

Bill of Materials

TI DESIGNS
Part #:9175
Literature #:PMP

RefDes	COUNT	Value	Description	Size	Part Number	MFR
C31	1	100pF	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	603	C1608C0G1H101J	TDK
C11, C12, C13, C14	4	330pF	CAP, CERM, 330pF, 50V, +/-5%, C0G/NP0, 0603	603	C1608C0G1H331J	TDK
C16	1	470pF	CAP, CERM, 470pF, 50V, +/-5%, C0G/NP0, 0603	603	C1608C0G1H471J	TDK
C2, C3, C8, C9	4	1000pF	CAP, CERM, 1000pF, 100V, +/-10%, X7R, 0603	603	C1608X7R2A102K	TDK
C26	1	2200pF	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603	603	C1608X7R1H222K	TDK
C32	1	6800pF	CAP, CERM, 6800pF, 50V, +/-10%, X7R, 0603	603	GRM188R71H682KA01D	MuRata
C4, C5, C6, C7	4	0.01uF	CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0603	603	C1608X7R2A103K	TDK
C34	1	0.047uF	CAP, CERM, 0.047uF, 25V, +/-10%, X7R, 0603	603	C1608X7R1E473K	TDK
C25, C30	2	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	603	C1608X7R1H104K	TDK
C24, C27, C33	3	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	603	C1608X7R1C105K	TDK
C20, C35	2	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	805	C2012X7R2A104K	TDK
C18, C19	2	2.2uF	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210	GRM32ER72A225KA35L	MuRata
C21, C22, C23	3	100uF	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1210	1210	C3225X5R0J107M	TDK
C1, C10	2	1000pF	CAP, CERM, 1000pF, 2000V, +/-10%, X7R, 1812	1812	1812GC102KA1	AVX
C15, C29	2	2200pF	CAP, CERM, 2200pF, 2000V, +/-10%, X7R, 1812	1812	C4532X7R3D222K	TDK
C28	1	22uF	CAP, AL, 22uF, 16V, +/-20%, 0.7 ohm, SMD	SMT Radial C	EEE-FK1C220R	Panasonic
C17	1	22uF	CAP, AL, 22uF, 100V, +/-20%, 1.3 ohm, SMD	SMT Radial F	EEE-FK2A220P	Panasonic
D1, D2, D3, D4, D5	5		Diode, Schottky, 100V, 1A, SMA	SMA	B1100-13-F	Diodes Inc.
D6, D7, D8, D9	0	DNP	Diode, Schottky, 100V, 1A, SMA	SMA	B1100-13-F	Diodes Inc.
D10, D11, D13	3		Diode, Switching, 100V, 0.2A, SOD-123	SOD-123	MMSD4148T1G	ON Semiconductor
D12	1		Diode, Ultrafast, 200V, 1A, SMA	SMA	MURA120T3G	ON Semiconductor
D14	0	DNP	Diode, Switching, 100V, 0.2A, SOD-123	SOD-123	MMSD4148T1G	ON Semiconductor
D15	1		Diode, Schottky, 30V, 0.2A, SOT-23	SOT-23	BAT54S-7-F	Diodes Inc.
D16	1	58V	Diode, TVS, Uni, 58V, 400W, SMA	SMA	SMAJ58A	Diodes Inc.
J1, J2	2		RJ-45, Right Angle, No LED, tab up	RJ-45 Jack	1-406541-1	AMP
J3, J4	2		Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm	ED555/2DS	On-Shore Technology
L1, L2, L3, L4	4	30 ohm	1.5A Ferrite Bead, 30 ohm @ 100MHz, SMD	805	MMZ2012R300A	TDK
L5	1	3.3uH	Inductor, Shielded Drum Core, Ferrite, 3.3uH, 1.9A, 0.08	LPS4018	LPS4018-332MLB	Coilcraft
Q1, Q2, Q3, Q4	4		MOSFET, N-CH, 100V, 2.7A, SSOT-3	SSOT-3	FDN8601	Fairchild Semiconductor
Q5	0	DNP	MOSFET, N-CH, 30V, 65A, SON 5x6mm	SON 5x6mm	CSD17527Q5A	Texas Instruments
Q6	1		Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23	MMBT3906	Fairchild Semiconductor
Q7	1		MOSFET, N-CH, 30V, 12A, SON 3.3x3.3mm	SON 3.3x3.3mm	CSD17551Q3A	Texas Instruments
Q8	1		MOSFET, N-CH, 150V, 4.1A, SOIC-8	SOIC-8	FDS86242	Fairchild Semiconductor
R23	1	0	RES, 0 ohm, 5%, 0.1W, 0603	603	ERJ-3GEY0R00V	Panasonic
R17, R24	2	10	RES, 10 ohm, 5%, 0.1W, 0603	603	CRCW060310R0JNEA	Vishay-Dale
R1, R2, R3, R4, R5,	8	75	RES, 75.0 ohm, 1%, 0.1W, 0603	603	CRCW060375R0FKEA	Vishay-Dale
R36	1	90.9	RES, 90.9 ohm, 1%, 0.1W, 0603	603	CRCW060390R9FKEA	Vishay-Dale
R25	1	681	RES, 681 ohm, 1%, 0.1W, 0603	603	CRCW0603681RFKEA	Vishay-Dale
R29, R32, R38	3	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	603	CRCW06031K00FKEA	Vishay-Dale

