

**PROJECT NAME: STEVAL-ILD004V2**

**BILL OF MATERIALS**

Item	Quantity	Reference	Part / Value	Voltage / Watt / Ampere	Type / TECHNOLOGY informations	Tolerance	Package	Manufacturer	Manufacturer's ordering code / Orderable Part Number
1	2	Q1,Q2	TS820		SCR		TO-220FPAB	ST	TS820-600FP
2	1	Q3	STGF10NC60KD		IGBT		TO-220FP	ST	STGF10NC60KD
3	1	U1	STM8S103F2		8-Bit MCU		TSSOP20	ST	STM8S103F2P6
4	1	U3	Viper01/Viper06		Offline Converter		SSO10	ST	VIPER06XS
5	1	U4	LD2981ABU50TR		Ultra Low Drop Voltage Regulator		SOT-89	ST	LD2981ABU50TR
6	1	Q11	2STR1160		NPN Transistor		SOT-23	ANY	2STR1160
7	1	Q12	2STR2160		PNP Transistor		SOT-23	ANY	2STR2160
8	6	D3,D4,D7,D9,D16,D19	STTH1L06		Rectifier Diode		SMA	ST	STTH1L06A
9	1	Q4	BS250		P-Mosfet		SOT23-3	Diodes Inc.	BS250FTA
10	2	Q5,Q10	BS170		N-Mosfet		SOT-23	Diodes Inc.	BS170F
11	2	Q13,Q14	BSS159 N		N-Mosfet		SOT-23	Infineon	BSS159N E6327
12	1	L1	2.2uH	6.5A	Inductor	±20%	SMD-0.510" L x 0.370" W (12.95mm x 9.40mm)	EPCOS	B82476B1222M100
13	1	L2	1mH	300mA	Inductor	±10%	Through Hole	Bourns Inc.	RLB0914-102KL
14	1	L3	1.5mH	380mA	Inductor	±10%	Through Hole	Würth Electronics Inc	768772152
15	1	C1	1uF	16V	Ceramic	±5%	SMD-0805	ANY	ANY
16	1	C9	1uF	50V	Ceramic	±5%	SMD-0805	ANY	ANY
17	3	C2,C7,C23	100nF	50V	Ceramic	±5%	SMD-0805	ANY	ANY
18	1	C15	10nF	400V	Ceramic	±10%	Through Hole	EPCOS	B32520C6103K189
19	3	,C5,C6,C12	10nF	16V	Ceramic	±5%	SMD-0805	ANY	ANY
20	1	C3	10nF	16V	Ceramic	±5%	SMD-0805	ANY	ANY
21	2	C4,C17	1nF	16V	Ceramic	±5%	SMD-0805	ANY	ANY
22	1	C8	100uF	35V	Electrolytic	±5%	Through Hole	ANY	ANY
23	1	C10	47nF	25V	Ceramic	±5%	SMD-0805	ANY	ANY
24	2	C11,C22	10uF	16V	Ceramic	±5%	SMD-0805	ANY	ANY
25	1	C13	15nF	16V	Ceramic	±5%	SMD-0805	ANY	ANY
26	1	C14	680pF	35V	Ceramic	±5%	SMD-0805	ANY	ANY
27	1	C16	4.7nF	50V	Ceramic	±20%	Through Hole	ANY	ANY
28	1	C18	22nF	50V	Ceramic	±5%	SMD-0805	ANY	ANY
29	2	C25,C26	1uF	400V	Electrolytic	±20%	Through Hole	ANY	ANY
30	2	R1,R2,	22K		Thin Film	±5%	SMD-1206	ANY	ANY
31	2	R10,R27	22K		Thin Film	±5%	SMD-0805	ANY	ANY
32	1	R3	36K		Thin Film	±5%	SMD-1206	ANY	ANY
33	1	R18	10E		Thin Film	±5%	SMD-0805	ANY	ANY
34	2	R4,R25	10E		Thin Film	±5%	SMD-1206	ANY	ANY
35	2	R5,R6	220K	1/4 Watt	Metal Film	±5%	Through Hole	ANY	ANY
36	3	R7,R8,R17	200K		Thin Film	±5%	SMD-0805	ANY	ANY
37	1	R9	3K		Thin Film	±5%	SMD-0805	ANY	ANY
38	1	R16	1K		Thin Film	±5%	SMD-0805	ANY	ANY
39	1	R19	10K		Thin Film	±5%	SMD-0805	ANY	ANY
40	2	R20,R21	51E		Thin Film	±5%	SMD-0805	ANY	ANY
41	1	R22	0.05E	1W	Metal Element	±1%	SMD-2512	Vishay Dale	WSL2512R0500FEA
42	1	R23	100E		Thin Film	±5%	SMD-0805	ANY	ANY
43	1	R24	100K		Thin Film	±5%	SMD-0805	ANY	ANY

44	1	R26	4.7K		Thin Film	±5%	SMD-0805	ANY	ANY
45	1	R37	10E - 1/2W		Thin Film	±20%	Through Hole	EPCOS	B57153S100M
46	1	R38	11K		Thin Film	±5%	SMD-0805	ANY	ANY
47	1	R39	33K		Thin Film	±5%	SMD-0805	ANY	ANY
48	1	R40	47K		Thin Film	±5%	SMD-0805	ANY	ANY
49	1	R42	Do Not Mount		Thin Film	±5%	SMD-0805	ANY	ANY
50	2	D1,D2	1N5404	3A,400V			DO-201AD	ANY	ANY
51	1	D5	LED	Red Color			1206	DIALIGHT	5988210107F
52	5	D8,D12,D13,D14,D17	1N4148				SMD	ANY	ANY
53	1	D18	5V	250mW	Zener Diode		SOD80	ANY	ANY
54	1	D21	+13.1V	250mW	Zener Diode		SOD323	ANY	ANY
55	3	SW1,SW2,SW3	SW_PB_SPST		SPST-NO		SMD	TE Connectivity	FSM4JSMA
56	1	SW4	SPDT	500mA	SPDT		Through Hole 2.54mm pitch	EAO	09-03290.01
57	1	RV1	VARISTOR	300V, 20mm Dia			Through Hole	EPCOS (TDK)	B72220S321K551
58	1	RV2	VARISTOR	300V, 7mm Dia			Through Hole	EPCOS (TDK)	B72207S2321K311
59	1	F1	FUSE	WIRE JUMP/ SHORT	WIRE JUMP/ SHORT		Through Hole	ANY	ANY
60	2	J3,J4	SHUNT	WIRE JUMP/ SHORT	WIRE JUMP/ SHORT		Through Hole	ANY	ANY
61	1	J10	CON4	SWIM Connector	4-Pin Bergstick 2.54mm pitch		Through Hole	FCI	68000-104HLF
62	1	J11	CON3	300V, 6A Power Connector	5mm pitch		Through Hole	ANY	ANY
63	6	TP1,TP2,TP3,TP4,TP5,TP6	TEST POINT				Through Hole	ANY	ANY
64	1	Heat Sink with mounting screws	Heat Sink	1mm Thick Aluminium Sheet	58mm x 58mm		Screw type	ANY	ANY
65	4	nylon SPACER	SIZE 6.35 mm?	NYLON	SIZE 6.35 mm?			ANY	ANY
66	4	Nylon Screw	3mm					ANY	ANY
67	4	Nylon Nuts	3mm					ANY	ANY