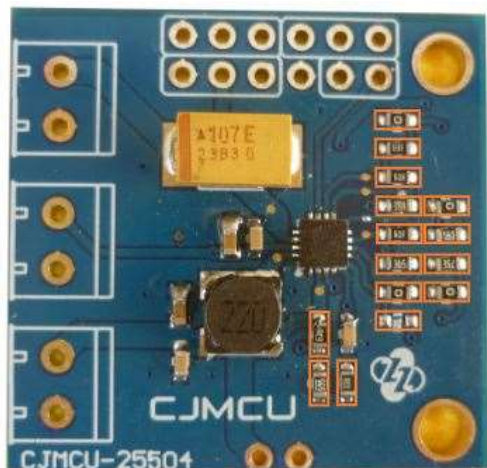


Resistor Map, Values

The following image presents visually each resistor with both labels: IC manufacturer and module manufacturer.



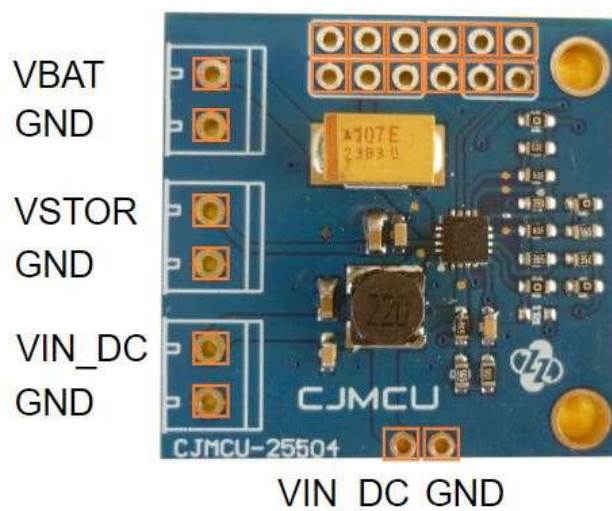
ROK1a(R16)	
ROK1(R8)	
ROK2(R9)	
ROK3(R7)	RUV1a(R15)
RUV2(R6)	RUV1(R5)
ROV2(R4)	ROV1(R3)
OT_PROG 60C(R12)	ROV1a(R14)
OT_PROG 120C(R11)	

ROC2(R2)	
ROC1(R10)	ROC1a(R1)

Pinout

The following image presents visually each header pin with a label exactly written as in the IC manufacturer datasheet.

GND	VREF_SAMP	VOC_SAMP	VSTOR	VOC_SAMP	ROC2_ROC1_DIVIDER
GND	VBAT	VSTOR	GND	GND	VBAT_OK



In this module the voltage divider made of ROC1 and ROC2 is not connected to VOC_SAMP pin. Instead, the middle point of the divider and VOC_SAMP signals are routed to header pins. MPPT could be enabled or disabled externally.

Module resistor values

The following tables show the values of the resistors that came soldered into the PCB. Those values are the same found in the IC sample design pdf.

MPPT

TI ID	PCB ID	MARK	VALUE
ROC2	R2	63E	4.42 M
ROC1	R10	565	5.60 M
ROC1a	R1	106	10.0 M

OVERVOLTAGE

TI ID	PCB ID	MARK	VALUE
ROV2	R4	59E	4.02 M
ROV1	R3	75E	5.90 M
ROV1a	R14	0	0 M

UNDERVOLTAGE

TI ID	PCB ID	MARK	VALUE
RUV2	R6	61E	4.22 M
RUV1	R5	565	5.60 M
RUV1a	R15	0	0 M

VOLTAGE OK

TI ID	PCB ID	MARK	VALUE
ROK3	R7	16E	1.43 M
ROK2	R9	61E	4.22 M
ROK1	R8	63E	4.42 M
ROK1a	R16	0	0 M

OVERTEMPERATURE

TI ID	PCB ID	MARK	VALUE
OT_PROG 60	R12	0	0 M
OT_PROG 120	R11	N/A	N/A

Here are the configuration parameters obtained with the aforementioned resistor values:

PARAMETER	VALUE
VBAT_OV	3.15 V
VBAT_UV	2.20 V
VBAT_OK	2.44 V
VBAT_OK_HYST	2.80 V
MPP	78 %
OVERTEMP	60 C

This configuration uses a solar cell as input and 2x 1.25V NiMH rechargeable batteries in series as a storage device

Example values for LiFePO4 3.2 V

MPPT

TI ID	PCB ID	MARK	VALUE
ROC2	R2	63E	4.42 M
ROC1	R10	565	5.60 M
ROC1a	R1	106	10.0 M

OVERVOLTAGE

TI ID	PCB ID	MARK	VALUE
ROV2	R4	475	4.70 M
ROV1	R3	515	5.10 M
ROV1a	R14	244	240 K

UNDERVOLTAGE

TI ID	PCB ID	MARK	VALUE
RUV2	R6	515	5.10 M
RUV1	R5	515	5.10 M
RUV1a	R15	NONE	0 M

VOLTAGE OK

TI ID	PCB ID	MARK	VALUE
ROK3	R7	01E	1.00 M
ROK2	R9	475	4.70 M
ROK1	R8	395	3.90 M
ROK1a	R16	30D	200 K

OVERTEMPERATURE

TI ID	PCB ID	MARK	VALUE
OT_PROG 60	R12	0	0 M
OT_PROG 120	R11	N/A	N/A

Here are the configuration parameters obtained with the aforementioned resistor values:

PARAMETER	VALUE
VBAT_OV	3.50 V
VBAT_UV	2.50 V
VBAT_OK	2.70 V
VBAT_OK_HYST	3.00 V
MPP	78 %
OVERTEMP	60 C

This configuration uses a solar cell as input and 1x 3.2V LiFeP04 rechargeable battery as a storage device