Ethernet Daughterboard

Status Report

E. Hazen, E. Kearns, J. Raaf, S.X. Wu

Boston University
Current Status

• Eric and Jen will go to Kashiwa Monday
  – for integration tests of DB with ATM
• DB Working with TKO R/W operations
  – Only tested on BU tester but should work on ATM as well
• Small changes in TKO spec understood
  – (polarity of some signals)
• 1 DB and 1 tester in Kashiwa already
• Software almost ready (spec sent)
Goals for Integration

- Mate DB with ATM, ensure power supplies and basic operation are OK
- Test TKO read/write of registers
- Test data readout of ATM events
  - Check that data is correct
  - Measure performance
- Test for pickup noise from DB
- Anything else?
Software I

• Command-line diagnostic tool
  – Connect to specified <ip_addr> <tcp_port>
  – Execute interactive commands:
    • Read UDP, Write UDP
    • Program flash memory
    • Configure FPGA from flash memory

• Available here:
  • http://ohm.bu.edu/cgi-bin/superk/Ethernet_Software
Software II

• Library
  – EthOpen(), EthClose()
  – EthTKOSingle()
    • Perform single TKO read/write, return Q*, YSSIR*
  – EthUDPRead(), EthUDPWrite()
    • Read/write local register on DB

• Specification on web

• First release should be ready today (28 Sept)