

STEVAL-ILL048V1 Bill-Of-Material

Item	Reference	Description	Package	Value	Part number	Manufacturer	
1	CON1	8 pins female header	SIL8		613-008-143-121	Würth Elektronik	
2	CON2	Mini USB connector			6510-0516121	Würth Elektronik	
3	CON3	5x2 female connector			6233-10235321	Würth Elektronik	
4	C1,C3	Aluminum, 50V, 6.3x7.7mm	Panasonic D8	47u	EEEFK1H470XP	Panasonic	
5	C2,C4,C7,C8	Ceramic, 50 V, X7R, 10%	SMD1210	10u	GRM32ER71H106KA12L	Murata	
6	C5,C6	Aluminum, 50V, 8x10.2mm	Panasonic F	100u	EEFFP1H101AP	Panasonic	
7	C9	Ceramic, 50V , X7R, 5%	SMD 0805	1u	GRM21BR71H105KA12L	Murata	
8	C10,C15,C18	Ceramic, 25V , X5R, 5%	SMD 0603	1u			
9	C11			470n			
10	C12			68n			
11	C13			100p			
12	C14			10n			
13	C16, C39			N.M.			
14	C17,C19,C20,C21,C22, C23,C25,C26,C27,C29, C30,C31,C32,C35,C36, C37,C38	Ceramic, 25V , X5R, 5%	SMD 0603	100n			
15	C24,C28	Tantalum, 10V	Size A		T491A106K010AT	Kemet	
16	C33,C34	Ceramic, 25V, NP0, 5%	SMD 0603	22p			
17	D1,D2	Schottky, 60V, 3A	SMC		STPS3L60-Y	STMicroelectronics	
18	D3	Zener 15V 400mW	SOD123		MMSZ5245B	Zetex	
19	D4	Zener 4.3V1 400mW				BZT52C4V3	Zetex
20	D6,D10	Blue LED	SMD 0805		KP-2012PBC-A	Kingbright	
21	D7,D8,D9,D11	Red LED					KP-2012SRC-PRV
22	D5,D12	Yellow LED					KP-2012SYC
23	F1	Fuse	SMD 1206	200mA	0466.200NR	Littelfuse	
24	J1,J2,J3,J4,J5,J6,J7, J8,J9,J10,J11,J12,J13	Faston terminal	hole 1.2mm				
25	JP1,JP2,JP3,JP4,JP5, JP6,JP7,JP10,JP11, JP12,JP13	jumper	SIL2	strip2 male			
26	JP8,JP9	jumper selector	SIL3	strip3 male			
27	L1,L2	custom	custom	10u	MSS1260T-103	Coilcraft	
28	L3,L4,L5	Ferrite bead, 300Ω, 3A	SMD 0805	0R	7427-9203130	Würth Elektronik	
29	PB1,PB2,PB3	Pushbutton			430453031836		
30	PB4				434123025816		
31	Q1	NMOS 60V 12A	DPAK		STD12NF06L	STMicroelectronics	
32	Q2	NMOS 100V 4A	SO8	N.M.	STS4NF100		
33	Q3	NMOS 60V 2.5A	SOT23		IRLML0060TRPBF	IR	

34	Q4	PMOS 60V 2.5A	SO8		STN3PF06 (alternative part: STN3P6F6)	STMicroelectronics
35	R1,R30	Resistor, 1%, 0.125W	SMD 0603	220k		
36	R2,R23			5k6		
37	R3	Sensing resistor	SMD 1206	1R5	ERJ8BQF1R5V	Panasonic
38	R4			2R0	ERJ8BQF2R0V	
39	R5	Resistor, 1%, 0.125W	SMD 0603	2R2		
40	R6	Sensing resistor	SMD 1020	R050	ERJB1CGR05U	Panasonic
41	R7	Resistor, 1%, 0.125W	SMD 0603	1k5		
42	R8			4R7		
43	R9			2k2		
44	R10,R26,R27,R37, R38,R39			1k		
45	R11			SMD 0805	10k	
46	R12,R16,R28,R36			SMD 0603	10k	
47	R13			470R		
48	R14	Through-hole trimmer	SIL3	500k		
49	R18			50k		
50	R17	Resistor, 1%, 0.125W	SMD 0603	68k		
51	R20,R33,R34,R35			100k		
52	R15,R19,R21,R29			47k		
53	R22			680R		
54	R24,R31			15k		
55	R25			390R		
56	R32			22k		
57	R40,R41,R42	100R				
58	SW1	switch selector	SIL3		MMP1010D	Knitter-switch
59	SW2,SW3	jumper selector	SIL3	strip3 male		
60	SW4	DIP switch	DIL8		DBS3108	Knitter-switch
61	TP1,TP2,TP3,TP4,TP5, TP6,TP7,TP8,TP9,TP10, TP11,TP12,TP13	Test point (white)	hole 1mm		200-202	RS
62	U1	LED driver	HTSSOP-16	ALED6001	ALED6001	STMicroelectronics
63	U2	Microcontroller	LQFP-48	STM32F103C6T6	STM32F103C6T6	
64	U3	USB protector	SOTT-123-6L	USBUF02W6	USBUF02W6	
65	U4	3V3 Linear regulator	SOT-23	LK11233	LK112M33TR	
66	Y1	Crystal resonator	FQ7050B	8MHz	FQ7050B-8.000	FOX