

**PROJECT NAME: STEVAL-ILL074V1**

**BILL OF MATERIALS**

Item	Quantity	Reference	Part / Value	Voltage / Watt / Ampere	Type / TECHNOLOGY informations	Tolerance	Package	Manufacturer	Manufacturer's ordering code / Orderable Part Number	Additional Notes
1	1	C1	220u	25V	Aluminium electrolytic		D=8,H=11.5	Rubycon	25YXH220MEFC8X11.5	
2	2	C2,C4	1mF	100V	Aluminium electrolytic		D=18,H=35,5	Panasonic	ECA2AM102	
3	2	C3,C20	1,5n	50V	Multilayers Ceramic X7R		C0805	Generic Comp		
4	1	C5	220n	100V	Multilayers Ceramic X7R		C0805	Kemet	C0805C224K1RACTU	
5	3	C6,C10,C14	220n	305Vac	X2			Epcos	B32922C3224K	
6	1	C7	1n	1kV	Y2			Vishay	VY2102M29Y5US6TV7	
7	2	C8,C9	3,3n	300 Vac	Y2			Vishay	VY2332M41Y5US6TV7	
8	1	C11	22p	50V	Multilayers Ceramic X7R		C0805	Generic Comp		
9	1	C12	100p	1kV	Multilayers Ceramic X7R		C1206	Syfer Technology	1206Y1K00101KXT	
10	1	C13	100n	50V	Multilayers Ceramic X7R		C0805	Generic Comp		
11	1	C15	22u	25V	Aluminium electrolytic		D=5mm,H=11mm	Nichicon	UPW1E220MDD	
12	1	C16	1n	50V	Multilayers Ceramic X7R		C0805	Generic Comp		
13	1	C17	330n	50V	Multilayers Ceramic X7R		C0805	Generic Comp		
14	1	C18	22n	630V	Multilayers Ceramic X7R		C1812	MULTICOMP	MC1812B223K631CT	
15	1	C19	22u	6,8V	Multilayers Ceramic X7R		C1206	AVX	1206D226MAT2A	
16	1	C21	22u	16V	Multilayers Ceramic X5R		C1206	Murata	GRM31CR61C226KE15K	N.M.
17	1	C22	22n	50V	Multilayers Ceramic X7R		C0805	Generic Comp		N.M.
18	1	D1	STPS1H100A	100V-1A	Power Schottky diode		SMA	ST	STPS1H100A	
19	1	D2	STPS20200CT	200V-2x10A	Power Schottky diode		TO220AB	ST	STPS20200CT	
20	1	D3	2KBP08M	800V - 2A	Bridge rectifier		KBPM	Vishay	2KBP08M	
21	1	D4	P6KE440	440V	Transient voltage suppressor		DO15	ST	P6KE440A	N.M.
22	1	D5	STTH108	800V	Ultrafast rectifier diode		SMA	ST	STTH108A	
23	3	D6,D7,D9	LL4148	100V - 0.2A			SOD-80	Vishay	LL4148GS18	
24	1	D8	TZM5246B-GS08	16V - 500mW	Zener diode	5%	SOD-80	Generic Comp		
25	1	D10	BAT46	100V - 0.15A	Schottky diode		SOD-80	ST	TMMBAT46FILM	N.M.
26	1	D11	1SMB5943BT3G	56V-3W	Zener diode		SMB	On Semiconductor	1SMB5943BT3G	
27	1	D12	TZM5231B-GS08	5V1 - 500mW	Zener diode	5%	SOD-80	Generic Comp		N.M.
28	1	D13	STPS0560Z	60V-0.5A	Zener diode		SOD-123	Vishay	STPS0560Z	
29	1	D14	TZM5245B-GS08	15V-500mW	Zener diode	5%	SOD-80	Generic Comp		
30	1	D15	TZM5257B-GS08	33V - 500mW	Zener diode	5%	SOD-80	Generic Comp		N.M.
31	1	D16	TZM5226B-GS08	3V3 - 500mW	Zener diode	5%	SOD-80	Generic Comp		N.M.
32	1	D17	BAT46	100V - 0.15A	Schottky diode		SOD-80	ST	TMMBAT46FILM	N.M.
33	1	F1	fuse	2A,250Vac				Wickmann	3821200041	
34	1		portafuse							
35	2	HS1,HS2	Heatsink	20.3°C/W				AAVID THERMALLOY	7141DG	
36	2	HL1,HL2								
37	1	OPT1	PC357N7TJ00F		Optoisolator			Sharp	PC357N7TJ00F	N.M.
38	2	J1,J2	Mains, Output Connectors				3 pin - spacing 5.08 mm	WeidMuller	PM 5.08/3/90 3.5 SW	
39	4	JMP1,JMP3	Soldering Jumper				pad of 1206			Close
40	4	JMP2,JMP4	Soldering Jumper				pad of 1206			Open
41	1	Q1	STF10N95K5	6A, 950V	N channel mosfet		TO220-FP	ST	STF10N95K5	
42	1	Q2	2N7002KT1G		N channel mosfet		SOT23	On semiconductor	2N7002KT1G	N.M.
43	1	Q3	2N7002DWH6327XT		N channel dual mosfet		SOT363	Infineon	2N7002DWH6327XT	N.M.
44	1	RV1	S10 K300	275Vac				TDK_EPC	B72210S0301K101	
45	1	R1	10K			1%	R1206	Generic Comp		N.M.
46	1	R2	1K			1%	R1206	Generic Comp		
47	1	R3	12K			1%	R1206	Generic Comp		N.M.
48	3	R4,R7,R16	0R			1%	R1206	Generic Comp		
49	1	R5	47K5			0.10%	R0805	Generic Comp		
50	1	R6	51K			0.10%	R0805	Generic Comp		
51	2	R8,R9	220R			1%	R0805	Generic Comp		
52	2	R10,R11	0R43	2W-100ppm		1%	R1020	Panasonic	ERJB1BFR43U	
52	1	R12	56k			1%	R0805	Generic Comp		

