

PROJECT NAME: STEVAL-IHM034V1

Item	Quantity	Reference	Part / Value	Tolerance %	Voltage Current	WATT	TECNOLOGY information	PACKAGE	Manufacturer	Manufacturer Code
1	1	B1	USER				Surface Mount Tactile Switch	SMD	Any	
2	1	B2	RESET				Surface Mount Tactile Switch	SMD	Any	
3	2	C77,C51	47uF	+/-20%	10V		Aluminium electrolytic capacitor	SMT	Panasonic	EEE1AA470SP
4	1	C1	47uF	+/-20%	25V		Aluminium electrolytic capacitor	SMD	Any	
5	22	C2,C3,C4,C5,C6,C7,C10,C12,C25,C42,C61,C62,C67,C72,C71,C69,C64,C63,C59,C83,C85,C75	100nF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805		
6	1	C35	2.4nF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805		
7	4	C8,C84,C86,C95,	1nF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805		
8	12	C11,R14,R16,R17,R38,R99,R97,C47,C48,C53,C54,R120	NC	Do Not Fit	Do Not Fit	Do Not Fit	Do Not Fit	Do Not Fit	Do Not Fit	Do Not Fit
9	2	C65,C66	22pF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805	Any	
10	1	C68	1uF	+/-10%	16V		tantalum capacitor	SMD		
11	6	C28,C29,C30,C31,C32,C33	2.2uF	+/-10%	50V		Ceramic capacitor X7R	SMD 1206	Any	
12	1	C21	0.22uF	+/-20%	300V		X2 Capacitor	Through Hole		
13	1	C70	10uF	+/-10%	16V		Ceramic capacitor X7R	SMD		
14	2	C22,C23	220uF	+/-20%	450V		Electrolytic Capacitor	Through Hole		
15	1	C74	2.2uF	+/-20%	450V		Electrolytic Capacitor	Through Hole		450YK2.2M10X12.5
16	3	C45,C50,C52	2.2uF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805	Any	
17	2	C26,C108	470nF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805	Any	
18	3	C94,C96,C97	5.6nF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805	Any	
19	1	C27	4.7nF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805	Any	
20	3	C34,C46,C49	10nF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805	Any	
21	3	C93,C76,C82	22uF	+/-20%	25V		Aluminium electrolytic capacitor	SMT	Panasonic	EEE1EA220SP
22	2	C87,C92	22nF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805	Any	
23	1	C90	1uF	+/-5%	25V		Aluminium electrolytic capacitor	SMD 0805	Any	
24	1	C88	10uF	+/-20%	6.3V		CERAMIC SMT CAPACITOR	1206	Murata	GRM31CR60J106KA01L
25	4	C78,C79,C80,C81,	100pF	+/-10%	50V		Ceramic capacitor X7R	SMD 0805	Any	
26	4	C104,C105,C106,C107	100pF	+/-10%	50V		Ceramic capacitor X7R	SMD 0603	Any	
27	1	C73	100nF	+/-5%	630VCC		Poliester Film capacitor	Through Hole	Panasonic	ECQE6104JF
28	1	C91	220nF	+/-5%	25V		Ceramic capacitor X7R	0805	Any	
29	1	C89	100uF	+/-20%	25V		Aluminium electrolytic capacitor	SMT	Panasonic	ECEV1EA101P
30	2	C55, C56	2.2nF	+/-20%	400V		Y1 Ceramic capacitor	Through Hole		
31	6	C98,C99,C100,C101,C102,C103	1nF	+/-20%	25V		Ceramic capacitor X7R	SMD 0603	Any	
32	6	D1,D2,D7,D8,D23,D24	LL4148				Switching diode	SOD-80		
33	1	D3	RED LED SMD				Chip LED	SMD 0805		
34	1	D4	STTH15L06D				Turbo 2 ultrafast high voltage rectifier	TO-220	ST	STTH15L06D
35	1	D5	GF1M		1000V/1A		Rectifier diode	DO214BA	Vishay	GF1M
36	1	D6	8A/400V Ac diode bridge		400V/8A		Single-Phase Bridge Rectifier	Through Hole	Vishay	KBU8G-E4
37	1	D19	1N4148WT				HIGH CONDUCTANCE FAST SWITCHING DIODE	SOD 523	FAIRCHILD	1N4148WT
