

Item	Quantity	Reference	Part	Footprint	Part Description	Power	Tolerance	Voltage	Manufacturer
1	11	C1,C3,C4,C6,C7,C8,C19,C44,C45,C46,C47	0.1uF	SMD0603-A-1	CAP, SMD, Ceramic, 0603			10% 50V	
2	1	C2	10uF TANT.	SM/CT_3528_12				50V	Any
3	2	C5,C9	33U-7343	SMD07343	C/C/ SMD, Tan, 7343		10%	25V	
4	2	C11,C15	33pF	SMD0805-A-1	CAP, SMD, Ceramic, 0805		10%	50V	
5	1	C16	33uF	SMD3528-B-1					
6	1	C17	68uF	SMD3528-B-1					
7	1	C18	10u	SMD07343					
9	3	C21,C22,C23	2.2uF	SMD1812-A-1	CAP, SMD, Ceramic, 1812, X7R		10%	100V	TDK/C4532X7R2A225
10	1	C24	390uF	WA series, Size Code G80	Capacitor electrolytic				Panasonic/EEF-WA0J391P
11	1	C25	10u, 6.3V	SMD1206-A-1	CAP, SMD, Ceramic, 1206, X7R		10%	6.3V	TDK/C3216X5R0J106K
12	3	C26,C27,C28	10u, 6.3V	SMD1206-A-1	CAP, SMD, Ceramic, 1206, X7R		10%	6.3V	TDK/C3216X5R0J106K
13	1	C29	0.1uF	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		Vitramon/VJ0805
14	1	C30	0.1uF 100V	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%	100V	Vitramon/VJ0805
15	2	C34,C31	1uF	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		TDK/C2012X5R1A105K
16	2	C32,C36	1nF	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		Vitramon/VJ0805
17	1	C33	4.7nF	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		Vitramon/VJ0805
18	1	C35	47nF	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		Vitramon/VJ0805
19	1	C37	27nF	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		Vitramon/VJ0805
20	1	C38	1nF	SMD1808-A-1	CAP, SMD, Ceramic, 1808, X7R		10%	250V	Syfer/1808JA250102KXBSY2
21	1	C48	1500pF	SMD1808-A-1	CAP, SMD, Ceramic, 1808, X7R		10%	2KV	
22	1	C49	0.22uF	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		Vitramon/VJ0805
23	4	C50,C51,C53,C54	1nF 250V	SMD1808-A-1	CAP, SMD, Ceramic, 1808, X7R		10%	250V	Syfer/1808JA250102KXBSY2
24	1	C55	Open	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		TDK/C2012X5R1A105K
25	1	DZ1	SMAJ90A	SMA	Transient suppressor diode				Diodes/SMAJ90A
26	1	DZ2	SMAJ60A	SMA	Transient suppressor diode				Diodes/SMAJ60A
27	1	D1	LED_ACT/COL	LED-DUAL-SMT	LTST-C195GYKT				
28	1	D2	LED_SPEED	LED-DUAL-SMT	LTST-C195GYKT				
29	1	D3	LED_LINK	LED-DUAL-SMT	LTST-C195GYKT				
30	1	D4	12CWQ03	D-Pak (TO-252AA)	Schottky Rectifier				International Rectifier/12CWQ03FN
31	1	D5	MMSD4148	SOD-123	Small signal diode				ON Semiconductor
32	1	D6	MMSD4148	SOD-123	Small signal diode				
33	2	D7,D8	LTM673	OSRAM LTM673	Hyper-Bright LED				OSRAM/LTM673-R1S2-35
34	2	D10,D9	HD01	MiniDIP	Surface Mount Bridge Rectifier				Diodes/HD01
35	1	J1	HDR-2X20	CN-MII-40P-RA-M					
36	8	J3,J4,J5,J16,J17,J24,J25,J57	HDR_1X3	CN-HDR1X3					
37	2	J56,J58	HDR-1X2	CN-HDR1X2					
38	1	J9	HDR2X3	CN-HDR2X3					
39	1	J13	CON-MII-MALE	CN-MII-40P-RA-M					
40	1	J15	CON2x5_TH	cn-hdr2x5					
41	5	J18,J19,J20,J21,J22	HDR-1X1	CN-HDR1X1					
42	3	J30,J31,J32	HDR-1X3	CN-HDR1X3					
43	1	J50	CON-RJ45	CN-PHONE8P8C-RA-SHLD	RJ-45 Connector				
44	1	J55	2 pos. Terminal Block	Phoenix Contact Fig. 7	5mm PCB Connector Terminal Block, Contact Type MKDSN 1.5/2				Phoenix Contact/1729018
45	1	L1	0.2uH	P2004	Bead Inductor				Pulse/P2004
46	1	R121		0 SMD1206-A-1	RES, SMD, 1206				
47	1	L3	PE-53913	Pulse PE-53913	SMT Common Mode Inductor				Pulse/PE-5913
49	2	M1,M2	NTMS10P02R2	SO-8	PMOS, low Vt				ON Semi/NTMS10P02R2
50	1	M3	NTA4001N	SC-75	NMOS, low Vt				ON Semiconductor/NTA4001N
51	1	Q1	IRF7451	SO-8	N-channel power MOSFET				International Rectifier/IRF7451
52	1	REF1	LMV431	SOT23-5					
53	25	R1,R2,R3,R5,R6,R7,R28,R29,R30,R31,R33,R34,R37,R38,R39,R46,R47,R48,R55,R56,R57,R107,R111,R119,R120	2.2K	SMD0603-A-1	RES, SMD, 0603	1/16W		5%	
54	1	R8	1.5K	SMD805-A-1	RES, SMD, 0805	1/10W		1%	
55	1	R11	4.87K	SMD0603-A-1	RES, SMD, 0603	1/16W		1%	
56	1	R12	0.0-0805	SMD0805-A-1	RES, SMD, 0805	1/10W		1%	

