

# **TRG**

# **Follow-up Report**

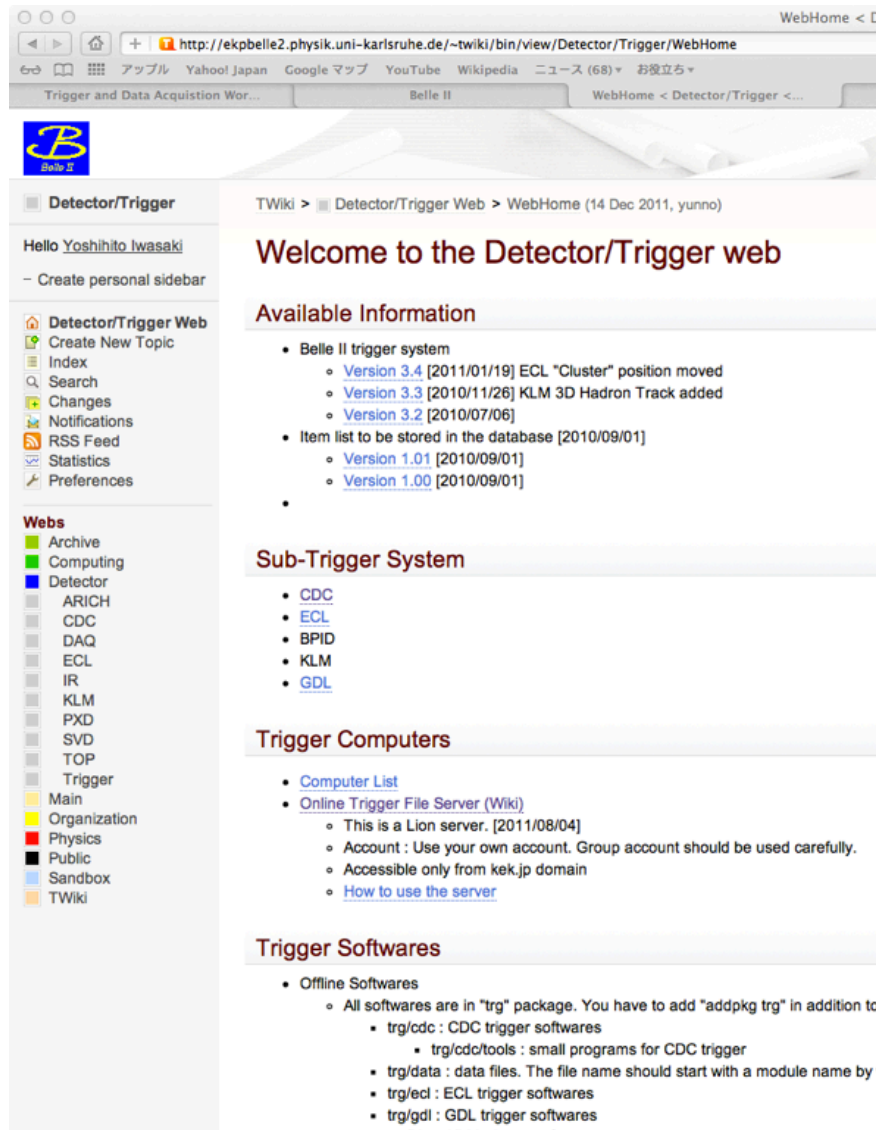
Y. Iwasaki

2012/01/19

TRG/DAQ Workshop

@ Univ. Hawaii

# TRG Information on Net



## ● Belle2 Trigger TWiki

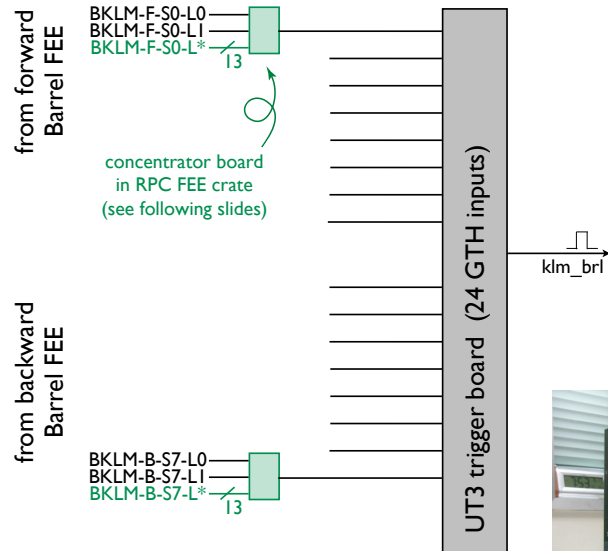
- General purpose
- General pictures
- Sub-trigger information
- Trigger software (TSIM)

