

BILL OF MATERIALS

Item	Quantity	Reference	Part / Value	Tolerance %	Voltage Current	TECHNOLOGY information	PACKAGE	Manufacturer	Manufacturer Code	RS/Distelec/Other Code
1	2	CS1,C52	100nF	10%	630V	RADIAL	TH	EPCOS	B32652A6104K	RS 190-8371
2	4	C1,C2,C57,C59	100nF	10%	50V	CERAMIC	TH	MURATA	RPER71H104K2M1A05U	RS 188-6186
3	2	C10,C14	47uF	10%	35V	CAP TANTALIUM	SMD	AVX	TAJE476K035R	RS 547-9631
4	1	C11	4.7nf	5%	50V	CERAMIC	SMD 0805	MURATA/ ANY	GRM216R71H472JA01D	RS 624-2553
5	1	C16	100pF	5%	50V	CERAMIC	SMD 0805	EPCOS/ ANY	B37940K5101J60	RS 211-3108
6	1	C12	47uF	20%	16V	Fixed Ceramic Capacitors-Y5V	SMD-3225	TDK	C3225Y5V1C476ZB	Digi-Key-C3225Y5V1C476Z
7	1	C41	100pF	5%	50V	CERAMIC	TH	EPCOS/ ANY	B37979G5101J	RS 211-4763
8	1	C17	680nF	10%	25V	CERAMIC	SMD 1206	kemet/ ANY	C1206C684K3RAC	RS 652-4041
9	2	C18,C19	22uf	20%	25V	ELECTROLYTIC	TH	PANASONIC	EEAFC1E220	RS 449-1012
10	2	C26,C31	1uF	10%?	50V	CERAMIC	TH	EPCOS	B37984M5105K054	
11	2	C28,C33	470nF	10%	50V	CERAMIC	TH	EPCOS	B37984M5474K	RS 211-5328
12	2	C34,C35	33uF	20%	450V	ELECTROLYTIC	TH	EPCOS	B43821F5336M000	
13	2	C37,C38	3900uF/0.012 OHM	20%	35V	ELECTROLYTIC	TH	RUBYCON	35-YXH-3900-20%-	
14	1	C39	150uF	20%	35V	ELECTROLYTIC	TH	PANASONIC	EEUFC1V151	RS 315-0704
15	1	C40	22nF	10%	100V	CERAMIC	TH	AVX	SR201C223KAR	RS 537-3690
16	3	C42,C51,C52	100uF	20%	25V	ELECTROLYTIC	TH	PANASONIC	EEUFC1E101S	RS 449-1040
17	1	C53	2.2uF	20%	450	ELECTROLYTIC	TH	EPCOS	B43851A5225M002	
18	2	C54,C55	4.7nF	10%	100V	CERAMIC	TH	EPCOS	B37981M1472K	RS 211-5227
19	1	C56	470nF	10%	50V	CERAMIC	TH	EPCOS	B37984M5474K054	
20	1	C58	330nF	10%	50V	CERAMIC	TH	EPCOS	B37984M5334K054	
21	1	C60	150nF	5%	50V	CERAMIC	TH	ANY		
22	5	D1,D2,D3,D4,D13	STTH8R06			Turbo 2 ultrafast high voltage rectifier	TO220AC	STMicroelectronics	STTH8R06D	
23	4	D5,D6,D7,D8	BAT46			Small signal Schottky diodes	SOD-123	STMicroelectronics	BAT46ZFILM	
24	2	D9,D10	STTH1L06			Turbo 2 ultrafast high voltage rectifier	DO-41	STMicroelectronics	STTH1L06	
25	2	D11,D12	1N5821			Low drop power schottky rectifier	DO-201AD	STMicroelectronics	1N5821	
26	2	VOUT+,VOUT-								
27	4	VOUT AC1,VOUT AC2,VIIN,GND								
28	2	IC1,IC2	L6386			High-voltage high and low side driver	DIP14	STMicroelectronics	L6386	
28A	2	socket for IC1,IC2	14ay turned pin			14 way turned pin DIL socket,0.3in pitch	TH	any		R.S.197-2653
29	4	IGBT-LOW1,IGBT-HIGH1,IGBT-LOW2,IGBT-HIGH2	STGW19NC60WD			Ultra fast PowerMESH™ IGBT	TO-247	STMicroelectronics	STGW19NC60WD	
30	1	J1	CON10			10 Ways IDC connctor		ANY		RS 625-7252
31	1	L3	150uH		3A	SMD Inductors(Coils)		TDK	SLF12575T-151M1R5-PF	
32	1	L4	1.5mH			FILTER INDUCTOR		MAGNETICA ITALIA	1174.0018 ST04	ST-SUPPLY
33	6	M1,M2,M3,M4,M5,M6	STP160N75F3			N-channel 75V - 3.5mΩ - 120A	TO-247	STMicroelectronics	STW160N75F3	
34	1	Q8	STN4NF03L			N-channel 30 V - 0.039 Ω - 6.5 A	SOT-223	STMicroelectronics	STN4NF03L	
35	2	Q9,Q10	2SD882			NPN medium power transistor	SOT-32	STMicroelectronics	2SD882	
36	2	Q11,Q12	2SB772			PNP medium power transistor	SOT-32	STMicroelectronics	2SB772	
37	4	RGATE IGBT LOW 1,RGATE IGBT LOW 2,RGATE IGBT HIGH 1,RGATE IGBT HIGH 2	100	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273461001	618-5135
38	1	R7	390K	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273463904	618-3296
39	1	R9	5.6K	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273465602	618-1650
40	2	R20,R21	12	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273461209	618-5309
41	2	R22,R23,R24,R25,R99,R100,R101,R102,R103,R104	10	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273461009	618-5179
42	1	R81	22K	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273462203	618-3959

