32CH-DSP APN532

Digital Signal Processor for γ-ray Spectroscopy

MADE IN JAPAN

NIM

APN532 is a high density multi channel digital signal processing (DSP) of 32 CH. It carry a ADC of resolution of 14 bit・50 MSPS. APN532 is best used as a multichannel gamma-ray spectroscopy, because it has histogram mode and list mode. The application has a auto pole zero cancel. Therefore, it can collect the data comfortably.

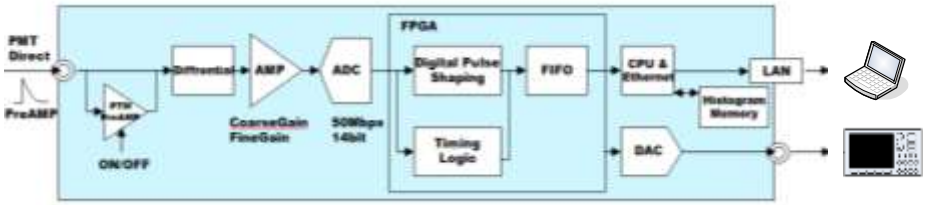
- **Channel** 32 CH
- **Mode** Histogram, List
- **Multi function** Built-in PMT preamp, Input and output DAC for filter waveform, Automatic pole zero cancelation
- **Dimension** NIM-standard single-width module
- **Interface** TCP/IP
- **Option** UDP data transfer
- **Software** Application, Hard, Software, and Manual

APN532 (Front)

APN532 (Rear)

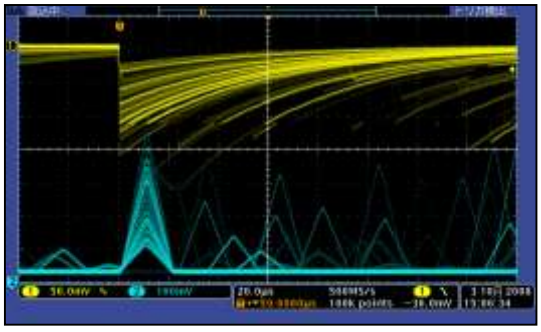
Overview

APN532 is a radiation measurement system equipped with a high density multi channel digital signal processing (DSP) of 32 CH. It has a preamp for PMT. Therefore, there is a choice between direct input from PMT or input from outside preamp. The signal become processed to digital signal processing by ADC (14 bit・50 MHzSPS) and high-density FPGA. The measurement data have a histogram, and will be transferred to PC via network (TCP / IP). An application is a standard accessory.



Specifications

Analog Input	32 CH
Preamp for PMT	Built-in
Input Impedance	1kΩ
Coarse Gain	x2, x4, x10, x20
Fine Gain	x0.5 ～ x1.5
ADC Input Signal	±1V
Sampling	50MSPS
Resolution	14bit
ADC GAIN	8K, 4K, 2K, 1K, 512, 256 ch
Trapezoidal Filter	0.25, 0.5, 1, 2, 4, 8 μs
Digital Baseline Restorer	Yes
Digital Pileup Rejecter	Yes
Digital Corse Gain, Fine Gain	Yes
Automatic Pole Zero Cancel	Yes
Interface	Ethernet (TCP / IP)
External dimensions (Unit: mm)	NIM-standard single-width module 34(W) x 221(H) x 249(T) (without connector)
Weight	About 1000g
Environmental condition	Operating temperature: 0～40℃, No dew condensation



Output DAC（Upper：Preamp, Lower：Trapezoidal filter）

*Images is for illustration purpose.
*Please note that contents may change without prior notice.

TechnoAP

Design and fabrication of electronic circuit associated with measurement control and radiation measurement

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