## ● Trigger File Server

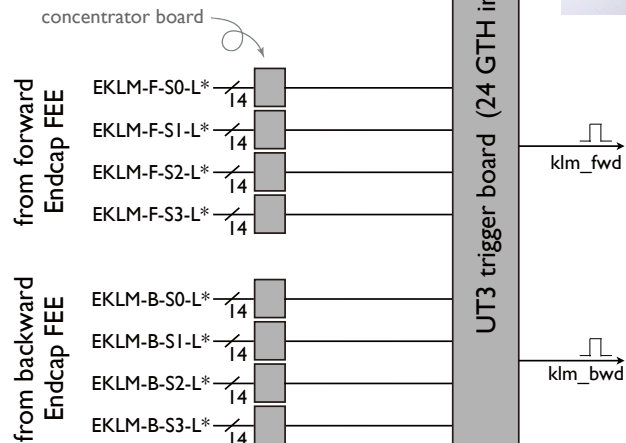
- Private purpose
  - Open to TRG/DAQ people only
  - Accessible only from kek.jp domain (use VPN if you are outside)
- <http://btrgmac4.kek.jp/wiki/projects>
  - You need an account on btrgmac4 ... Ask Iwasaki to get an account
- Documents of hardwares
  - UT, UT2, UT3, etc
  - Circuit diagrams, layout, parts list, etc
- SVN for firmwares
  - ISE project files
- Backup server for TRG PC

# KLM Trigger

Barrel concentration is done in the RPC FEE crate



Endcap concentration is done in a new board



Documents - Universal Trigger board 3 gamma (UT3g)

http://btrgmac4.kek.jp/wiki/pages/s835r3V5u/Universal\_Trigger\_board\_3\_gamma\_UT3g

Wiki Documents Universal Trigger board 3 gamma (UT3g)

☆ Universal Trigger board 3 gamma (UT3g)  
 アップデート日時 2011/9/22 / 午前 09:14 ユーザ 岩崎 義仁

**Log Book**

**Main Board**

- Circuit diagram (Japanese)
  - 071-110301A-CA-060\_110...
- List of parts (Japanese)
  - 071-110301A-CB-060\_110...
- Layout
  - 071-110301A-FB-000\_mai...

**GTX Daughter Board**

- Circuit diagram (Japanese)
  - 071-110301B-CA-012\_110...
- List of parts (Japanese)
  - 071-110301B-CB-011\_110...
- Layout
  - 071-110301B-FB-001\_gtx...

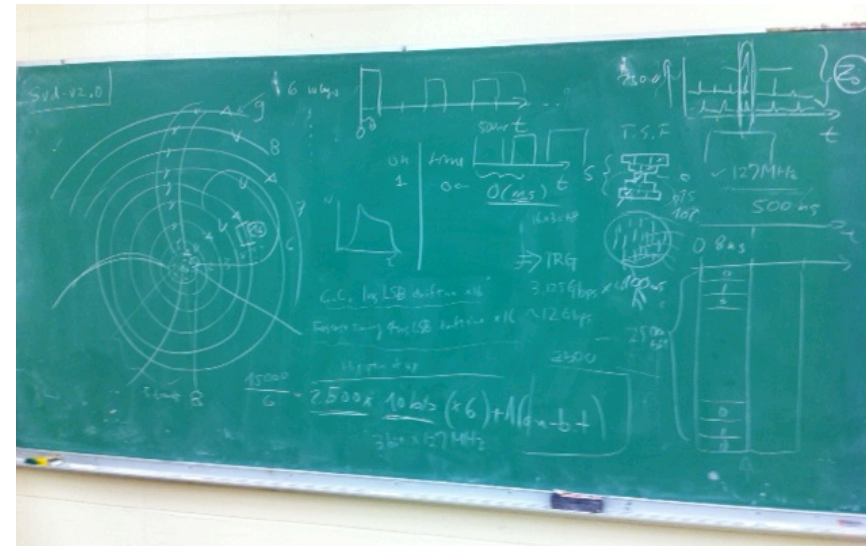
**LVDS Daughter Board**

- Circuit diagram (Japanese)
  - 071-110301C-CA-030\_110...
- List of parts (Japanese)
  - 071-110301C-CB-030\_110...
- Layout
  - 071-110301C-FB-000\_lvd...

