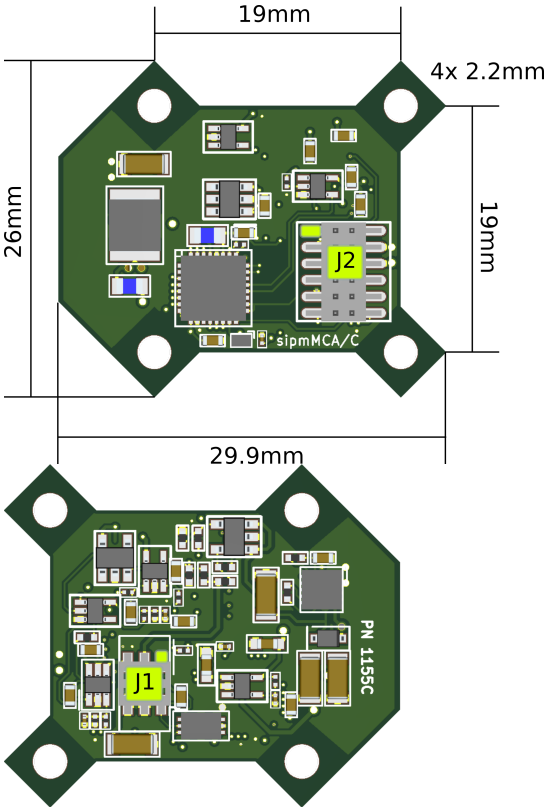
SiPM-Counter Pinouts

Two SiPM-Counter Assemblies	
	
Assembly for 38mm scintillators	Assembly for 50mm scintillators
USB interface	USB and serial interface, QA, QD

In both SiPM-Counter assemblies, the bottom cup can be removed to replace the scintillator crystal.

SiPM-Counter PCB connectors



SiPM-Counter and SiPM-1000 MCA have the same PCB shape.

12-pin MCA Connector, J2		
Pin	***Name***	***Function***
1	S1	ARM, Port A3
2	S0	ARM, Port A1
3	GND	Ground
4	QA	Analog output
5	SWD_CLK / TX	Software Debug Clock / UART TX
6	Vin	+5V nominal, 30mA
7	SWD_IO / RX	Software Debug Data / UART RX
8	SWD_RST#	Software Debug Reset (active low)
9	GND	Ground
10	QD	Trigger out; Alarm out
11	USB-DM	USB Data −
12	USB-DP	USB Data +

The SiPM-Counter is powered and operated via the 12-pin MCA connector. Power consumption is 15mA (75mW) at room temperature.

SiPM Connector J1, CLP-6	
#	***Name***
1	D+; cf Note 1
2	D−; cf Note 1
3	SiPM operating voltage (+)
4	GND; Ground
5	SiPM Anode
6	GND; Ground

Pinout of the SiPM connector; Note 1: The SiPM carrier board has an MMBT3904 NPN transistor connected as a diode (CB=D+ and E=D−). D+ and D− connect to an LTC2997 temperature-measuring IC.