

			PROJECT NAME:STEVAL-ISV003V2									January 11, 2013	
BILL OF MATERIALS													
Item	Quantity	Reference	Part / Value	Toller ance %	Voltage Current	WATT	TECNOLOGY information	Package	Manufacturer	Manufacturer Code	RS/Distelec/OTHer Code	More Info	
1	2	C137,C147	150uF		63V		ALUMINIUM ELEC. CAP	SMD	Panasonic	EEEFK1J151AQ	Digikey code PCE4852CT-ND		
2	2	C83,C144	220uF		25V		ALUMINIUM ELEC. CAP	SMD	Panasonic	EEEFK1E221P	Digikey code PCE4005CT-ND		
3	2	C146,C138	220nF		63V		X7R SMD CERAMIC CAP	0805	ANY				
4	4	C135,C136,C141,C145	2.7nF		50V		X7R SMD CERAMIC CAP	0805	ANY				
5	2	C80,C143	120pF		25V		X7R SMD CERAMIC CAP	0805	ANY				
6	3	C4,C42,C55	100nF	1%	15V		X7R SMD CERAMIC CAP	0805	ANY				
		C5,C35,C38,C43,C50,C56,C77,C79,C82,C84,C86,C88,C95,C96,C97,C99,C100,C107,C108,C109,C110,C111,C112,C120,C121,C122,C123,C124,C125,C126,C129,C130,C131,C132,C133,C134,C139,C140,C148	100nF	10%	25V		X7R SMD CERAMIC CAP	0805	ANY				
7	39												
8	1	C7	2.2uF	5%	630VDC		METALLIZED POLYPROPYLENE FILM CAPACITORS	RADIAL	Panasonic	ECQE6225JF	RS 622-5003		
9	2	C12,C13	2.2uF	5%	250V		METALLIZED POLYPROPYLENE FILM CAPACITORS	RADIAL	Epcos	B32523Q3225J	RS 334-423		
10	4	C8,C9,C10,C11	22uF	20%	450V		ALUMINIUM ELEC. CAP	RADIAL	Panasonic	EEUED2W220S	RS 434-0352		
11	4	C14,C40,C53,C54	1uF	20%	25V		X7R SMD CERAMIC CAP	0805	ANY				
12	14	C15,C16,C17,C18,C19,C20,C21,C22,C23,C24,C25,C26,C27,C28	1uF	10%	100V		X7R SMD CERAMIC CAP	1812	KEMET	C1812F105K1RAC	RS 500-2405		
13	4	C29,C30,C33,C34	2.2nF	20%	300VAC		CAP POLYESTER Y2	RADIAL	ANY		RS 684-2172		
14	1	C31	470nF	10%	275VAC		METALYZED POLYESTER FILM CAP	RADIAL	ANY		RS 725-7543		
15	13	C36,C39,C41,C51,C58,C60,C62,C66,C68,C73,C87,C89,C119	10uF	10%	25V		SMD X7R CERAMIC CAP	1210	MURATA	GRM32DR71E106KA12L	RS 106-836		
16	8	C61,C65,C149,C150,C152,C153,C154,C155	22uF	10%	25V		SMD CERAMIC CAP	1206	Murata	GRM31CR61E226KE15L	Farnell 1797010		
17	1	C37	22nF	10%	25V		X7R SMD CERAMIC CAP	0805	ANY				
18	7	C57,C59,C63,C64,C69,C71,C76	100nF	10%	50V		X7R SMD CERAMIC CAP	0805	ANY				
19	1	C72	22nF	10%	16V		SMD CERAMIC CAP	0805	ANY				
20	1	C67	100nF	10%	16V		SMD CERAMIC CAP	0805	ANY				
21	6	C75,C78,C85,C98,C118,C142	10nF	10%	25V		X7R SMD CERAMIC CAP	0805	ANY				
22	2	C127,C128	1uF	10%	16V		X7R SMD CERAMIC CAP	0805	ANY				
23	1	C70	1nF	10%	50V		X7R SMD CERAMIC CAP	0805	ANY				
24	1	C74	47nF	10%	25V		X7R SMD CERAMIC CAP	0805	ANY				