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R39	1	2.00k	RES, 2.00k ohm, 1%, 0.1W, 0603	603	CRCW06032K00FKEA	Vishay-Dale
R18	1	4.99k	RES, 4.99k ohm, 1%, 0.1W, 0603	603	CRCW06034K99FKEA	Vishay-Dale
R26	1	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	603	CRCW060310K0FKEA	Vishay-Dale
R37	1	14.3k	RES, 14.3k ohm, 1%, 0.1W, 0603	603	CRCW060314K3FKEA	Vishay-Dale
R33	1	20.5k	RES, 20.5k ohm, 1%, 0.1W, 0603	603	CRCW060320K5FKEA	Vishay-Dale
R22	1	27.4k	RES, 27.4k ohm, 1%, 0.1W, 0603	603	CRCW060327K4FKEA	Vishay-Dale
R31	1	44.2k	RES, 44.2k ohm, 1%, 0.1W, 0603	603	CRCW060344K2FKEA	Vishay-Dale
R34	1	59.0k	RES, 59.0k ohm, 1%, 0.1W, 0603	603	CRCW060359K0FKEA	Vishay-Dale
R35	1	80.6k	RES, 80.6k ohm, 1%, 0.1W, 0603	603	CRCW060380K6FKEA	Vishay-Dale
R13, R14, R15, R16	4	150k	RES, 150k ohm, 1%, 0.1W, 0603	603	CRCW0603150KFKEA	Vishay-Dale
R28	1	392k	RES, 392k ohm, 1%, 0.1W, 0603	603	CRCW0603392KFKEA	Vishay-Dale
R9, R10, R11, R12	4	499k	RES, 499k ohm, 1%, 0.1W, 0603	603	CRCW0603499KFKEA	Vishay-Dale
R27	0	DNP	RES, 2.00k ohm, 1%, 0.1W, 0603	603	CRCW06032K00FKEA	Vishay-Dale
R21	1	20	RES, 20 ohm, 5%, 0.125W, 0805	805	CRCW080520R0JNEA	Vishay-Dale
R19	1	39k	RES, 39k ohm, 5%, 0.125W, 0805	805	CRCW080539K0JNEA	Vishay-Dale
R30	1	0.5	RES, 0.5 ohm, 1%, 0.25W, 1206	1206	STD	Panasonic
R20	1	3.3	RES, 3.3 ohm, 5%, 0.25W, 1206	1206	CRCW12063R30JNEA	Vishay-Dale
T1	1		Transformer, PoE, Type 1, Gigabit	S024	H6062	Pulse
T2	1		Transformer, 142uH, SMT	17.75x12.7x13.46mm	PA6340-AL	Coilcraft
TP1	1		Test Point, Multipurpose, White, TH	White Multipurpose	5012	Keystone
U2	1		Optocoupler, 3.75kV RMS, SMT	Mini Flat Package	HMHA2801A	Fairchild Semiconductor
U1	1		IEEE 802.3 PoE INTERFACE AND CONVERTER	PW0014A	TPS23753APW	Texas Instruments
U3	1		LOW-VOLTAGE ADJUSTABLE PRECISION SHUNT	DBV0005A	TLV431AIDBV	Texas Instruments

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