

## Description and Photography

### Time and Amplitude Recorder, 2ch. version

- Two dimensional measurement system.
- Records time data and pulse height data for input pulses at each channel.
- Use ADC for pulse height measurement with sliding scale logic error correction.
- Use high speed synchronous 28bit counter measuring the pulse input time
- ADC: Device has 16bit resolution and 12bit data is used in this system.
  - : Conversion processing time is less than 1usec.
- Timer: 100MHz oscillation will be counted by 28bit counter. speed
  - : So the period will be  $2.68435456\text{sec.}(2^{28} * 10^{-8})$  at 100MHz
  - : Time Marker will be added at each time period.
- Memory: 128MByte DRAM.
  - :At 12bit ADC data + 28bit time data, resulting data width is 40bit(5byte)/one input pulse.
  - :If the system has pulse input of 5000 counts/sec on the average,  
It needs memory space  $5000 * 5 = 2.5\text{kbyte/sec}$   
By 128MByte DRAM, you can measure 51200seconds(=14.2 hours)
- Phical Dimension: 2-width NIM Module
- Interfacing to PC :USB.



Photography of the same series. The photography seen in left is 3-channel version. To be Supplied goods is 2-channel version with some changes, eliminations of some useless functions seen in the front panel.