57	15	R13,R14,R15,R16,R17,R18, R19,R20,R21,R22,R23,R24, R25,R26,R27	33	SMD0603-A-1	RES, SMD, 0603	1/16W	5%	
58	3	R49,R50,R51	110	SMD0603-A-1	RES, SMD, 0603	1/16W	1%	
59	5	R52,R53,R54,R71,R72	165	SMD0603-A-1	RES, SMD, 0603	1/16W	1%	
60	2	R58,R63	0	SMD0603-A-1	RES, SMD, 0603	1/16W	5%	
61	1	R60	Open	SMD0603-A-1	RES, SMD, 0603	1/16W	5%	
63	1	R68	20	SMD0805-A-1	RES, SMD, 805, 1% Thick Film	1/16W	1%	DALE CRCW0805
64	1	R69	50K	SMD0603-A-1	RES, SMD, 0603	1/16W	1%	
65	1	R70	10	SMD0805-A-1	RES, SMD, 805, 1% Thick Film	1/16W	1%	DALE CRCW0805
66	1	R73	33.2K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
67	1	R74	24.9K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
68	1	R75	590	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
69	1	R76	24.3K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
70	1	R77	10.0K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
71	1	R78	590K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film	1/16W	1%	DALE CRCW0805
72	1	R79	1.00K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
73	1	R81	100	SMD0805-A-1	RES, SMD, 805, 1% Thick Film	1/16W	1%	DALE CRCW0805
74	1	R82	OPEN	SMD0805-A-1	RES, SMD, 805, 1% Thick Film	1/16W	1%	DALE CRCW0805
75	1	R83	107K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film	1/16W	1%	DALE CRCW0805
76	1	R84	12.1K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
77	1	R85	14.7K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
78	1	R86	0.33	SMD2010-A-1	RES, SMD, 2010, 1% Thick Film		1%	DALE CRCW2010
79	4	R91,R92,R93,R94	Open	SMD1206-A-1	RES, SMD, 1206	1/4W	5%	
80	4	R97,R98,R99,R100	49.9	SMD0603-A-1	RES, SMD, 0603	1/16W	1%	
81	4	R101,R102,R103,R104	75	SMD0603-A-1	RES, SMD, 0603	1/16W	1%	
82	1	R105	10K	SMD0603-A-1				
83	3	R108,R109,R118	Open	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
84	1	R110	0	SMD0805-A-1	RES, SMD, 0805	1/16W	5%	
85	1	R112	0	SMD0805-A-1	RES, SMD, 805, 1% Thick Film		1%	DALE CRCW0805
86	2	R113,R116	0	SMD0603-A-1	RES, SMD, 0603	1/16W	1%	
87	1	R117	1.0K	SMD0805-A-1	RES, SMD, 805, 1% Thick Film	1/16W	1%	DALE CRCW0805
88	1	T1	PA1269	Pulse EP13	POE Power Transformer			Pulse/PA1269
89	1	T2	H2019 (POE)	Pulse H1102/H2019	Magnetic			Pulse/H2019
90	1	U1	DP83848	VBH48A (Rev A)	Single 10/100 Ethernet Transceiver			
91	1	U4	LP3964 - 3.3V - 800mA	SOT223-5	Voltage Regulator 5V-3.3V			NSC/LP3964EMP-3.3
92	1	U5	PS2501-1-H	PS2501-1	Thru hole mount opto-coupler			NEC/PS2501-1-H
93	1	U6	LM5070	MTC16	Integrated POE PD Interface & PWM Controller			NSC/LM5070
95	1	Y1	XTAL - 25M	HC49-US	Crystal, 25.000M			Preferred Xtal manufacturer(s)/Part number/Specifications (Fox/Raltron/Calber/Abracon composite specifications): Fundamental mode frequency = 25MHz RS = Series Resistance = 40 Ohms Max CO = Shunt Capacitance =7pF Max CL = Load capacitance = 20pF DL = Recommended drive Level = 100uW GL = Max Drive Level = 500uW FS = Frequency Stability = +/- 50 ppm at DL

Do Not Populate These Items:

Item	Quantity	Reference	Part	Footprint	Part Description	Power	Tolerance	Voltage	Manufacturer
37a	2	J6, J59	HDR-1X2	CN-HDR1X2					
48	3	MTG1,MTG4,MTG8	MTG250R125	MTG250R125	Mounting Guide Hole				
59a	1	R59	0	SMD0603-A-1	RES, SMD, 0603	1/16W	5%		
88a	1	T2	H1102	Pulse H1102/H2019	Magnetic				Pulse/H1102
94	1	X1	OSC-25 MHz	OSC14-4P	25 MHz Oscillator (50 ppm), 3.3V				
8	1	C20	470pF	SMD805-A-1	CAP, SMD, Ceramic, 805, X7R		10%		Vitramon/VJ0805
62	1	R67	10, 1/4W	SMD2010-A-1	RES, SMD,2010, 1% Thick Film		1%		DALE CRCW2010

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