



PROJECT NAME:

STEVAl-ISA054V1-----100W SMPS powered by STW9N150

February 10, 2009

## BILL OF MATERIALS

Item	Quantity	Reference	Part / Value	Tolerance %	Voltage Current	WATT	TECNOLOGY information	PACKAGE	Manufacturer	Manufacturer Code	RS/Distelec/Other Code	More Info
1	1	Cin	10uF,25V Ceramic	10%	25V		MONOLITHIC CERAMIC CAPACITORS	SMD1210	Murata	GRM32DR71E106KA12	RS: 106-836	
2	1	Cout	470uF,10V-ZL series	20%	10V		ALUMINIUM ELECTROLYTIC CAP	RADIAL	Rubycon	10ZL470M8X11.5	DISTRELEC: 801835	
3	5	Co1,Co2,Co3,Co4,C16	560uF,35V-ZLH series	20%	35V		ALUMINIUM ELECTROLYTIC CAP	RADIAL	Rubycon	35ZLH560M10X20	FARNELL: 8126763	
4	2	C2, C5	68uF,450V-MXC series	20%	450Vac		ALUMINIUM ELECTROLYTIC CAP	SNAP-IN	Rubycon	450MXC68MSN22X30	DISTRELEC: 802063	
5	1	C3	330uF,25V	20%	25V		ELECTROLYTIC CAP.	RADIAL	ANY			
6	1	C4	2.2n,1600V R73 KP series	5%	1600V		FILM-FOIL POLYPROPYLENE CAP.	RADIAL	Arcoelectronics	R73T11220SE00J	RS: 821-138	
7	1	C6	100nF	10%	25V		SMD MULT.CERAMIC CAP.	SMD1206	ANY			
8	1	C7	22nF	10%	50V		SMD MULT.CERAMIC CAP.	SMD1206	ANY			
9	1	C8	220p	5%	50V		SMD MULT.CERAMIC CAP.	SMD1206	ANY			
10	1	C9	1nF,K	10%			CERAMIC CAP.	RADIAL	ANY			
11	1	C10	1nF,K	5%	50V		COG CERAMIC CAP.	RADIAL	EPCOS	B37979G5102J	RS: 211-4779	
12	2	C12,C13	47nF,X2 660Vac	20%	660Vac		X2 MULTI-LAYER METALLIZED CAP.	RADIAL	ANY	ANY	RS: 311-0992	
13	1	C14	10nF	10%	25V		CERAMIC CAP.	RADIAL	ANY	ANY		
14	1	C15	2.2nF,Y1	20%	500Vac		CERAMIC Y1 CAPACITOR	RADIAL	ANY	ANY	RS: 214-5903	
15	1	D2	1N4148		75V, 150mA		SMALL SIGNAL DIODE	AXIAL	ANY	ANY		
16	2	D3,D5	STTH108		1A, 800V		H.V. ULTRAFASST RECTIFIER	DO-41	St Microelectronics	STTH108		
17	4	D6,D9,D10,D11	1N4007		1A, 1000V		RECTIFIER	DO-41	ANY	ANY		
18	1	D7	STPS2L25U		2A, 25V		LOW DROP POWER SCHOTTKY RECTIFIER	DO214AA	St Microelectronics	STPS2L25U		
19	1	D8	STPS20120CFP		2x10A, 120V		POWER SCHOTTKY RECTIFIER	TO-220FPAB	St Microelectronics	STPS20120CFP		
20	1	F1	FUSE, 2A 6.3x32 mm		2A, 500Vac		FUSE	-	RS	T-HBC	RS: 414-033	WITH SOCKET / ELCART: 4/10513
21	1	J2	CON3, 24V		10A		2 WAYS 5mm POWER CONNECTOR	THT 5mm lead spacing	ANY		RS:408-7887	
22	1	J3	CON1, 400Vac		500Vac		2 WAYS 7.62mm POWER CONNECTOR	THT 7.65mm lead spacing	ANY		RS:189-5966	
23	1	J4	CON2, 230Vac		500Vac		2 WAYS 7.62mm POWER CONNECTOR	THT 7.65mm lead spacing	ANY		RS:189-5966	
24	1	J5	CON4, 3.3/5V		10A		2 WAYS 5mm POWER CONNECTOR	THT 5mm lead spacing	ANY		RS:408-7887	
25	1	L1	28mH		2A		COMMON MODE LINE CHOKES EMI FILTER	-	Coilcraft	CMT3-28-2L		
26	3	L2,L3,L5	1mH		1.1A		LINE INDUCTOR	-	Panasonic - ECG	ELC-18B102L		
27	1	L4	33uH, 2A		2A		INDUCTOR	SMD	Coilcraft	DO3316P-333MLB		
28	1	L6	10uH		4A		FILTER INDUCTOR	-	Coilcraft	RFB1010-100L		
29	1	Q5	STW9N150		1500V, 8A		HV POWER MOSFET	TO-247	St Microelectronics	STW9N150		
30	1	Q6	2SD882				NPN MEDIUM POWER TRANSISTOR STMicroelectronics	SOT-32	St Microelectronics	2SD882		
31	1	Q7	2SB772				PNP MEDIUM POWER TRANSISTOR STMicroelectronics	SOT-32	St Microelectronics	2SB772		
32	1	RT1	NTC - 10 ohm		7.5A		CURRENT SUPPRESSOR RESISTOR	RADIAL	Epcos	S364	DISTRELEC: 730723	
33	2	R1, R17	330K	5%		2W	CARBON FILM RESISTOR	AXIAL	ANY			
34	4	R2,R4,R7,R9	1M	5%		1/4W	SMD RESISTOR	SMD1206	ANY			
35	1	R3	10	5%		1/4W	RESISTOR	AXIAL	ANY			
36	1	R5	91K	1%		1/4W	SMD RESISTOR	SMD1206	ANY			
37	1	R6	2.2K	1%		1/4W	SMD RESISTOR	SMD1206	ANY			
38	1	R8	1K	5%		1/4W	SMD RESISTOR	SMD1206	ANY			
39	1	R19	1K	5%		1/4W	RESISTOR	AXIAL	ANY			
40	1	R20	24K	1%		1/4W	RESISTOR	AXIAL	ANY			
41	1	R10	4.7K	5%		1/4W	SMD RESISTOR	SMD1206	ANY			
42	1	R12	4.7K	1%		1/4W	SMD RESISTOR	SMD1206	ANY			



