

PROJECT NAME:

STEVAL-ISV004V2

July 21, 2010

BILL OF MATERIALS

Item	Qty	Reference	Part / Value	Tolerance %	Voltage Current	WA TT	TECNOLOGY information	PACKAGE	Manufacturer	Manufacturer Code	RS/Distelec/Other Code	More Info
1	4	C1, C2, C3, C4	22nF					SMD	MURATA	GRM188R71C223KA01		Bootstrap capacitors
2	2	C5, C11	1µF					SMD	MURATA	GRM31MR71H105KA88		Input Capacitor
3	1	C9	220pF					SMD	MURATA	GRM188R71E221KA01		Voltage Sensing Capacitor
4	1	C8	22nF					SMD	MURATA	GRM188R71C223KA01		Compensation capacitor
5	1	C10	220pF					SMD	MURATA	GRM188R71E221KA01		Voltage Sensing capacitor
6	1	C7	470nF					SMD	MURATA	GRM188R71A474KA61		Internal Reference Voltage capacitor
7	3	C6, C12, C13	4.7µF					SMD	MURATA	GRM32ER71H475KA88K		Output capacitor
8	1	D3	STPS140U or STPS3L40UF					SMD	ST	STPS140U or STPS3L40UF		Noise Filter on Supply pin
9	1	R1	2.2MΩ					SMD	VISHAY	D11/CRCW0603 2.2M 1%		Input Voltage Partitioning Resistor
10	1	R2	110kΩ					SMD	VISHAY	D11/CRCW0603 110k 1%		Input Voltage Partitioning Resistor
11	1	R3	4.3MΩ					SMD	VISHAY	D11/CRCW0603 4.3M 1%		output Voltage Partitioning Resistor
12	1	R4	110kΩ					SMD	VISHAY	D11/CRCW0603 110k 1%		output Voltage Partitioning Resistor
13	1	R5	1kΩ					SMD	VISHAY	D11/CRCW0603 1k 1%		Compensation resistor
		R6	0Ω					SMD				Pull up resistor (Note: R6 must be removed if R7 is soldered)
14		R7 (optional)	Depending on desired Fsw					SMD	?			Oscillator Resistor (Note: R6 must be removed if R7 is soldered)
15	4	L1, L2, L3, L4	47µH					SMD	EPCOS	B82477P4473M000 B82477G4473M000 (recommended for PV panels with Icc up to 5A)		Phase x (x=1..4) Inductors
16		L1, L2, L3, L4	47µH					SMD	COILCRAFT	MSS1278T-473ML (recommended for PV panels with Icc up to 8A)		Phase x (x=1..4) Inductors
17	2	D1, D2	STPS1045B					SMD	ST	STPS1045B		Bypass Diodes
18	1	J35	SPV1020					PSS036	ST	SPV1020		ST SUPPLY
19	1	J36	4PIN Connector				PITCH-2.54mm	TRH	Phoenix Contact	1723672	R.S.2901286	
20	2	D4, D5	SMBJ40A					SMD	ST	SMBJ40A-TR		600W, 40V unidirectional protection transistor