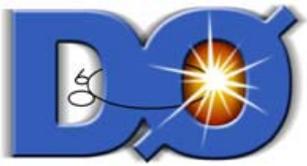




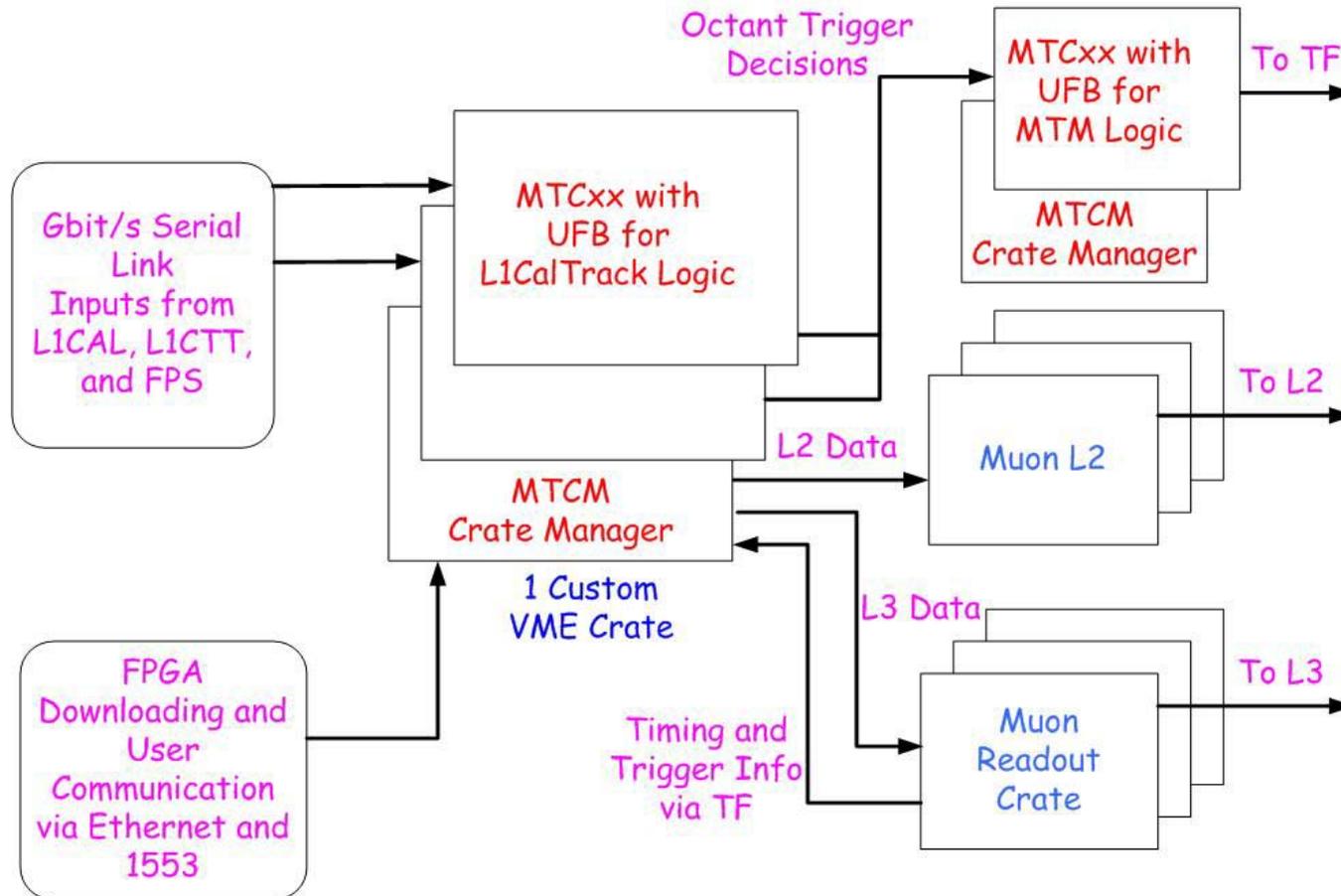
Commissioning the L1CalTrack Trigger

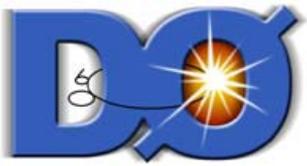
Kenneth Johns
University of Arizona