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43	1	R11	56K	1%		1/4W	SMD RESISTOR	SMD1206	ANY			
44	1	R13	47K	5%		3W	METAL OXIDE FILM RESISTOR	AXIAL	ANY		RS: 214-2982	
45	1	R14	10K, 1%	1%		1/4W	SMD RESISTOR	SMD1206	ANY			
46	1	R15	3.3K, 1%	1%		1/4W	SMD RESISTOR	SMD1206	ANY			
47	1	R16	5.6K, 1%	1%		1/4W	SMD RESISTOR	SMD1206	ANY			
48	1	R18	15K	1%		1/4W	RESISTOR	AXIAL	ANY			
49	1	R23	0.68	2%	350V	2W	METAL OXIDE SENSING RESISTOR	AXIAL	ANY		DISTRELEC: 711199	
50	1	R26	1K	5%		1/4W	RESISTOR	AXIAL	ANY			
51	1	R27	27	5%		1/4W	RESISTOR	SMD0805	ANY			
52	1	R28	12	5%		1/4W	RESISTOR	SMD0805	ANY			
53	1	R29	12	5%		1/4W	RESISTOR	AXIAL	ANY			
54	1	SW1	SW1				1-POLE MINIATURE SLIDE SWITCH	-	ANY		DISTRELEC: 202402	
55	1	T5	TRANSFORMER		4kV Isolation		TRANSFORMER	-	Magnetica	STP21 1012.0022		
56	1	U1	UC3844B				H.P. CURRENT MODE PWM CONTROLLER	DIP8	St Microelectronics	UC3844BN		
57	1	U2	L5970D		24Vinp, 3.3/5Vout 1A		DC-DC SWITCHING REGULATOR	SO8	St Microelectronics	L5970D		
58	1	U3	TL1431C				PROGRAM. VOLTAGE REFERENCE	TO92	St Microelectronics	TL1431CZ		
59	1	U4	PC817				PHOTOCOUPLER	DIP4	Sharp	PC817		
60	2	DIS1, DIS2	HEAT-SINK				HEATSINK	-	Aavid Thermalloy	6296B	RS: 507-4781	