53	1	R25	56k			1%	R0805	Generic Comp		N.M.	
54	1	R13	470			1%	R0805	Generic Comp			
55	1	R14	20K			0.10%	R0805	Generic Comp			
56	1	R15	150K	2W-100ppm		1%	R2512	TE connectivity	3520150KJT		
57	1	R17	750			1%	R0805	Generic Comp			
58	1	R18	100K			1%	R0805	Generic Comp		N.M.	
59	1	R19	0			1%	R0805	Generic Comp		N.M.	
60	1	R20	100k			1%	R0805	Generic Comp		N.M.	
61	1	R21	120k			1%	R0805	Generic Comp		N.M.	
62	2	R22,R23	0			1%	R1206	Generic Comp		N.M.	
63	1	R24	200K			1%	R0805	Generic Comp		N.M.	
64	1	R26	4K7			1%	R0805	Generic Comp		N.M.	
65	1	R27	10R			1%	R0805	Generic Comp		N.M.	
66	1	R28	4K7			1%	R0805	Generic Comp		N.M.	
67	1	TP1	VCC					Pad Circolare 1.5mm			
68	1	TP2	VFB					Pad Circolare 1.5mm			
69	1	TP3	VCS					Pad Circolare 1.5mm			
70	1	TP4	VTOFF					Pad Circolare 1.5mm			
71	1	TP5	VCTRL					Pad Circolare 1.5mm			
72	1	TP6	VZCD					Pad Circolare 1.5mm			
73	1	TP7	Vrect					Pad Circolare 1.5mm			
74	1	TP8	VGD					Pad Circolare 1.5mm			
75	1	TP9	GND_PRI					Pad Circolare 1.5mm			
76	1	TP10	GND_SEC					Pad Circolare 1.5mm			
77	1	TP11	V_SAux					Pad Circolare 1.5mm			
78	1	TP12	V_OUT					Pad Circolare 1.5mm			
79	1	T1	Flyback Transformer					ETD34-14pin	Itacoil	TSLETD3403	
79	1	T1	Flyback Transformer					ETD34-14pin	Wurth	750315434	Second source
80	1	T2	CM filter (39mH-1.2A)						Epcos	B82733F2122B001	
81	1	U1	HVLED001A		Flyback regulator			SSO10	ST	HVLED001A	