Update on the CN based Event Builder

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• test of the new CN
• change from UDP to Aurora
• status of the event builder
• TRBnet data generator current and future
• 8 new CN arrived at Gießen
  - 5 for Belle II
  - 3 for Panda + 2 obtain back from Belle II
• tested following parts (mostly done by Björn Spruck)

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x-rayed the defect boards:

- Short a the connection of flash of board #4
- Short a the connection of flash of board #5
- Short a the connection of RAM of board #2

try to fix them in Gießen
If not possible, we have to send them back to IHEP
μTCA

- 1 xFP v3
  - 4 Inputs 3.125Gb/s
  - 1 Output Gb-Ethernet

MicroTCA.0 System, Cube(Schroff)
Including one xFP and 1 MCH

Kontron AM4901 MCH

CP xFPv3
• change from UPD → Aurora
  – Because of the Ethernet MAC
• not needed by using Aurora
  – Easier for the CN
  – Problem: not easy to implement on TRB3
• change back to UDP
  – Grzegorz Korcyl managed yesterday

Schematic of the xFPv3
• Tested burst builder:
  • Simulation using ISIM
    • Test bench 2 inputs
      • Ok
    • Test bench 4 inputs
      • Loose sometimes last word
        • Due to a wrong assignment of the LL-interface
  • TRBnet data generator 2 inputs
    • Ok

• On hardware:
  • 2 inputs UDP
    • OK
  • 2 inputs TCP/IP
    • 3 times the data
      • work in progress
• TRBnet data generator: currently
  • x inputs
  • random data
  • sbn = counter
  • the probability which of the input is used or if more are used, is equally distributed
  • generates the input files and the output files for comparison
• TRBnet data generator: future (Bachelor theses Christopher Hahn) 
  • using Panda-root
Thanks for your attention