25	1	C81	Not mounted				X7R SMD CERAMIC CAP	0805	ANY	Not mounted	Not mounted	Not mounted	
26	2	C90,C91	10pF	10%	25V		X7R SMD CERAMIC CAP	0805	ANY				
27	2	C92,C93	22pF	10%	25V		X7R SMD CERAMIC CAP	0805	ANY				
28	12	C94,C101,C102,C103,C104,C105,C106,C113,C114,C115,C116,C117	180pF	10%	25V		X7R SMD CERAMIC CAP	0805	ANY				
29	1	C151	470pF	10%	25V		X7R SMD CERAMIC CAP	0805	ANY				
30	2	DCDC L2, DCDC L3	NMV0515SA				Isolated 1W Single Output DC/DC Converters Data Sheet	Through Hole	Murata Power Solutions	NMV0515SAC	RS 544-3288		
31	1	DCDC L5	RO-1505S				Isolated 1W Single Output DC/DC Converters Data Sheet	Through Hole	Recom Power Inc	RO-1505S	DIGIKEY RO-1505S-ND		
32	2	D31,D32	STPS3L60U		60V,3A		SCHOTTKY DIODE	SMB	STMicroelectronics	STPS3L60U			
33	9	D9,D10,D14,D15,D21,D22,D23,D24,D29	STPS2L25U		25V,2A		SCHOTTKY DIODE	SMB	STMicroelectronics	STPS2L25U			
34	2	D40,D42	STPSC606G		600V,6A		SiC high voltage rectifier	D2PAK	STMicroelectronics	STPSC606G-TR			
35	2	D12,D13	Zener 5.1V		5.1V	0.5W	Zener diode	SOD-80			Distrelec 600807		
36	2	D35,D36	STTH108		1A, 800V		ULTRAFAST RECTIFIER	SMA	STMicroelectronics	STTH108A			
37	2	D6,D8	STPS1545CB				SCHOTTKY DIODE	DPAK	STMicroelectronics	STPS1545CB			
38	2	IC7,IC12	HCPL4506				OPTOCOUPERS	Through Hole	Avago Technologies	HCPL-4506-000E	RS 547-3813		
39	2	D11,D34	STPSC606G		600V,6A		SiC high voltage rectifier	D2PAK	STMicroelectronics	STPSC606G-TR			
40	2	D43,D44	SMBJ85A		600V		Transil	SMB	STMicroelectronics	SMBJ85A-TR			
41	1	F1	FUSE		4A/250V		4A FUSE	SMT	Schurter	3404.2422.22	RS code: 703-2764		
42	1	IC1	CSLW6B5		5A		HALL EFFECT CURRENT SENSOR		HONEYWELL	CSLW6B5			
43	5	IC2,IC3,IC4,IC5,IC6	PM8834		4A		DUAL LOW SIDE DRIVER	SO8	STMicroelectronics	PM8834TR			
44	3	IC9,IC10,IC11	TS912		20MHz, 5V		RAIL TO RAIL OPAMP	SO8	STMicroelectronics	TS912BID			
45	1	J1	CON PV		50 VDC, 10A		2-WAYS CONNECTOR	TRH-PITCH 7.62 mm	PHOENIX CONTACT	1731721	RS 189-5966		
46	1	J2	CON GRID		230 VAC		2-WAYS CONNECTOR	TRH-PITCH 7.62 mm	PHOENIX CONTACT	1731721	RS 189-5966		
47	1	J3	3.3V		3.3 VDC		2 way screw terminal block 5.08mm pitch	THT 5.08 mm	ANY		RS 193-0586		
48	2	J4,J6	LD1086DT33TR		3.3V		VOLTAGE REGULATOR	DPAK	STMICROELECTRONICS	LD1086DT33TR			
49	2	J5,J8	JUMPER		SIGNAL		2 way single row strip line connector (male connector) 2.54mm pitch	Vertical Through Hole	Any		RS 495-8470		
50	1	J7	CON20		SIGNAL		20WAY IDC CONNECTOR LOW PROFILE	IDC 20	ANY	2-1761603-7	RS:461-770		

