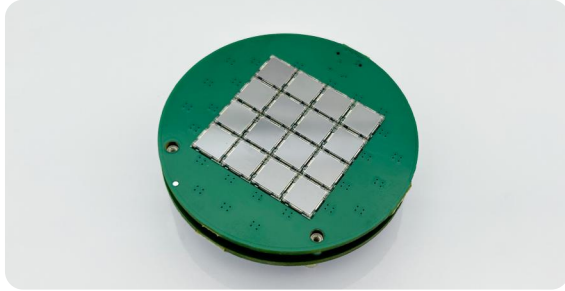


1. Overview

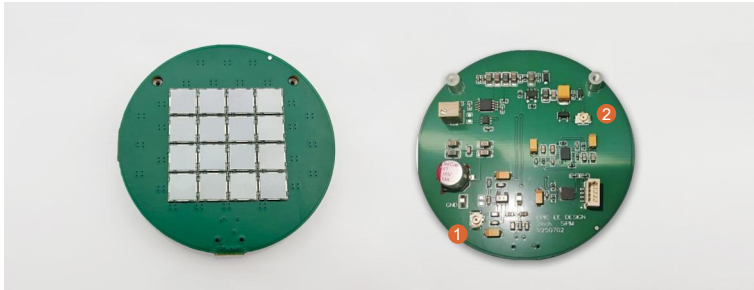


The 4x4-FC60035 spectrum probe module consists of a SiPM array and a SiPM readout module. The SiPM array consists of 16 independent FC60035 sensors arranged in a 4x4 array, connected via board-to-board connectors. The SiPM readout module integrates power supply, summing circuit, and amplification circuitry.

2. Main technical parameters

▶ SiPM Model	ONSEMI FC60035, 4chip
▶ SiPM Dimensions	Active area of single chip 6.0 mm × 6.0 mm
▶ SiPM operating voltage range	+24 V to +31 V
▶ Power supply	+5 V
▶ Overall Dimensions	about Φ55 mm × 14 mm
▶ Power Consumption	less than 200 mW

3. Outline Dimension



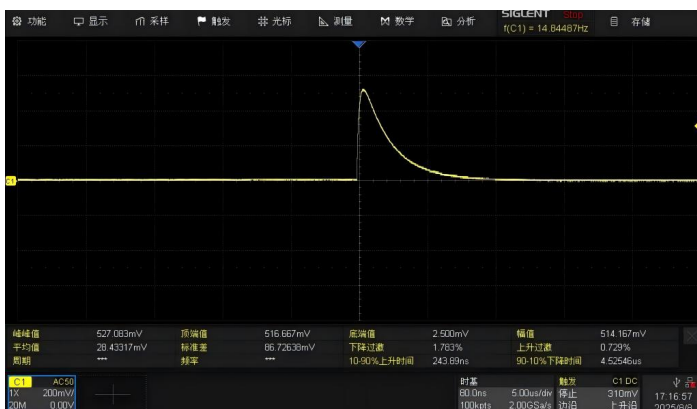
Pin definitions

Pin No.	Connection	Description
①	Signal output	Output positive amplification signal, less than +5V
②	Power supply	+5V power input

4. Test

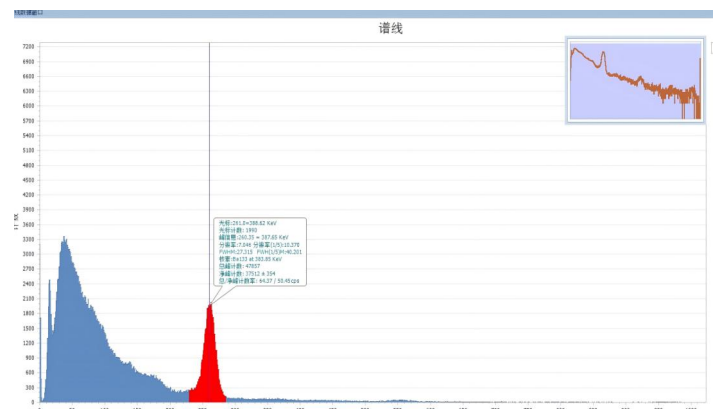
The energy spectrum probe module is coupled with a 2-inch NaI crystal, and a +28 V bias voltage is applied. The input impedance of the oscilloscope is 1MΩ. Test the waveform and energy spectrum output.

• Waveform Test



Output signal waveform, the oscilloscope input impedance 1MΩ

• Spectrum test



Energy Resolution: 7.046% @662keV-Cs137