38	3	D20,D21,D22	STTH1L06A				TURBO 2 ULTRAFAST HIGH VOLTAGE RECTIFIER	SMA	ST	STTH1L06A
39	3	D16,D18,D27	BAT48Z				Small signal Schottky diodes	SOD-123	ST	BAT48ZFILM
40	1	D13	GREEN LED SMD				Chip LED	SMD 0805	Any	
41	1	D25	1N5406		600V/3A		Rectifier diode	DO201AD	Any	
42	1	D26	SMAJ15A				Transil	SMA	ST	SMAJ15A-TR
43	1	L1	FCM1608KF-601T03		600ohm/100MHz		Ferrite Bead	SMD 0603	WURTH	
44	1	F1	Fuse		250V/10A		Time lag fuse	-	RS	
45	1	SOCKET for F1	SOCKET for F1				SOCKETfor F1	Through Hole	Schurter	31.8231
46	2	JP1,JP2	JUMPER				3 way single row strip line connector (male connector) 2,54mm pitch	Vertical Through Hole	Any	
47	1	J1	SPI				5 way way single row strip line connector (male connector) 2,54mm pitch	Vertical Through Hole	Any	
48	1	J2	2M_MC_CONNECTOR				34 way IDC low profile boxed header 2,54mm pitch	Vertical Through Hole	Any	
49	3	JP5,JP6,JP7	JUMPER				2 way single row strip line connector (male connector) 2,54mm pitch	Vertical Through Hole	Any	
50			Jumper				Female Jumper 2.54mm Black		Any	

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51	1	J13	JTAG\SWD				20 way IDC low profile boxed header 2,54mm pitch	Vertical Through Hole	Any	
52	1	J9	PFC BOOST INDUCTOR				2 way vertical closed header,5.08mm pitch vertical	Through Hole	Phoenix Contact	
53	3						2 way parallel rising clamp,5.08mm		Phoenix Contact	
54	1	J10	AC MAINS				4 way vertical closed header,5.08mm pitch vertical	Through Hole	Phoenix Contact	
55	1						4 way parallel rising clamp,5.08mm		Phoenix Contact	
56	1	J11	PFC_OUT				2 way vertical closed header,5.08mm pitch vertical	Through Hole	Phoenix Contact	
57	1	J12	MOTOR				3 way vertical closed header,5.08mm pitch vertical	Through Hole	Phoenix Contact	
58	1						3 way parallel rising clamp,5.08mm		Phoenix Contact	
59	1	J15	PFC BOOST INDUCTOR				2 way vertical closed header,5.08mm pitch vertical	Through Hole	Phoenix Contact	
60	1	LS1	FINDER 4031-12		12V/10A		Relè 12V 12A	Through Hole	Finder	40.31.7.012.0000
61	1	NTC1	10				Coated-Disk NTC Thermistor	Through Hole	Epcos	B57364-S100-M
62	1	NTC2	NTC 10k				Temperature Measurement Probe Assemblies	Through Hole	Epcos	B57703M103G
63	1	P1	DB9-Female				9 way r/a PCB D female,US footprint 8.1mm	Through Hole	Any	
64	1	Q1	STW23NM60N				N-channel 600 V	TO-247	ST	STW23NM60N
65	1	Q2	BC847				NPN Transistor		NXP	BC847
66	1	Q3	TLV431CDBZR				V-Ref Adjustable 1.24V to 6V	SOT-23	Texas Instruments	TLV431CDBZRG4
67	1	R90	240	+/-1%		1/8W	Resistor	SMD 0805		
68	2	R7,R8	330	+/-1%		1/8W	Resistor	SMD 0805		
69	4	R11,R87,R91,R106	3.3k	+/-1%		1/8W	Resistor	SMD 0805		
70	3	R15,R118,R119	10k				Trimmer	Through Hole	Bourns	3386F-1-103LF
71	1	R72	680	+/-1%		1/8W	Resistor	SMD 0805	Any	
72	2	R27,R26	10k	+/-1%		1/8W	Resistor	SMD 0805	Any	
73	7	R1,R2,R98,R76,R80,R110,R109	0	+/-1%		1/8W	Resistor	SMD 0805	Any	
74	2	R19,R52	100	+/-1%		1/8W	Resistor	SMD 0805	Any	
75	1	R81	220	+/-1%		1/8W	Resistor	SMD 0805	Any	
76	1	R22	160	+/-1%		1/4W	Resistor	SMD 1206	Any	
77	1	R23	6.8	+/-1%		1/8W	Resistor	SMD 0805	Any	
78	2	R25,R9	47	+/-1%		1/8W	Resistor	SMD 0805	Any	
79	2	R29,R94	100k	+/-1%		1/8W	Resistor	SMD 0805	Any	
