

Bill of Material – STEVAL-ISA015V2

Item	Quantity	Reference	Part	Description
Capacitors:				
1	2	C1,C2	150uF	electrolytic capacitor, EPCOS, LL, B43505-A9157-M, 400V
2	1	C3	6.8nF/1250V	foil capacitor, EPCOS, B32652A7682J
3	1	C4	10uF	electrolytic capacitor, 25V
4	2	C5	100nF	ceramic capacitor, 50V, -55...125°C
5	1	C10	100nF/100V	stacked film polyester capacitor, EPCOS, B32560J1104J
6	3	C6,C9,C13	1nF	ceramic capacitor, 50V, -55...125°C
7	1	C7	470pF	ceramic capacitor, 50V, -55...125°C
8	1	C8	33pF	ceramic capacitor, 50V, -55...125°C
9	2	C11,C12	1000uF/35V	electrolytic capacitor, Panasonic EEUFC1V102, Nichicon UPM1V102MHH6
10	1	C14	22nF	ceramic capacitor, 50V, -55...125°C
Diodes:				
11	4	D1,D2,D3,D4	1N4007	general purpose rectifier, 1000V, 1A, DO-41
12	4	D5,D6,D7,D8	1N4148	diode, 75V, 0.15A, DO-35
13	1	D9	BZX85V3.9	diode, zener, 3.9V, 1.3W, DO-41
14	2	D10,D11	STTH108	STMicroelectronics, diode, high voltage ultrafast, 800V, 1A, DO-41
15	1	D12	STPS8H100D	STMicroelectronics, diode, high voltage power schottky, 100V, 8A, TO-220AC
Mechanical parts:				
16	1	F1	T1A	fuse, radial, SCHURTER, slow, 1A, 250VAC
17	1	H1	6099B	heatsink, AAVID THERMALLOY, 6099B, 531102b02500, Rthjc = 11 °C/W
18	2	J1,J2	CONAC2	GM Electronic, ARK705V2P, obj.č. 8211129
19	1	J3	CON2	GM Electronic, ARK500/2, obj.č. 821-017
Transistors:				
20	1	Q1	STC04IE170HV	STMicroelectronics, Emitter Switched Bipolar Transistor, 4A, 1700V, TO-247 4 leads
21	1	Q2	BC547B	STMicroelectronics, small signal bipolar transistor, NPN, 65V, 100mA, 330mW, TO-92, 150°C

Resistors:				
22	3	R1,R2,R3	680k	resistor, size 0204, metal film, 250V, 0.185W, 1%
23	4	R4,R9,R15,R16	1k	resistor, size 0204, metal film, 250V, 0.185W, 1%
24	1	R5	1R5	resistor, size 0204, metal film, 250V, 0.185W, 1%
25	1	R6	47k	resistor, size 0204, metal film, 250V, 0.185W, 1%
26	1	R7	390k	resistor, size 0204, metal film, 250V, 0.185W, 1%
27	1	R8	22k	resistor, size 0204, metal film, 250V, 0.185W, 1%
28	1	R10	2R2	resistor, size 0207, metal film, 350V, 0.6W, 1%
29	1	R11	2.7	resistor, size 0207, metal film, 350V, 0.6W, 1%
30	1	R12	2.2	resistor, size 0207, metal film, 350V, 0.6W, 1%
31	2	R13,R14	82k	resistor, size 0414, metal film, 500V, 2W, 5%
32	2	R17,R20	4k7	resistor, size 0204, metal film, 250V, 0.185W, 1%
33	1	R18	39k	resistor, size 0204, metal film, 250V, 0.185W, 1%
34	1	R19	120k	resistor, size 0204, metal film, 250V, 0.185W, 1%
Transformers:				
35	1	T1	SL 040 923 11 03	VOGT-electronic, Power transformer, ETD39, N67
36	1	T2	SL 040 903 21 02	VOGT-electronic, Current transformer, RM13*7*4.5, Fi 340
Control ICs:				
37	1	U1	L6565	STMicroelectronics, quasi-resonant SMPS controller, DIP-8
38	1	U2	TL431AI	STMicroelectronics, shunt Reference, 2.5V, 1mA...100mA, 2%, TO-91, -40...105°C
39	1	U3	PC817	optocoupler, SHARP, Viso = 5kV, CTR = 50..600% @ IF = 5mA, DIP-4