

Belle2link Status

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TrigLab, IHEP/Beijing
Belle II Trigger & DAQ Workshop, 5-7
September 2016

Outline

- Belle2Link firmware update
- Status of HSLB mass production
- Some news about Belle2Link integration
- summary

Belle2Link firmware update

- Problem reported: Corrupted data related to Belle2link data header.
 - Effort in Belle2link itself did find hint in Beijing
 - Effort at KEK (email from Nakao)
 - belle2link: there was a long standing problem in the ECLTRG Belle2link readout that header is broken and read as 0xffffffff 0xffffffff 0xffffffff2. It happens when the trigger interval just happens to be around the end of a Belle2link transaction. It turned out to be a bug in the "ttnext" signal timing and it should be fixed now. (I thank and apologize Sunghyun Kim for reporting this and taking such a long time to fix.)
- Basically the problem is solved

- More problem?
 - No error report in Belle2link discussion.
 - We will see if some report from this workshop

Status of HSLB mass production

- 120 HSLBs produced this year.



Status of HSLB mass production

- 120 HSLB delivered to KEK in March 2016.



Test Results Statistics

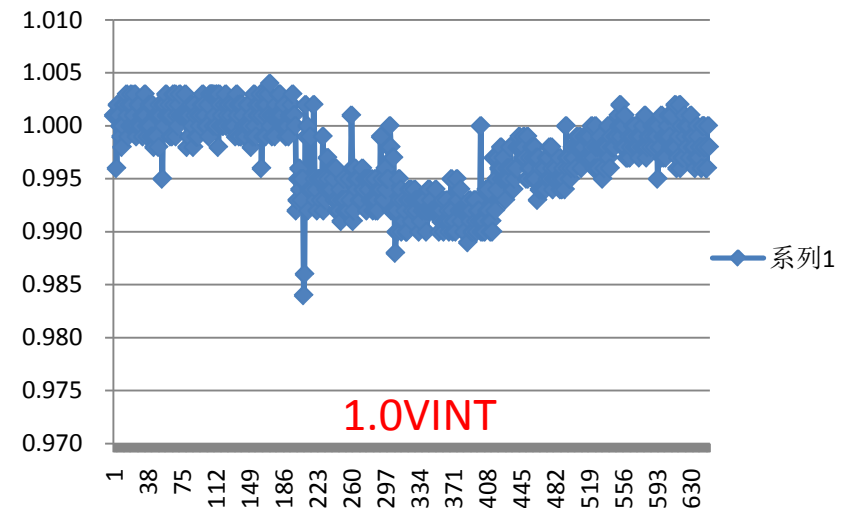
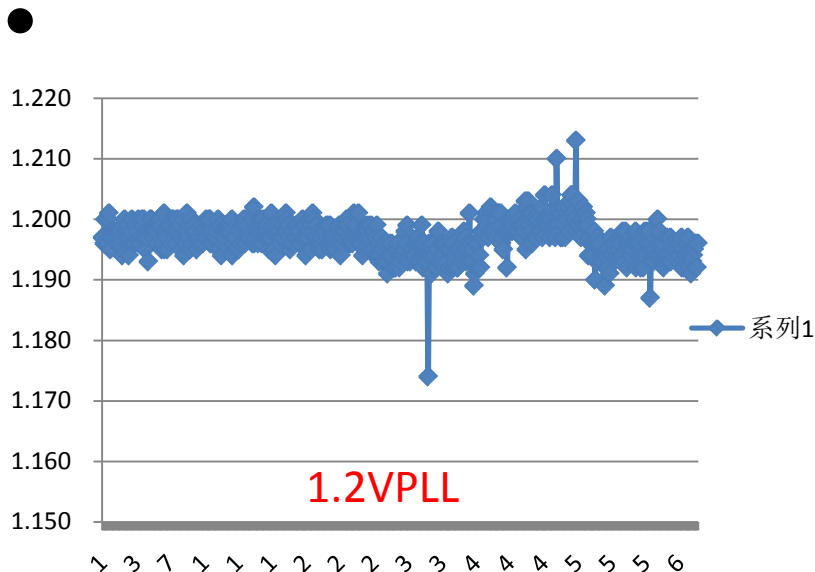
Item	Total Number	Test result/Remark
FPGA JTAG Downloading	120	√
Platform Flash JTAG Downloading	120	√
CPLD Downloading	120	√
FPGA Auto Programme by Flash	120	√
MGT Fiber loopback	120	√

