

PoE LED Light Bill of Materials

Item	Quantity	Reference	Part Value	Voltage	PCB footprint	Type	Part Number	Placement
1	4	C1, C4, C17, C19	0.1 μ F	25V	0603	X7R	Murata: GRM188R71 E104KA01	
2	1	C2	0.01 μ F	25V	0603	X7R	Murata: GRM188R71 E103KA01	
3	4	C3, C8, C12, C18	1 μ F	100V	1206	X7R	Murata: GRM31CR72 A105KA01	
4	1	C5	1000pF	2000V	1808	X7R	Murata: GR442QR73 D102KW01	
5	1	C6	22 μ F	63V	ECAP_SMT6P 3	electrolytic	Sanyo: CE1A220M1 XANG	
6	2	C7, C11	68nF	100V	0805	X7R	Murata: GRM21BR72 A683KAC4	
7	2	C13	10 μ F	10V	0805	X7R	Murata: GRM21BR71 A106KA73	
8	2	C21	10 μ F	10V	0805	X7R	Murata: GRM21BR71 A106KA73	DNP
9	2	C15, C16	12pF	50V	0603	X7R	Murata: GQM1885C1 H120GB01	DNP
10	1	C20	1 μ F	16V	0603	X7R	Murata: GRM188R71 E105KA01	
11	1	D1	CMSH2 -100M	/	SMA	/	CMSH2- 100M	
12	1	D2	ES2BA- 13-F	/	SMA	/	ES2BA-13-F	DNP
13	1	D3	SMBJ5 8A	/	DO214AA	/	SMBJ58A	
14	1	J2	CONN JACK PWR	/	DC-005	/	DC-005	DNP
15	1	J3	RJ45	/	RJ45_1X1T_GH _F	/	HuiLy: HGJ- 6711EANLF	
16	1	J4	CON- SIP3	/	SIP3_100MIL	/	3Pin 100mil Pitch	

							connector	
17	1	J5	CON-SIP5	/	SIP5_100MIL	/	5pin 100mil Pitch connector	
18	1	L1	220 μ H	/	SLF7045	/	TDK:SLF7045T-221MR33-PF	
19	1	L2	33 μ H	/	BSF4D28	/	SUMIDA:CDRH5D28-330M	
20	1	L3	3.3 μ H	/	VLCF4024	/	SUMIDA:CDRH4D28-3R3M	
21	1	RT1	100K Ω	/	0603	NTC	Murata:NCP18WF104F12RB	
22	2	R1, R19	180R	/	0603	/	/	
23	1	R2	0.68R	/	0805	1% tolerance	/	
24	1	R4	158k Ω	/	0603	/	/	
25	2	R5, R28	10k Ω	/	0603	/	/	DNP
26	4	R6, R17, R23, R25	49.9k Ω	/	0603	/	/	
27	5	R7, R8, R10, R11, R22	75R	/	0603	/	/	
28	1	R9	24.9k Ω	/	0603	1% tolerance	/	
29	1	R12	43.2R	/	0603	1% tolerance	/	
30	7	R20, R27, R30, R31, R32, R33, R34	10k Ω	/	0603	/	/	
31	1	R21	240R	/	0603	/	/	
32	1	R24	0.68R	/	0805	/	/	DNP
33	1	R26	1M Ω	/	0603	/	/	DNP
34	1	R29	12k Ω	/	0603	/	/	DNP
35	1	U1	MAX16832A	/	MAX16832-M	/	MAXIM:MAX16832A ASA+	
36	2	U2, U3	MB6S	/	MB6S	/	MB6S	
37	1	U4	MAX5969A	/	MAX5969_TD FN-10-EP	/	MAXIM:MAX5969A ETB+	

38	1	U5	MAX15062	/	TDFN8_MAX15062	/	MAXIM: MAX15062 AATA+	
39	1	U6	C8051F310	/	QFP32-7X7-0p8MM-M	/	SilconLab: C8051F310-GQR	
40	1	U8	BL600_SA	/	BL600_SA	/	Laird: BL600-SA	DNP
41	1	U9	WiFi_6288	/	BluetoothModule_HM_12_WiFi_6288	/	Espressif Systems: ESP8266	DNP
42	1	U9	BT_HM_12	/	BluetoothModule_HM_12_WiFi_6288	/	jnHuamao: HM-12	
43	1	Y1	11.0592M	/	5032_2	/	NDK: NX5032GA-11.0592M-STD-CSK-4	DNP
MISC								
44	1	/	JR45 cable	/	/	Cat.6e	LINMAX: 1m length. No part #	
45	1	/	E26 socket	/	/	/	GeWaihong (格外虹): Type86	
46	1	/	LED bulb	/	/	7W	No brand (OEM)	