80	5	R30,R32,R35,R40,R21	0.033	+/-1%		3W	Resistor	SMD 2512	DISTRELEC	DISTRELEC-71.52.11
81	3	R37,R96,R95,R121	4.7k	+/-1%		1/8W	Resistor	SMD 0805	Any	
82	1	R41	600	+/-1%		1/8W	Resistor	SMD 0805	Any	
83	1	R103	15K	+/-1%		1/8W	Resistor	SMD 0805	Any	
84	4	R43,R44,R82,R83	470k	+/-1%		1/8W	Resistor	SMD 0805	Any	
85	3	R105,R108,R101	1.5k	+/-1%		1/8W	Resistor	SMD 0805	Any	
86	1	R102	6.8K	+/-1%		1/8W	Resistor	SMD 0805	Any	
87	1	R88	3.9K	+/-1%		1/8W	Resistor	SMD 0805	Any	
88	1	R89	15K	+/-1%		1/8W	Resistor	SMD 0805	Any	
89	1	R86	560	+/-1%		1/8W	Resistor	SMD 0805	Any	
90	2	R48,R85	6.8k	+/-1%		1/8W	Resistor	SMD 0805	Any	
91	4	R92,R93,R104,R107	220K	+/-1%		1/8W	Resistor	SMD 0805	Any	
92	2	R53,R61	5k	+/-1%		1/8W	Resistor	SMD 0805	Any	
93	8	R54,R62,R63,R65,R70,R74,R75,R51	3k	+/-1%		1/8W	Resistor	SMD 0805	Any	
94	15	R55,R56,R59,R60,R64,R67,R68,R71,R24,R36,R57,R58,R66, R69,R73	1k	+/-1%		1/8W	Resistor	SMD 0805	Any	
95	1	R84	11k	+/-1%		1/8W	Resistor	SMD 0805	Any	
96	1	R100	53K	+/-1%		1/8W	Resistor	SMD 0805	Any	
97	1	R10	120	+/-1%		1/8W	Resistor	SMD 0805	Any	
98	6	R111,R112,R113,R114,R115,R116	100	+/-1%		1/8W	Resistor	SMD 0603	Any	
99	1	R117	1.2K	+/-1%		1/4W	Resistor	SMD 1206	Any	

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100	15	TP1,TP2,TP3,TP4,TP5,TP6,TP7,TP8,TP9,TP10,TP11,TP12,TP13,TP14,TP15	TEST POINT_3				1 way single row strip line connector (male connector) 2,54mm pitch	Through Hole	Any	
101	1	T1	1.41mH/15-3.3V		15-3.3V	2.55W	Transformer-	Through Hole	MAGNETICA	2092.0001
102	1	U1	L78L33ACUTR				Positive voltage regulators	SOT-89	ST	L78L33ACUTR
103	1	U2	ST3232CTR				± 15 kV ESD protection 3 to 5.5 V low power, up to 250 kbps, RS-232 drivers and receivers	TSSOP16	ST	ST3232CTR
104	2	U3,U4	SFH6156-2T				Optocoupler phototrans	SMD	Vishay/Semiconductors	SFH6156-2T
105	1	U13	LM193				Low power single voltage comparator	SO8	ST	LM193D
106	1	U11	STM32F103RCT6				HIGH-density performance line ARM-based 32-bit MCU	LQFP64	ST	STM32F103RCT6
107	1	U6	L6391				High-voltage high and low side driver	SO-14	ST	L6391
108	1	U7	STGIPS20K60				IGBT intelligent power module (IPM) 17 A - 600 V	SDIP-25L molded	ST	STGIPS20K60
109	1	U14	LD1117S33TR				Low drop fixed and adjustable positive voltage regulators	SOT-223	ST	LD1117S33TR
110	1	U15	VIPER16LD				Low Power OFF-Line SMPS Primary Switcher	SO-16	ST	VIPER16LD
111	1	U10	TSV914				Rail-to-rail input/output 8 MHz operational amplifiers	SO-14	ST	TSV914ID
112	1	J14	PCB DC power socket		12 V / 1A		Mini DC Power socket 2,5mm	Through Hole	RS	448-376
113	1	Heatsink	L=140mm				Heatsink		PADA	G8425140
114	4		Distance				Distance M3, 10mm long, plastic, with screw, for corners		Any	
115										
116	1	X1	8MHz (with socket)				8 MHzCrystal	Through Hole	Any	
117	1	SOCKET for X1	SOCKET for X1				2 way single row strip line connector (female connector) 2,54mm pitch	Through Hole	Any	
118	1	kit for TO220 insulation					mica,sleeve for screw			
119	1	kit for TO247 insulation					mica			
120	4	SPACER	SPACER L=10 x 3 mm				NYLON			R.S.-325-687
121	4	ISO metric ivory nylon 6.6 full NUT.M3	NYLON-NUT							R.S.525-701