PROJECT NAME:STEVAL-ISV001V1

June 14, 2011

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Item	Quantity	Reference	Part / Value	Tolerance %	Voltage Current	TECNOLOGY information	PACKAGE	Manufacturer	Manufacturer Code	RS/Distelec/Other Code
43	1	R82	3.3K	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273463302	618-2625
44	1	R83	39K	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273463903	618-3331
45	6	R87,R88,R89,R90,R91,R92	10K	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273461003	618-5163
46	1	R93	1.5K	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273461502	618-3662
47	2	R94,R95	470	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273464701	618-2546
48	2	R96,R97	10	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273461009	618-5179
49	1	R98	47K	1%		Thick Film	SMD0805	PHYCOMP/ANY	232273464703	618-2580
50	1	TX1	1356.0004 rev.01			POWER TRANSFORMER PULSE WIDTH MODULATOR		MAGNETICA ITALIA	1356.0004 rev.01	ST-SUPPLY
51	1	U1	SG3525			REGULATING PULSE WIDTH MODULATORS	SO-16Narrow	STMicroelectronics	SG3525AP	
52	1	U16	L5973D			2.5 A switch step down switching regulator	HSOP8 exposed pad	STMicroelectronics	L5973D	
53	1	U17	ST7LITE39F2			8-bit MCU with single voltage Flash, data EEPROM, ADC, timers, SPI, LINSCI	SO20	STMicroelectronics	ST7LITE39F2	
54	1	U20	L7805AB			Precision 1 A regulators	D2PAK	STMicroelectronics	L7805ABD2T-TR	
55	2	125,126	THERMAL RES. 1.2°C/W at LENGHT 135 mm WIDTH 49.5 mm HEIGHT 85.5 mm			HEAT SINK		AAVID THERMALLOY www.aavid.com	78350-SA36	
56	1	124	THERMAL RES. 7.52 °C/W at LENGHT 70 mm WIDTH 40mm HEIGHT 57 mm			HEAT SINK		AAVID THERMALLOY www.aavid.com	78185- S562	
57	6	SPACER-distanziatori	height 12.7mm			Nylon/plastic SPACER		any	any	R.S.606-793
58	1	VIN+ , GND	2 WAY TERMINAL BLOCK			15 Cm of wire, solder directly on PCB and terminated with terminal block.		WEIDMULLER	MK 6/2	R.S. 489-5161
59	1	V OUT AC1, V OUT AC2	2 WAY TERMINAL BLOCK			15 Cm of wire, solder directly on PCB and terminated with terminal block.		WEIDMULLER	MK 6/2	R.S. 489-5161
60	14	CLIP FOR TO247 and TO220 DEVICE	High power heat sink clip 05			High power heat sink clip 05				R.S. 234-2441