X5R0J107M	TDK
1	C31	22uF	Capacitor, Aluminum, 25V, 20%	5x5.8mm	EEEFK1E220R	Panasonic
1	C21	22uF	Capacitor, Aluminum, 100V, 20%	8x10.2mm	EEEFK2A220P	Panasonic
4	D1, D2, D3, D4		Diode, Schottky, 1A, 100V	SMA	B1100	Diodes, Inc
		Alternate D1, D2, D3, D4	Diode, Schottky, 1A, 100V	SMA	S100	WTE
1	D13		Diode, Switching, 100V, 200mA, 400mW,	SOD-123	MMSD4148	On Semi
1	D15		Diode, Dual Schottky, 200-mA, 30-V	SOT23	BAT54S	Zetex
1	D16		Diode, SMT TVS 400W, 4.3-A, 58-V	SMA	SMAJ58A	Diodes
2	D6, D10		Rectifier, Superfast Power, 200V 1A	SMA	ES1D	Diodes, Inc
1	D7		Diode, Schottky, 1A, 40V	SMA	B140	Diodes, Inc
1	D8	10V	Diode, Zener, 10V, 250mW	SOT-23	BZX84C10LT1	On Semi
4	D9, D11, D12, D14		Diode, Schottky, 0.5A, 30V	SOD-123	MBR0530	On Semi
4	FB1, FB2, FB3, FB4	15	Bead, Ferrite, SMT, 15 Ohms, 1.5A	805	MMZ2012R150A	TDK
2	J1, J3		Connector, Jack, Modular, 8 POS	0.705 x 0.820	520252	AMP
4	J6, J7, J8, J9		Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	ED555/2DS	OST
0	L1	DNP	Inductor, SMT, 0.79A, 300milliohm	3.5x3.7mm	VLF4012AT-100MR79	TDK
4	Q1, Q2, Q3, Q4		Transistor, NFET, 100V, 1.5A, 250 milliohm	SOT-23	Si2328DS	Vishay

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		Alternate Q1, Q2, Q3, Q4	Transistor, NFET, 90V, 1.7A, 240 milliohm	SOT-23	AP2330GN-HF	APEC
0	Q11	DNP	Transistor, MOSFET, N-Chan, 150V, 4.1A, 67	SO8	FDS86242	Fairchild
1	Q5		MOSFET, N-ch, 30V, 5.3A, 27 milliohm	SOT-23	IRLML0030	IR
0	Q6	DNP	MOSFET, N-Chan, 30V, 65A, 11.8milli-ohm	QFN-8 POWER	CSD17527Q5A	TI
2	Q7, Q10		Transistor, PNP, 40V, 200mA, 225mW	SOT23	MMBT3906LT1G	On Semi
1	Q8		Trans, Nch, 150V, 2.3A, 144milliohm	SuperSOT-6	FDC86244	Fairchild
1	Q9		MOSFET, N-Chan, 30V, 65A, 11.8milli-ohm	QFN-8 POWER	CSD17527Q5A	TI
1	R30	0	Resistor, Chip, 1/16W, 5%	603	STD	Std
1	R16	1	Resistor, Chip, 1/16W, 5%	603	STD	Std
3	R20, R21, R25	10	Resistor, Chip, 1/16W, 5%	603	STD	Std
1	R17	49.9	Resistor, Chip, 1/16W, 5%	603	STD	Std
2	R3, R4	75	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R44	137	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R37	237	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R40	499	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R22	825	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R41	1K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R38	2K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R50	3.01K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R47	5.90K	Resistor, Chip, 1/16W, 1%	603	STD	Std
3	R31, R34, R39	10K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R48	20K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R43	24.9K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R42	68.1K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R46	69.8K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R49	100K	Resistor, Chip, 1/16W, 1%	603	STD	Std
4	R11, R12, R13, R14	150K	Resistor, Chip, 1/16W, 1%	603	STD	Std
4	R7, R8, R9, R10	499K	Resistor, Chip, 1/16W, 1%	603	STD	Std
1	R24	0.82	Resistor, Chip, 1/10W, 1%	805	STD	Std
1	R26	10	Resistor, Chip, 1/10W, 5%	805	STD	Std
1	R27	20	Resistor, Chip, 1/10W, 5%	805	STD	Std
1	R18	100K	Resistor, Chip, 1/10W, 5%	805	STD	Std
0	R19	DNP	Resistor, Chip, 1/10W, 5%	805	STD	Std
0	R23	DNP	Resistor, Chip, 1/10W, 1%	805	STD	Std
1	T1		XFMR, 1000 Base-T, Ratio 1:1	0.500 x 0.370 inch	H2019	Pulse
1	T2		Transformer, Flyback	13.5x17.75 mm	NA6069-AL	Coilcraft
0	Alternate T2		Transformer, Flyback	13.5x17.75 mm	LDT0571-50	LinkCom
1	T3		Transformer, Gate Drive, 1mH	9.7mm x 7.8mm	LTC0266-50	LinkCom
1	U5		IC, Photocoupler, 80-160% CTR	SOP-4	LTV817AS	Lite-on
		ALT U5	IC, Photocoupler, 80-160% CTR	SOP-4	FOD817AS	Fairchild
1	U6		IC, Precision Adjustable Shunt Regulator	SOT23-5	TLV431ACDBVR	TI
1	U4		IC, High Power/Efficiency PoE PD and DC/DC	HTSSOP	TPS23785BPWP	TI

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