			PROJECT NAME:STEVAL-ISV003V2							January 11, 2013
--	--	--	------------------------------	--	--	--	--	--	--	------------------

BILL OF MATERIALS

Item	Quantity	Reference	Part / Value	Tolerance %	Voltage Current	WATT	TECNOLOGY information	Package	Manufacturer	Manufacturer Code	RS/Distelec/Other Code	More Info
51	1	J9	CON30A		SIGNAL		30 way double row strip line connector (female connector) 2.54mm pitch 11.05mm High	Vertical Through Hole	Samtec	ESQ12012GD	RS: 254-6154	STRIP FEMM 2X15
52	1	J10	HEADER 8		SIGNAL		8 way double row strip line connector (male connector) 2.54mm pitch	Vertical Through Hole	ANY		ELCART 5/7643-5	
53	1	J11	PWM CONNECTOR FOR DEBUG		SIGNAL		50 way double row strip line connector (male connector) 2.54mm pitch	Vertical Through Hole			ELCART 5/7643	
54	4	J12,J13,J14,J16	JUMPER_3		SIGNAL		3 way single row strip line connector (male connector) 2.54mm pitch	Vertical Through Hole	Any		RS code:495-8470	
55	1	J15	CON6A		SIGNAL		Multi function switch Jyostick		DSL	MT008-A		
56	2	L4,L6	INDUCTOR 600uH				POWER CHOKE	Through Hole	MAGNETICA	2162.0003	06057	PROTOTYPE
57	2	L15,L17	220uH				INDUCTOR		COILCRAFT	MSS1278224		
58	2	L13,L14	3.6mH		1.1A		FILTER INDUCTORS	Through Hole	Magnetica	2196.0001		
59	1	L16	BLM41PG600SN1L				INDUCTOR	SMD 1806	MURATA	BLM41PG600SN1L	RS 188-8665	
60	1	P1	DATA PORT 0				c12	Through Hole	Any		RS code: 542-8043	FEMALE
61	4	Q1,Q2,Q3,Q4	STB11N65M5		600 V-11 A		Mdmesh™ V Power MOSFET	D*PAK	STMicroelectronics	STB11N65M5		
62	2	Q5,Q7	STH110N10F7-2		100V, 110A		N-channel Power MOSFET	H*PAK	STMicroelectronics	STH110N10F7-2		
63	1	Q9	2N7002		0.18A, 60V	0.3W	MOSFET N Channel SMT	SOT23	NXP	2N7002	RS: 112-5526	
64	1	Q10	2STN2340				PNP power transistors	SOT-223	STMicroelectronics	2STN2340		
65	1	R11	G5LE-1A4-DC12		10A, 12VDC		RELAY SPST 10A 12VDC PCB SEALED	Through Hole	Omron	G5LE-1A4 DC12	RS: 2509036648	
66	2	R1,R4	360	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
67	3	R2,R5,R94	200	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
68	1	R3	15M	1%		0.8W	HIGH VALUE RESISTOR	RADIAL	Tyco Electronics	HBA15MFZRE	RS: 158-165	
68	2	R21,R23	2.7	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
69	4	R7,R8,R19,R20	0	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
70	2	R9,R12	27	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
71	1	R10	150k	1%		1/4W	SMD RESISTOR	1206	Tyco Electronics	CRG1206F150K	RS: 223-2552	
72	2	R11,R14	0	1%		0.5W	SMD RESISTOR	1206	ANY	ANY		Do not mount zero ohm resistor. Solder wire between resistors pins
73	3	R13,R16,R36	330	1%		1/4W	SMD RESISTOR	1206	ANY	ANY		
74	1	R18	4.3k	1%		1/4W	SMD RESISTOR	1206	Any	ANY	RS: 679-2187	
75	8	R29,R43,R47,R51,R54,R72,R79,R86	10k	1%		1/4W	SMD RESISTOR	1206	Tyco Electronics	CRG1206F10K	RS: 223-2394	
