

**GH9J5 @-GJ\$&\$J%Bill of material**

Sect.	Item	Qty.	Reference	Part / value	Tolerance %	Voltage current	Watt	Technol. info.	Package	Manufacturer	Manufacturer code	More information	
<b>DC-DC input section</b>	1	1	U1	SPV1050					VFQFPN 3 x 3 x 1 20L (code A0BR)	ST	SPV1050	Plastic socket	
	2	1	CN1	2-way screw connector						TE Connectivity	282834-2	Input connector for PV panel or TEG	
	3	1	C1	4.7 $\mu$ F	15%	25 V			0805	Murata	GCM21BR71C 475KA73L	Input capacitance	
	4	0	C2 (DNM)	4.7 $\mu$ F	15%	25 V			0805	Murata	GCM21BR71C 475KA73L		
	5	3	J1, J2, J3	Jumper					Pitch 2.54 mm	TH		Enable/disable MPPT	
	8	1	R1	10 M $\Omega$	1%				0805	YAGEO	RC0805FR- 0710ML	Resistor partitioning for MPP track/setting	
	9	1	R2	1 M $\Omega$	1%				0805	TE Connectivity	CRG0805F1M0		
	10	1	R3	5.6 M $\Omega$	1%				0805	VISHAY	CRCW08055M 60FKEA		
	11	1	L1	22 $\mu$ H	20%					Coilcraft	LPS4018- 223ML_	DC-DC inductor	
	12	1	C8	10 nF	15%	16 V			X7R	0603	Murata	GRM188R71C1 03KA01D	Voltage sampling time constant capacitance

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Battery section	13	1	CN4	2-way screw connector						TE Connectivity	282834-2	Connector for external supply of pin STORE
	14	1	C9	47 $\mu$ F	20%	10 V			0805	TDK	C2012X5R1A476M125AC	
	15	1	R4	6.2 M $\Omega$	5%				0805	RS	RS-0805-6m2-5%-0.125W	Resistor Partitioning for UVP, EOC, protection setting
	16	1	R5	499 k $\Omega$	1%				0805	VISHAY	CRCW0805499KFKEA	
	17	1	R6	2.7 M $\Omega$	1%				0805	VISHAY	CRCW08052M70FKEA	
	18	1	CN2	8-way screw connector						TE Connectivity	282836-8	Connector for battery and battery status signals
LDOs section	19	2	C6, C7	100 nF	10%			X7R	0603	KEMET	C0603C104K4RAC	Tank capacitor for LDOs
	21	2	SW1, SW2	5-pin male Stripline				Pitch 2.54 mm	TH			Close 2 - 3: LDO disabled Close 1 - 2: LDO enabled Floating: external control through CN3
	23	1	CN3	4-way screw connector						TE Connectivity	282836-4	Connector for LDOs load connection

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List of test points	24	1	TP1					True hole				PV+ pin sensing and soldering
	25	1	TP2					True hole				MPP pin sensing and soldering
	26	1	TP3					True hole				MPP-SET pin sensing and soldering
	27	1	TP4					True hole				STORE pin sensing and soldering
	28	1	TP5					True hole				ULP pin sensing and soldering
	29	1	TP6					True hole				EOC pin sensing and soldering
	30	1	TP7					True hole				GND pin sensing and soldering
	31	1	TP8					True hole				GND pin sensing and soldering
	32	1	TP9					True hole				IN_LV pin sense (for probe scope)
	33	1	TP10					True hole				GND pin sensing (for probe scope)
	34	1	TP11					True hole				L_HV pin sensing (for probe scope)