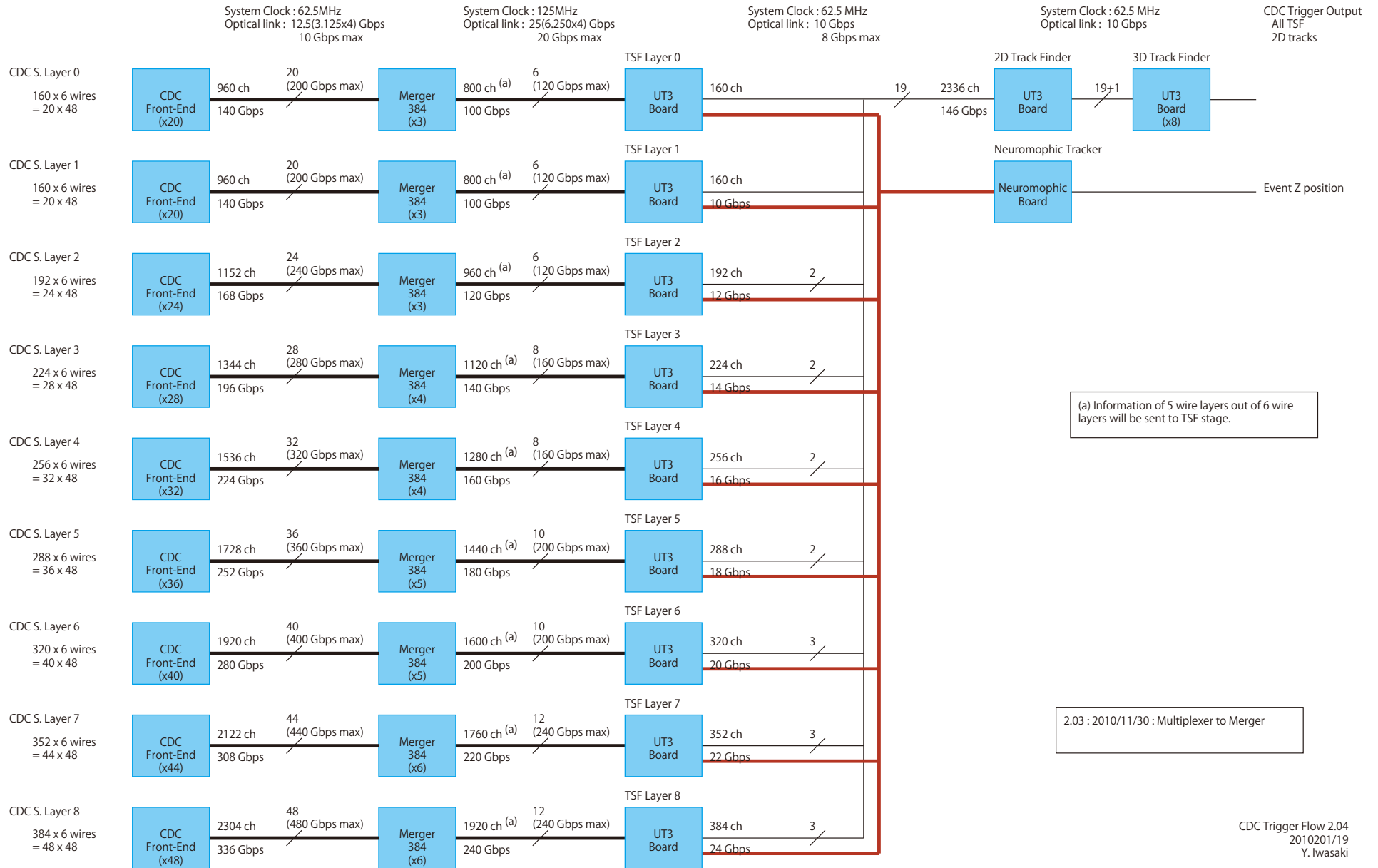
● UT3 will be send on April 2012

# CDC Neuromorphic Tracker

- **Timing information of one wire layer/super-layer will be sent**
  - 9 wire layers : about 2500 wires
    - Same tracking condition with present 3D tracker
  - Data to be sent : hit map of 2500 wires in a every system clock (127MHz)
- **Matched with the existing CDC trigger data stream**
  - No hardware modification
  - Adding one output to a Track Segment Finder
    - 9 TSF -> 9 optical output to Neuromorphic board
    - Need to fix link speed, optical connector, protocol, etc.
- **Simulation study**
  - Can be simulated in present TSIM



# CDC Neuromorphic Tracker



CDC Trigger Flow 2.04  
2010201/19  
Y. Iwasaki