

PROJECT NAME:

STEVAL-ISV006V2

BILL OF MATERIALS

Item	Quantity	Reference	Part / Value	Voltage Current	TECNOLOGY information	PACKAGE	Manufacturer	Manufacturer Code	RS/Distelec/Other Code	More Info
1	1	PV1 *	175mW	Vmp:1.44V;Imp:135mA Voc:1.65V;Isc:150mA	Polycrystalline		nbszgd	SZGD7050-3P		195mW solar cell
2	2	Cin1, Cout2	10µF	10V		0805				Input and Output Capacitor
3	1	C2	1nF	10V		0805				Voltage Sensing Capacitors
4	1	C4	100nF	10V		0805				Voltage Sensing Capacitors
6	1	Cout1	4.7µF	10V		0805				Output pin Capacitor
7	1	R3	100k			0805				Input Voltage Sensing Resistor
8	3	R4, R2, R10	Up to 1M			63M			183-1401	Input Voltage Trimmer Resistor
11	1	L1	10uH	Isat = 1.5A @vmp =1.5V		2220(EIA)	COILCRAFT COILCRAFT EPCOS	XAL6060-103 MSS7341-103 B82442T1103K050		Boost Inductor
		L1 (alternate)								
12	1	VRS	0.05	50mV @Iout_max		0805				Output current sense
		VRS (Alternate)								
13	1	R1	1M			0805				output voltage partition
14	1	R11	330k			0805				output voltage partition
15	1	J28 (SCAP)	220mF	5.5V, 220mF			PANASONIC	EECS0HD224H	377-372	battery
16	1	J1				TH				jumper connecting load
17	1	D4		1.8V, 2mA		TH			180-8451 (green)	charge display
18	1	D1		1.8V, 2mA		TH			171-1234(Red)	
19	2	R6,R7	1k			0805				charge voltage partitioning
21	1	R8	1M			0805				
22	1	R9	27k			0805				
23	1	R5	0			0805				X_SHUT start up
24	1	J27				SO14	ST	TS339		4xcomparator
25	1	J26				TSSOP8	ST	SPV1040T		SPV1040, mppt boost controller
26	1	D5	STPS160U			SMB		STPS160U		Voltage reference diode
27	1	Dout1	SMM4F5.0	Vbr = 5V, Vcl = 9V		STmite flat		SMM4F5.0		Output protection transil
28	2	RF1, RF2	1k			0805				lout noise filter resistor
30	1	CF1	1uF			0805				lout noise filter capacitor
* Alternative part:										
1	1	PV1	400mW	Vmp:1.92V;Imp:200mA Voc:2.2V;Isc:220mA	Polycrystalline		nbszgd	SZGD6060-4P		400mW solar cell