Quick Board Test Stand

Goal

Quick Board Test Stand intends for the **quick test** of the 16 channel anode amplifier-discriminator boards. The stand determined the quality of the boards.

System Requirement

Windows NT, Windows 95

Program Measurement Capability

The program show problem for the each channel on the board.
(Suppose that all chips are tested before soldering on the boards.)

Equipment List

Each item was numbered according Hardware Scheme, Fig. 1.

1. CAMAC Crate.
2. LE32C, 32 channel LVDS/ECL Level Converter
   with two Channel Pulse Generator.
3. LeCroy 32 channel TDC 3377, Time to Digital Converter.
4. DSP 6002 CAMAC Crate Controller.
5. PC004 IBM PC/XT/AT ISA Plug-in Card.
6. 32 channel Charge Injecting Adapter.
7. Personal Computer.
8. Two 20 twisted pair cables, 40 wires.
9. Two 17 twisted pair cables, 34 wires.
10. One twisted pair cable, 2 wires.
11. Flat cable, 40 wires.
12. Two lemo-lemo cables, 50 Ohm.

Quick Chip Test Stand

Goal

Quick Chip Test Stand intends for the **quick test** of the 16 channel anode amplifier-discriminator chips. The stand determined the quality of the chips.

System Requirement

Windows NT, Windows 95

Program Measurement Capability

1. Efficiency (Threshold) Measurement.
2. Delay Time Measurement.
3. Calculate raw data to select “bad” chips.
4. Visualize the measuring and calculating processes.
5. Save raw data.
6. Save the calculated parameters for the each channel of the chip.
7. Save the summary parameters for the each chip.
8. Save parameters of the “bad” chip (channel).

Equipment List

See Equipment List for Quick Chip Test Stand.

Final Test Stand

Goal

Final Test Stand intends for the **full test** of the 16 channel anode amplifier-discriminator boards.

System Requirement

Linux

Test Stand Measurement Capability

Test Stand will measure 10 boards (chips) at once according to a program of the measurement and write raw data for the each measurement.

1. Efficiency Measurement for few values of the thresholds.
2. Delay Time Measurement.
3. Calculating raw data to select “bad” chips (boards).
4. Visualize the measuring and calculating processes.
5. Save raw data.

Equipment List For Final Test Stand

1. CAMAC Crate.
2. LE32C, LVDS/ECL Level Converter – 6 ps.
3. LeCroy 32 channel TDC 3377 – 5 ps.
4. Jorway 73A CAMAC Crate Controller.
5. AHA-2940AU PCI SCSI Card.
6. 10 Boards Charge Injecting Adapter.
7. Byte Blaster (control through LPT Port)
8. Personal Computer.
9. Ten 20 twisted pair cables, 40 wires.
10. Ten 17 twisted pair cables, 34 wires.
11. Five one twisted pair cables, 2 wires.
12. Jorway Model A5560-4 cable, SCSI connectors.