L1CalTrack Trigger Overview

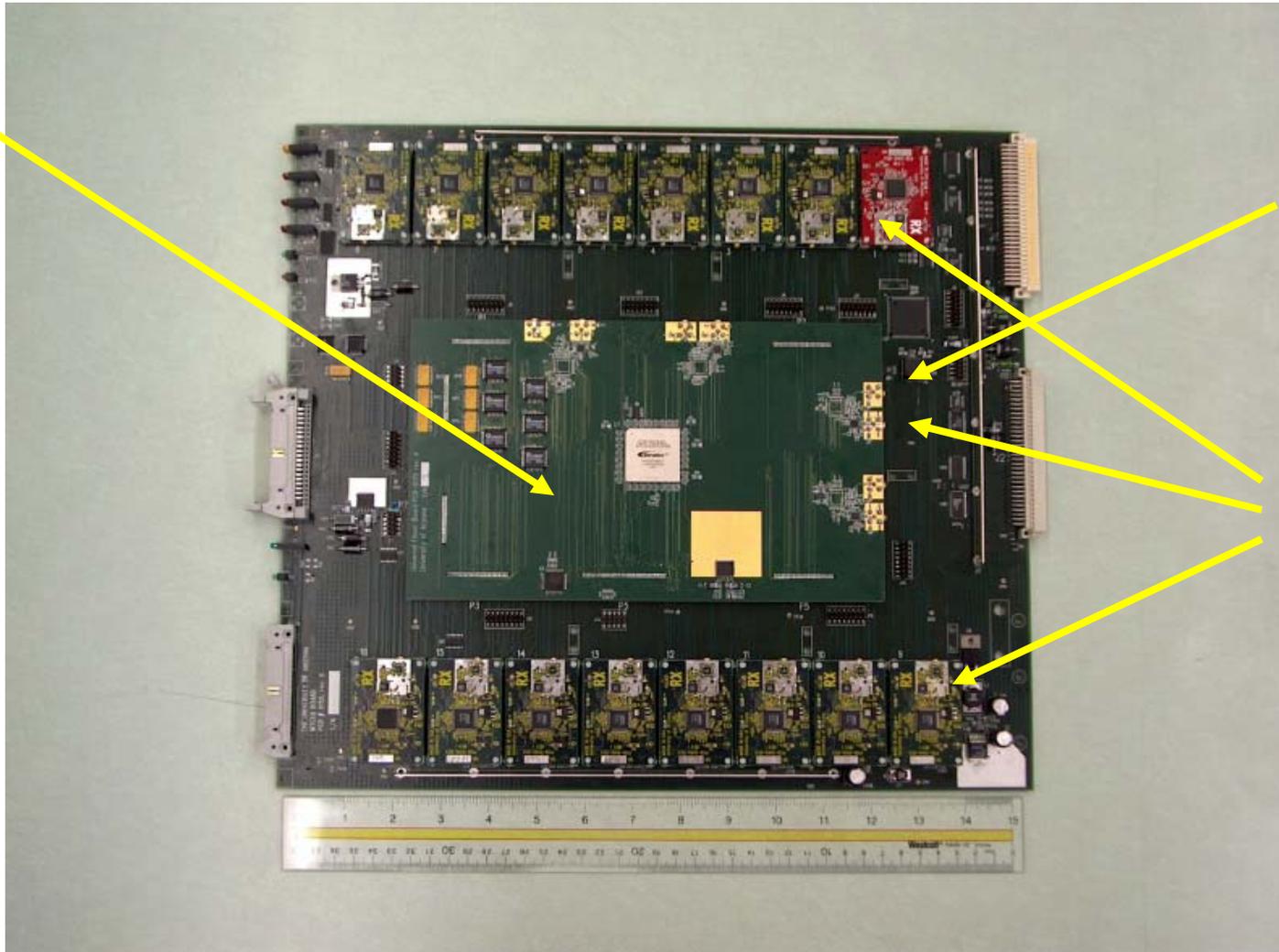
L1CalTrack Trigger System





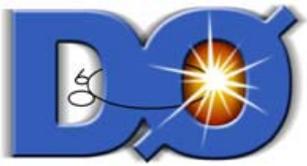
Preproduction MTCxx with Prototype MTFB (no tail)