Long time testing

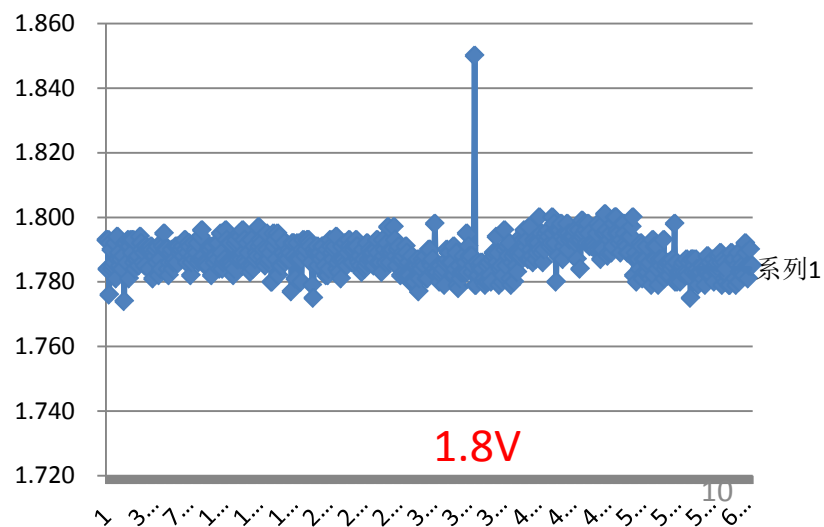
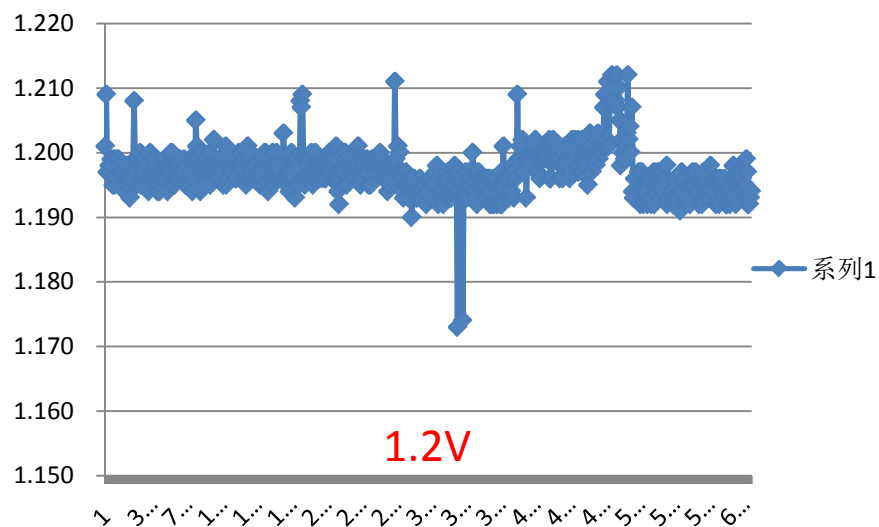
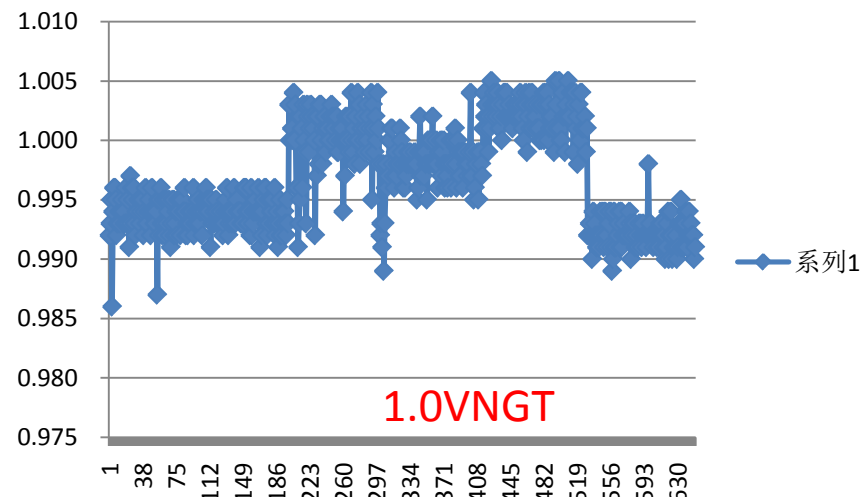
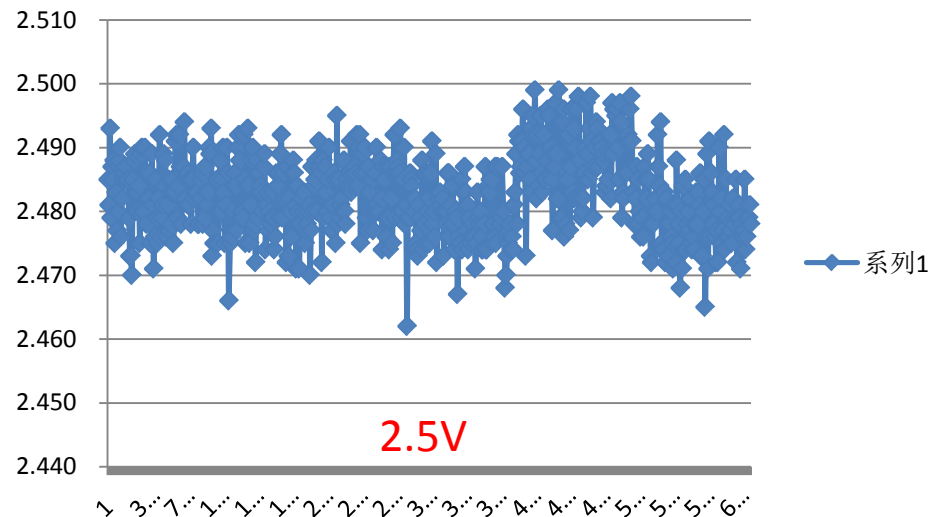
- 8 boards random selected
- TX->RX Loopback tested
- 70 hours
- Results
 - No error found
 - $BET < 10^{-15}$

