

STEVAL-ILB004V1**Bill of materials****BOM**

Item	Qty	Reference	Part / value	Voltage Watt	Type
1	1	C1	220 nF	275 V _{ac}	EPCOS - order code B32922C3224K
2	1	C10, C14	10 F		Ceramic
3	1	C11	47 µF	35 V	Electrolytic
4	2	C12, C13	100 nF	50V	Ceramic
5	2	C16	10 nF	1600 V	EPCOS - order code B32653A1103J
6	1	C15	100 nF	400 V	Polyester
7	1	C17	10 nF	50 V	Ceramic
8	2	C18, C22	470 nF	50 V	Ceramic
9	1	C19	4.7 nF	100 V	Ceramic
10	1	C2	1 nF	275 V _{ac}	Y2 capacitor
11	1	C20	1 nF	50 V	Ceramic
12	1	C23	68 nF	50 V	Ceramic
13	3	C25, C26, C28	10 pF	50 V	Ceramic
14	1	C27	10 pF	50 V	Ceramic
15	1	C3	470 nF	275 V _{ac}	Polyester
16	1	C30	330 nF	50 V	Ceramic
17	1	C4	100 pF	50 V	Ceramic
18	1	C5	2.7 nF	50 V	Ceramic
19	1	C6	4.7 nF	50 V	Ceramic
20	1	C7	47 µF	450 V	Electrolytic
21	1	C8	1 nF	630 V _{dc}	Polyester
22	1	C9	220 nF	50 V	Ceramic
23	1	D12	1N4007	1 A 1000 V	General purpose rectifier
24	3	D2, D13, D14	STTH1L06A	1 A 600 V	STMicroelectronics turbo 2 ultrafast high-voltage rectifier
25	2	D4, D6	1N4148	200 mA 100 V	Small signal diode
26	1	D7	BRIDGE RB156		Bridge rectifier
27	1	F1	Fuse 2 A, 250 V	250 V	
28	1	L1	1.2 mH ± 5%		VOGT PFC choke EVD25 Part nr. SL0606302101
29	1	NTC1	10		
30	3	Q1, Q2, Q3	STP6NK60Z	1 Ω / 6 A 600 V	STMicroelectronics Zener-protected SuperMESH™ MOSFET



BOM (continued)

Item	Qty	Reference	Part / value	Voltage Watt	Type
31	1	Q4	BF421	500 mA 300 V	Small signal PNP transistor
32	1	Q5	BF420	500 mA 300 V	Small signal NPN transistor
33	3	R1, R2, R29	1 M Ω		
34	2	R10, R14	1 k Ω - 1%		
35	5	R13, R24, R30, R49, R54	10 k Ω - 1%		
36	2	R16, R46	22 Ω		
37	1	R18	0 Ω	0.6 W	
38	1	R22	33 Ω		
39	1	R23	1 Ω - 1%	1 W	
40	1	R27	3.9 k Ω - 1%		
41	1	R28	820 Ω - 1%		
42	4	R3, R4, R11, R12	750 k Ω - 1%		
43	3	R31, R32, R33	330 k Ω - 1%	0.25 W	
44	1	R34	120 k Ω - 1%	0.2 5W	
45	1	R35	75 Ω - 1%	0.25 W	
46	1	R36	22 k Ω - 1%		
47	3	R37, R38, R39	220 k Ω - 1%	0.25 W	
48	1	R40	2.2 k Ω	0.25 W	
49	1	R41	2.2 k Ω - 1%		
50	3	R43, R44, R45	10 k Ω		
51	1	R48	3.3 k Ω		
52	1	R5	18 k Ω - 1%		
53	1	R52	1.8 k Ω		
54	1	R53	1 M Ω		
55	1	R6	27 k Ω		
56	3	R7, R19, R21	10 Ω		
57	3	R8, R47, R51	47 k Ω		
58	1	R9	0.5 Ω - 1%	1 W	
59	1	T1	2x47 mH at 0.5 A		EPCOS Current-compensated D core choke Or. code B82731-M2501-A30
60	1	T2	2 mH $\pm$ 5%		VOGT PFC choke EVD25 Part nr. SL0606301101



BOM (continued)

Item	Qty	Reference	Part / value	Voltage Watt	Type
61	1	U1	ST7FLIT19BF1B 6		STMicroelectronics 8-bit MCU
62	1	U2	L6382D5		STMicroelectronics power management unit for microcontrolled ballast

