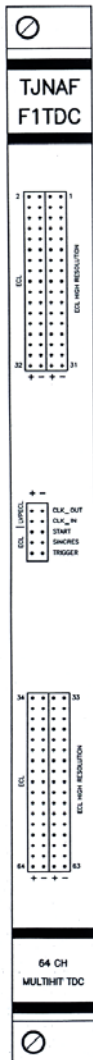


Hall C Upgrade DAQ

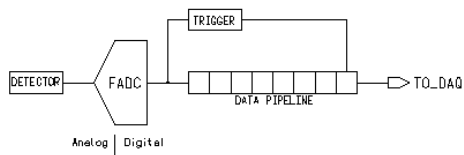
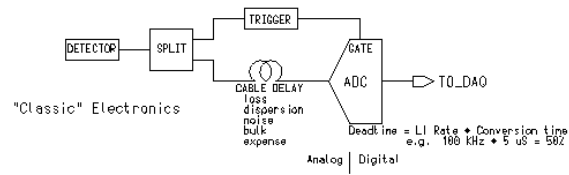
- Plan for >10,000 events/second
 - Run coincidence with single arm trigger
 - Because we can
- Moderate on-line analysis farm
 - Filter data before “Tape” (RICH analysis?)
 - CODA developing on-line farming
- Move to pipeline multihit TDC's *and* ADC's
 - No more delay cables!!!
 - Coincidence setup easier
 - VME
 - TDC choices nearly exist. 60 ps LSB
 - Hall D ADC ideas should be promoted

Jlab Multihit TDC



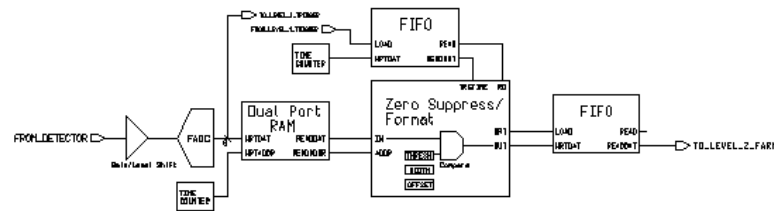
- Inspired by Hall D
- Functionally like Fastbus 1877
- ECL inputs
 - 64 Channels @ 120ps LSB
 - 32 Channels @ 60ps LSB
- Standard + higher speed VME
- Fully designed
- First board soon
- Timing for all PMT's + Wire Chambers

ADC development



"Pipeline" Electronics

Hall D
December, 1999

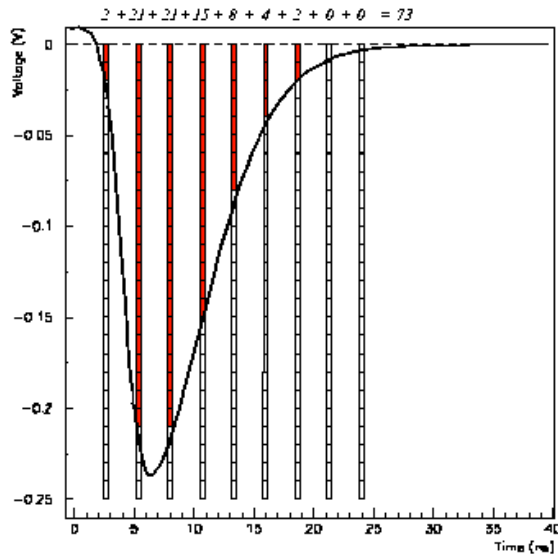


Flash ADC Data Pipeline

Hall D
December, 1999

ADC Prototype

Pulse Digitization



- 250 MHz/8 bit FADC
- Simulate lead glass with FEU84-3 tube. (slow)
- Resolution of ADC exceeds intrinsic resolution of glass
- IU building single channel PCI prototype
- Is resolution sufficient for JLAB hodoscopes and calorimeters.
- Electronics group could develop general purpose board.