Statistics for whole mass production

- 730 boards produced in total
 - 2012 produced 80 boards(data not included);
 - 2013 produced 300 boards;
 - 2014 produced 230 boards;
 - 2015 produced 120 boards;



Some results for whole mass production

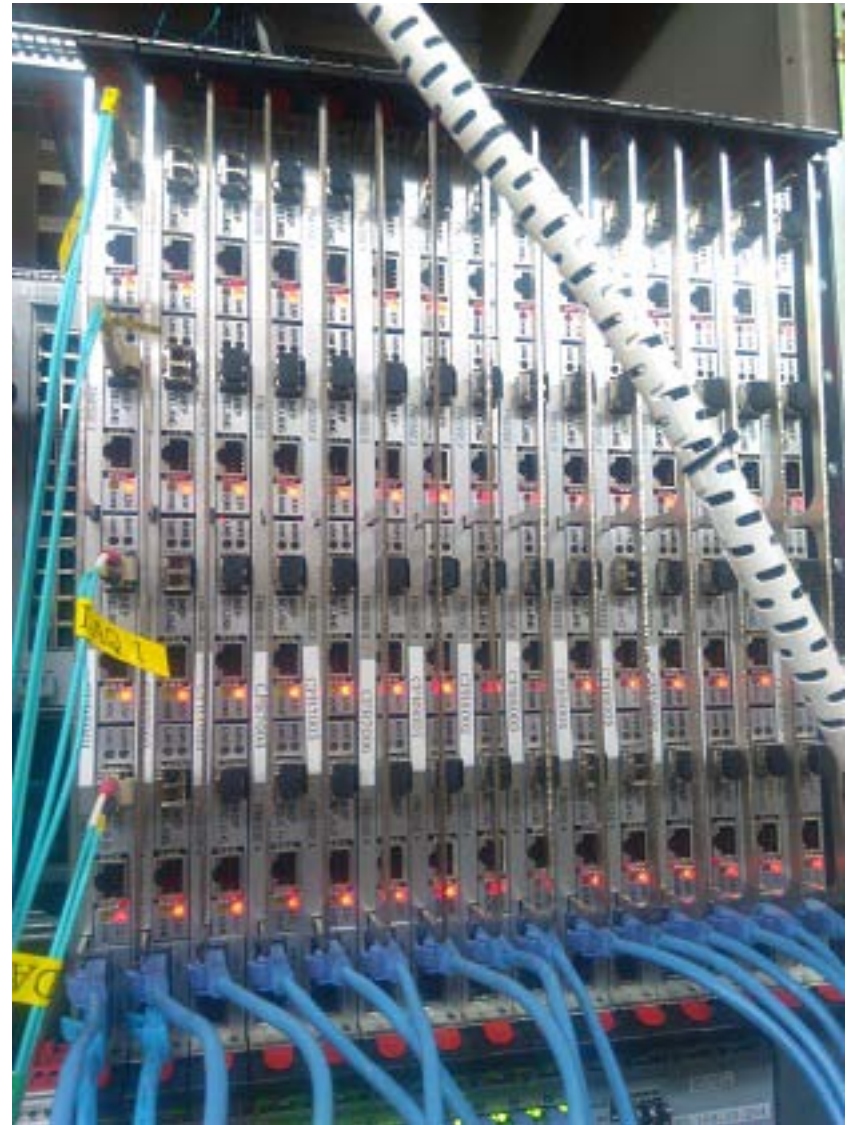


Status of Belle2Link integration

- A lot effort has been made by KEK/DAQ Group, which will be reported by others. Here are some pictures taken in February 2016



Tests/Integration at KEK



Summary

- Waiting more reports of problems from this workshop
- Production of all HSLB are finishes this year
- Test/Integration are on going at KEK