76	1	R22	3mOhm	1%		1W	SMD RESISTOR	2512	Panasonic	ERJM1WSF3M0U	RS: 565-847	
77	1	R96	1.1K	1%		1/4W	SMD RESISTOR	1206	ANY	ANY		
78	3	R98,R100,R126	1K	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
79	3	R25,R26,R62	dnf	5%		1/4W	SMD RESISTOR	1206	Not mounted	Not mounted	Not mounted	Not mounted
80	1	R27	470	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
81	1	R28	8.2	5%		5W	Wirewound resistor	AXIAL	ANY	ANY	Distelec: 727033	
82	1	R74	10K	1%		1/4W	SMD RESISTOR	1206	ANY	ANY		
83	2	R30,R129	1K	1%		1/4W	SMD RESISTOR	1206	ANY	ANY		
84	1	R40	16K	1%		1/8W	SMD RESISTOR	0805	ANY	ANY		
85	2	R48,R55	8.2K	1%		1/4W	SMD RESISTOR	1206	ANY	ANY		
86	4	R38,R49,R70,R71	20K	1%		1/4W	SMD RESISTOR	1206	ANY	ANY		
87	1	R77	4.7K	1%		1/4W	SMD RESISTOR	0805	ANY	ANY		
88	1	R113	100	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
89	1	R115	390	5%		1/8W	SMD RESISTOR	0805	ANY	ANY		
90	1	R128	33k	1%		1/4W	SMD RESISTOR	1206	ANY	ANY		
91	1	R130	120	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
92	1	R131	59k	1%		1/4W	SMD RESISTOR	1206	ANY	ANY		
93	19	R15,R17,R57,R58,R59,R60,R61,R63,R64,R65,R88,R104,R107,R108,R109,R110,R111,R112,R118	10k	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
94	1	R90	4.7k	0.1%		0.10W	Thin Film Precision Chip Resistor	0805	Tyco Electronics	CPF0805B4K7E	RS: 666-2575	
95	1	R92	150k	0.1%		1/8W	Thin Film Precision Chip Resistor	1206				
96	2	R101,R102	10k	0.1%		1/8W	Thin Film Precision Chip Resistor	1206				
97	6	R41,R44,R46,R50,R52,R56	330	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
98	3	R6,R45,R53	100k	1%		1/4W	SMD RESISTOR	1206	Tyco Electronics	CRG1206F100K	RS: 223-2524	
99	10	R66,R67,R105,R106,R114,R116,R117,R119,R120,R123	0	1%		0.0625 W	SMD RESISTOR	0402	Tyco Electronics	CRG0402ZR	RS: 667-8520P	
100	1	R68	0	1%		1/8W	Thin Film Precision Chip Resistor	0805				
101	2	R69,R76	6.81k	1%		1/4W	Thick Film resistor	1206	Phycomp	2.32272E+11	RS: 617-8632	
102	1	R78	2.7k	1%		1/4W	SMD RESISTOR	1206	ANY			
103	1	R42	56.2K	1%		1/4W	SMD RESISTOR	1206	ANY			
104	2	R39,R75	24k	1%		1/4W	SMD RESISTOR	1206	ANY			
105	1	R73	180k	1%		1/4W	Thick Film resistor	1206	Tyco Electronics	CRG1206F180K	RS: 223-2568	
106	1	R84	20k	1%		1/4W	Thick Film resistor	1206	Phycomp	232272462003	RS: 618-0871	
107	1	R122	4K7	5%		1/4W	SMD RESISTOR	1206	ANY	ANY		
108	1	R95	30k	0.1%		1/8W	Thin Film Precision Chip Resistor	0603	Tyco Electronics	CPF0603B30KE	RS: 666-2152	
109	1	R97	1K	0.1%	75V	0.1W	Metal Film Chip Resistors	0603	Panasonic	ERA3ARB102P	RS: 661-8688	
110	1	R103	3.3k	1%		1/4W	SMD RESISTOR	1206	Tyco Electronics	CRG1206F3K3	RS: 223-2338	

			PROJECT NAME: STEVAL-ISO003V2			January 11, 2013
--	--	--	-------------------------------	--	--	------------------

BILL OF MATERIALS

[illegible]