

Table 1: STEVAL-POE005V1 bill of materials

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
1	4	C1, C2, C3, C4	10 nF 250 V C0805	Capacitors	Wurth Elektronik	885342207010
2	1	C5	2.2 nF 2KV C1812	Capacitor	AVX	
3	4	C6, C7, C8, C9	1 nF 2KV C1812	Capacitors (not mounted)	TDK	
4	1	C10	1 nF 2KV C1812	Capacitor	AVX	
5	2	C11, C12	1 nF 250 V C0805	Capacitors	Wurth Elektronik	885342207008
6	2	C13, C17	100 nF 100 V C0805	Capacitor	Wurth Elektronik	885012207128
7	1	C14	10 nF 100 V C0603	Capacitor	Wurth Elektronik	885012206114
8	1	C15	33 µF 100 V C-POL8-10	Capacitor	Panasonic	EEEFK2A330P
9	2	C16, C24	4.7 µF 100 V C1210	Capacitor	TDK	
10	1	C18	1.5 nF 100 V C0603	Capacitor	Wurth Elektronik	885012206109
11	1	C19	10 nF 100 V C0805	Capacitor	Wurth Elektronik	885012207122
12	2	C20, C22	2200 pF 2KV C1812	Capacitors (not mounted)	AVX	
13	1	C21	2200 pF 2KV C1812	Capacitor	AVX	
14	5	C23, C26, C46, C51, C95	1 nF 100 V C0805	Capacitor	Wurth Elektronik	885012207116
15	1	C25	100nF 25V C0603	Capacitor	Wurth Elektronik	885012206071
16	3	C27, C28, C30	100 V C0805	Capacitors (not mounted)	Any	
17	1	C29	33 µF 100 V C-POL8-10	Aluminium Electrolytic capacitor	Panasonic	EEEFK2A330P
18	3	C31, C32, C33	4.7uF 100V C1210	Capacitors	TDK	
19	1	C34	2200 pF 2KV C1812	Capacitor	AVX	
20	1	C35	2200 pF 2KV C1812	Capacitor (not mounted)	AVX	
21	3	C36, C37, C38	47 µF 16 V C1210	Capacitor	Wurth Elektronik	885012109011
22	1	C39	1 nF 100 V C0805	Capacitor (not mounted)	Wurth Elektronik	885012207116
23	3	C40, C41, C42	47 µF 16 V C1210	Capacitor (not mounted)	Wurth Elektronik	885012109011
24	1	C43	100 ±0F 16 V Case D	Aluminium Electrolytic capacitor	Panasonic	EEEFK1C101P

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25	2	C44, C45	100 nF 25 V C0603	Capacitor	Wurth Elektronik	885012206071
27	1	C47	2.2 µF 25 V C0603	Capacitor	Any	
28	1	C48	47 nF 200 V C1206	Capacitor	Any	
29	1	C49	200 V C1206	Capacitor (not mounted)	Any	
30	3	C50, C55, C58	100 nF 25 V C0603	Capacitor	Wurth Elektronik	885012206071
31	1	C52	100 pF 25 V C0603	Capacitor	Any	
32	1	C53	10 nF 25 V C0603	Capacitor	Wurth Elektronik	885012206065
33	1	C54	2200 pF 2KV C1812	Capacitor	AVX	
34	1	C56	C0603	Capacitor (not mounted)	Any	
35	1	C57	22 nF COG 25 V C0603	Capacitor (not mounted)	Any	
36	1	C59	220 pF COG 25 V C0603	Capacitor	Wurth Elektronik	885012006040
37	1	C60	22 nF COG 25 V C0603	Capacitor	Any	
38	4	C61, C62, C63, C64	33 nF 100 V C0805	Capacitor	Wurth Elektronik	885012207125
39	2	C75, C76	100 pF 50 V C0805	Capacitor	Wurth Elektronik	885012007057
40	1	C78	25 V C0603	Capacitor (not mounted)	Any	
41	1	C81	22 nF 25 V C0603	Capacitor	Wurth Elektronik	885012206067
42	3	C82, C83, C84	1 nF 25 V C0603	Capacitor	Wurth Elektronik	885012206059
43	1	C85	20 K R0805	Resistor (not mounted)	Any	
44	1	C86	100 V C0805	Capacitor (not mounted)	Any	
45	8	C87, C88, C89, C90, C91, C92, C93, C94	10 nF 1KV C1210	Capacitor (not mounted)	AVX	1210AC103KAT1A
46	1	C96	2.2 µF 25 V C0603	Capacitor	Any	
47	1	C97	47K R0603	Resistor	Any	
48	1	C98	47K R0603	Resistor	Any	
49	1	D1	SOD-323	Diode	Any	
50	1	D2	SOD-23	Diode	Any	
51	1	D3	SOT23	Diode	Any	
52	1	D4	T2	LED Diode	Kingbright	AA3528CGSK
53	1	D5	T1	LED Diode	Kingbright	AA3528CGSK