MTFB

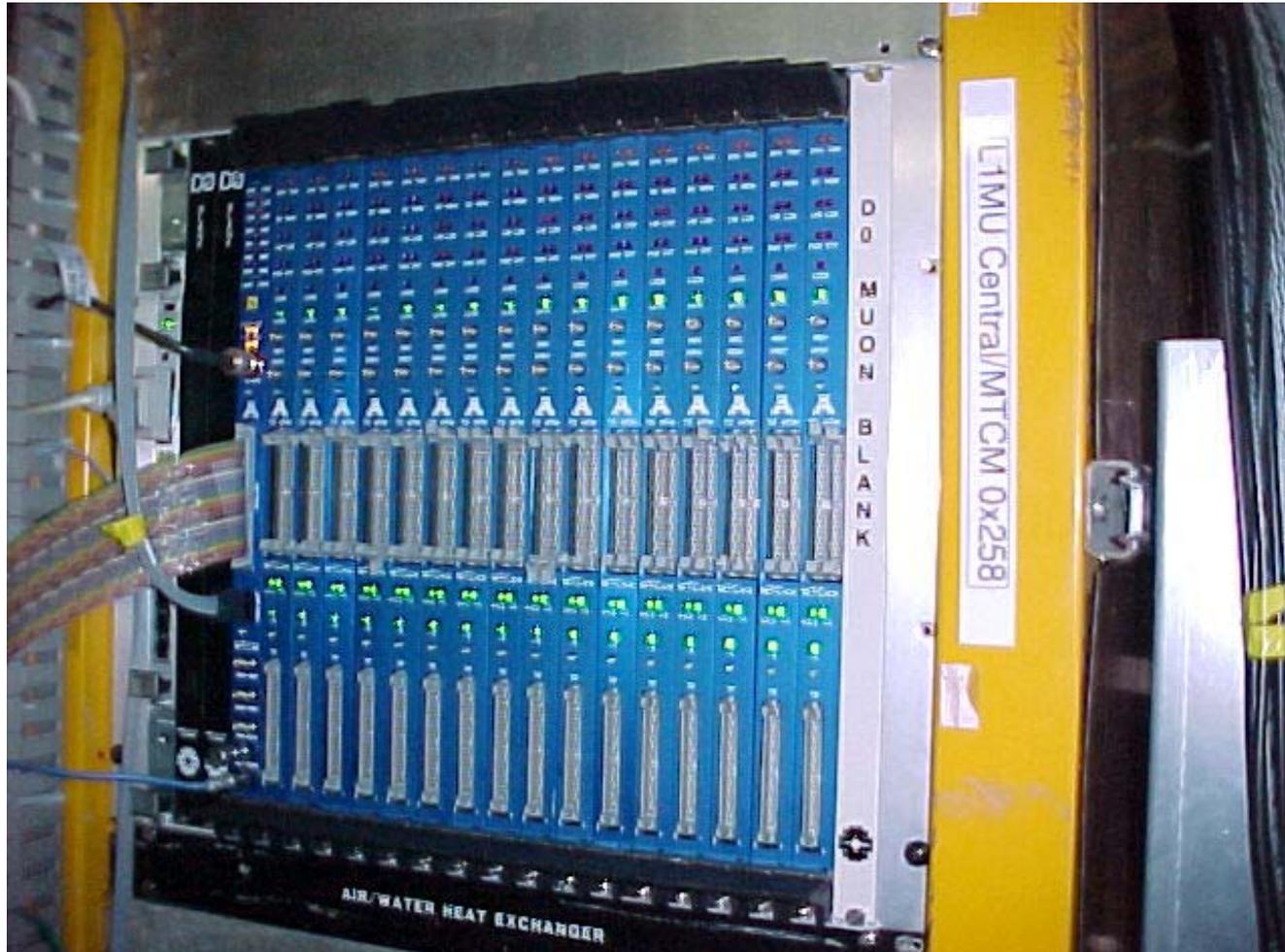


Gbit/s
XMIT

Gbit/s
RECV



Follow L1MU Successful Commissioning Procedure



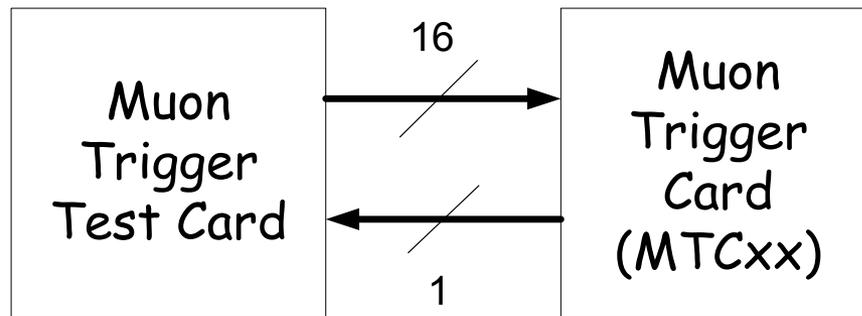
5/4/2004
Some D0 meeting

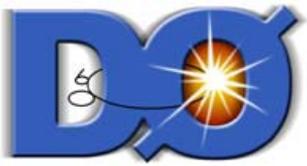


Commissioning Steps

- Step A

- ◆ JTAG boundary scan testing
- ◆ Test stand commissioning which includes testing of inputs, MTFB, buffering, and L1-L3 outputs





Commissioning Steps

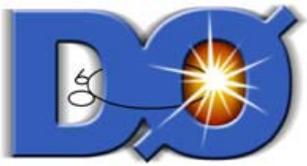
- Step B
 - ◆ Generate BOT triggers to TF
 - ◆ Readout L1CalTrack crates to L3
 - Use spare inputs from L1MU
 - Use spare L1MU cards
 - ◆ Some of the infrastructure is already in place
 - ◆ If we can accomplish Step B this summer we will be in excellent shape
 - But it's a lot of detailed dirty work
- A successful Step B means we are integrated into the experiment



Commissioning Steps

- **Step C**

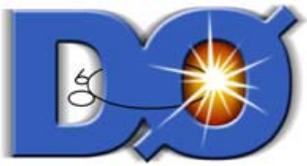
- ◆ Repeat Step B with L1CalTrack hardware (MTCM, MTCxx, UFB)
- ◆ The source of any problems must be the new cards since the infrastructure was tested in Step B



Commissioning Steps

- Step D

- ◆ Repeat Step C using inputs from new L1CTT and new L1CAL
- ◆ The source of any problems must be the new inputs since the L1CalTrack cards were commissioned in step C
 - Compare our L1CTT-only triggers with L1CTT triggers
 - Compare our L1CAL-only triggers with L1CAL triggers
- ◆ At this point we could begin to take special run data to look at various L1CalTrack triggers



Commissioning Steps

- Step E





Conclusions

- A first version of the L1CalTrack commissioning doc has been produced
 - ◆ Commissioning steps
 - ◆ Infrastructure tasks
 - ◆ Software tasks
- Big issues are
 - ◆ Power supply replacement in 3rd floor MCH for Step B
 - ◆ PDT FEB modifications
 - ◆ AND/OR terms
 - ◆ Person-power in 2005