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54	1	D6	T0	LED Diode	Kingbright	AA3528CGSK
55	1	D7	SMA	Diode TVS	ST	SMAJ58A
56	1	D8	SMA	Transil Diode	ST	
57	1	D9	SOD-323	Diode	Any	BAS16J
58	1	D11	SOT23-D	Zener diode (not mounted)	Any	BZX84C10
59	15	D12, D13, D14, D16, D17, D20, D37, D43, D45, D46, D47, D48, D49, D50, D51	SOD-323	Diode	Any	
60	1	D15	VOUT Led LED_SMD_0805	LED Diode	Several	
61	1	D39	FAUX	LED Diode	Kingbright	AA3528CGSK
62	1	D40	STBY	LED Diode	Kingbright	AA3528CGSK
63	2	D41, D42	SMC	Diode	ST	STPS4S200S
64	1	D44	RAUX	LED Diode	Kingbright	AA3528CGSK
65	2	D52, D53	SOT-23	Dual Diode Common Anodes	Any	BAS70-05
66	1	J1	DATA & POWER INPUT RJ45-8PIN	Connector	Bell Stewart	SS-7188S-A-NF
67	1	J2	DATA OUTPUT RJ45-8PIN	Connector	Bell Stewart	SS-7188S-A-NF
68	2	J4, J6	BANANA- JACK BOC_10A	Connector	Any	
69	1	J9	AUX Front	Power Jack	Switchcraft	P-JACK-RAPC722
70	1	J10	AUX Rear	Power Jack	Switchcraft	P-JACK-RAPC722
71	1	L1	POWER INDUCTOR, 5.6 µH	Inductor	Wurth Elektronik	744316560
					Coilcraft	XAL5050-562
72	2	L2, L3	220 R 805	Inductor (not mounted, mount ohm resistor)	TDK	MPZ2012S221AT000
73	1	L4	10 µH	Inductor	Wurth Elektronik	7443631000
74	4	L5, L6, L7, L8	220 R 805	Ferrite beads	TDK	MPZ2012S221AT000
75	1	L9		Low Profile Power inductor	Coilcraft	LPS4018-105ML
76	1	P1	SLEEP/ WKUP	Push Button	Any	
77	1	P2	SHDN	Push Button	Any	
78	2	Q1, Q5	POWERFLAT_5X6	Power MOSFET	ST	STL90N6F7
79	1	Q2	POWERFLAT_5X6	Power MOSFET (not mounted)	ST	STL90N6F7
80	2	Q3, Q8	MMBT3904LT1 SOT23_BEC_T	Switching transistor NPN (not mounted)	Any	MMBT3904LT1

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81	1	Q4	BSC190N15NS3 POWERFLAT_5X6	Power MOSFET	Infineon	BSC190N15NS3
82	1	Q7	POWERFLAT_3X3	Switching MOSFET P channel	Any	FDMC86259P
83	2	Q9, Q12	SOT23_BEC_T	Switching transistor NPN	Any	PBSS4240T
84	2	Q10, Q11	SOT23_BEC_T	Switching transistor PNP (not mounted)	Any	PBSS5240T
85	2	Q13, Q14	SOT23	N channel MOSFET	Any	2N7002
86	8	R1, R2, R3, R4, R5, R6, R7, R8	75 R R0603	Resistor	Any	
87	1	R9	0R0 R1210	Resistor	Any	
88	1	R14	26.1 K ±1% R0603	Resistor	Any	
89	1	R15	R1206	Resistor (not mounted)	Any	
90	1	R16	5R6 R0805	Resistor (not mounted)	Any	
91	1	R17	22 R R0805	Resistor	Any	
92	3	R18, R19, R20	3.9 K R0603	Resistor	Any	
93	2	R21, R30	10 K R0805	Resistor (not mounted)	Any	
94	1	R22	51R1 ±1% R0805	Resistor	Any	
95	1	R23	36R5 ±1% R0805	Resistor	Any	
96	2	R24, R26	0R0 R1206	Resistor	Any	
97	3	R25, R37, R40	10 K R0603	Resistor	Any	
98	1	R27	3Mega R2010	Resistor (not mounted)	Any	
99	1	R28	0R R0603	Resistor	Any	
100	1	R29	1 K R0805	Resistor	Any	
101	1	R31	R0603	Resistor (not mounted)	Any	
102	1	R32	10 R R0805	Resistor (not mounted)	Any	
103	1	R33	5R6 R0805	Resistor (not mounted)	Any	
104	1	R34	22 R R0805	Resistor	Any	
105	2	R35, R75	1 K R0805	Resistor	Any	
106	2	R36, R38	10 R R0805	Resistor	Any	
107	1	R41	R0603	Resistor (not mounted)	Any	
108	1	R43	130 K ±1% R0603	Resistor	Any	

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109	1	R44	R050 ±1% R1210	Resistor	Any	
110	1	R45	330 K ±1% R0603	Resistor	Any	
111	1	R46	91 K ±1% R0603	Resistor	Any	
112	1	R47	2 K R0603	Resistor	Any	
113	1	R48	0R ±1% R0603	Resistor	Any	
114	1	R49	0R0 R0603	Resistor	Any	
115	1	R50	390 R ±1% R0603	Resistor	Any	
116	1	R51	2 K ±1% R0603	Resistor	Any	
117	1	R52	20 k ±1% R0603	Resistor	Any	
118	1	R53	4.7 K ±1% R0603	Resistor	Any	
119	1	R54	4K64 ±1% R0603	Resistor (not mounted)	Any	
120	1	R55	5K23 ±1% R0603	Resistor	Any	
121	1	R56	10 K R0603	Resistor	Any	
122	5	R57, R58, R59, R60, R67	0R0 R0805	Resistor (not mounted)	Any	
123	1	R61	10 K R0805	Resistor	Any	
124	1	R62	5K6 R0805	Resistor (not mounted)	Any	
125	1	R69	100 k R0805	Resistor	Any	
126	2	R76, R77	0R R0805	Resistor	Any	
127	1	R78	0R R1206	Resistor	Any	
128	1	R101	±1% R0603	Resistor (not mounted)	Any	
129	1	R102	1 K R0603	Resistor	Any	
130	1	R103	12k ±1% R0603	Resistor	Any	
131	1	R104	56K ±1% R0603	Resistor	Any	
132	1	R105	330 R R0603	Resistor	Any	
133	1	R107	0R0 R0805	Resistor	Any	
134	1	R108	R100 R1210	Resistor	Any	
135	1	R114	4K7 R0805	Resistor	Any	
136	2	R115, R116	100 k R0805	Resistor	Any	
137	1	R117	4k7 R0805	Resistor	Any	
138	1	R118	0 R R0805	Resistor (not mounted)	Any	
139	1	R119	100 k R0603	Resistor (not mounted)	Any	

Item	Q.ty	Ref.	Part/Value	Description	Manufacturer	Order code
140	1	R120	4k3 R0805	Resistor	Any	
141	1	R121	20 K R0805	Resistor	Any	
142	1	R122	47 K R0805	Resistor	Any	
143	1	R123	1 k R0805	Resistor	Any	
144	1	R124	18 R R0805	Resistor	Any	
145	1	R125	47 K R0603	Resistor	Any	
146	1	R126	10 R0603	Resistor	Any	
147	1	R127	470 K R0603	Resistor	Any	
148	1	R128	10 K R0603	Resistor	Any	
149	1	R129	6K8 R0603	Resistor (not mounted)	Any	
150	1	R130	2K2 R0603	Resistor (not mounted)	Any	
151	1	R131	0R0 R0603	Resistor	Any	
152	1	R132	0R0 R0603	Resistor (not mounted)	Any	
153	1	R133	100K R0603	Resistor	Any	
154	2	RV1, RV2	1812	Surge arrester (not mounted)	TDK	B88069X9231T203
155	1	T1	POE Trafo	Data Trafo	Wurth Elektronik	7490220123
					Coilcraft	WA8704-ALD
156	1	T2	RN112	Common Choke (not mounted)	Schaffner	RN 112-4-02-0M7
157	1	T3	750370225 Rev 03	Power Trafo	Wurth Elektronik	
158	1	T4		Planar Power Trafo (not mounted)	Coilcraft	
159	2	T5, T6	WURTH_WE-SL5	Common Choke (not mounted)	Wurth Elektronik	744272471
160	2	T7, T8	RN102	Common Choke	Schaffner	RN 102-2-02-1M1
161	14	TP1, TP3, TP5, TP7, TP8, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20	KEYSTONE_501	Test point red	Any	
162	4	TP2, TP4, TP6, TP9	KEYSTONE_501	Test point black	Any	
163	2	TP10, TP11	MILLMAX_2501	Test point turret	Any	
164	1	U1	QFN56-8X8X1-49P	Controller	ST	PM8805
165	1	U2	16QFN_3X3X0.75	Controller	ST	PM8804
166	1	U3	FOD817	Optocoupler	Fairchild	FOD817AS
167	2	U4, U23	SOT-23-5LEAD	Voltage Reference (not mounted)	ST	TS431AILT
168	5	U5, U16, U17, U18, U19	Diode TVS SMC	Transil	Any	

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169	5	U6, U7, U8, U9, U11	Diode TVS SMC	Transil (not mounted)	Any	
170	1	U10	Diode TVS SMC	Transil	ST	SM15T68CA
171	2	U12, U24	SOT-23-3L	Voltage Reference	ST	TS2431-AILT
172	2	U20, U21	Diode TVS SMC	Transil (not mounted)	Any	
173	1	U22	FOD817	Optocoupler	Fairchild	FOD817AS