

In-kind project IIK 14.4.3

Quarterly Meeting

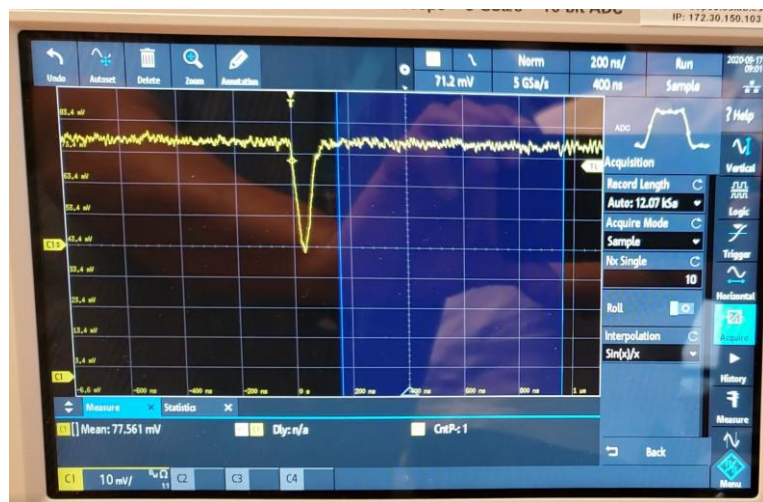
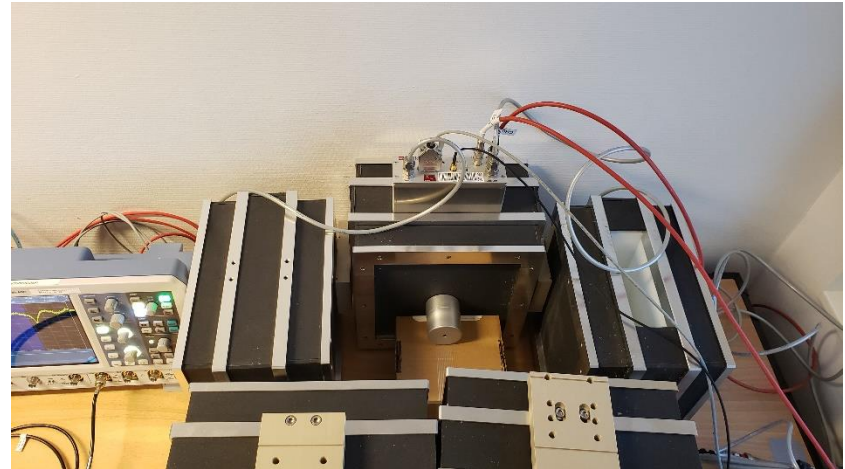
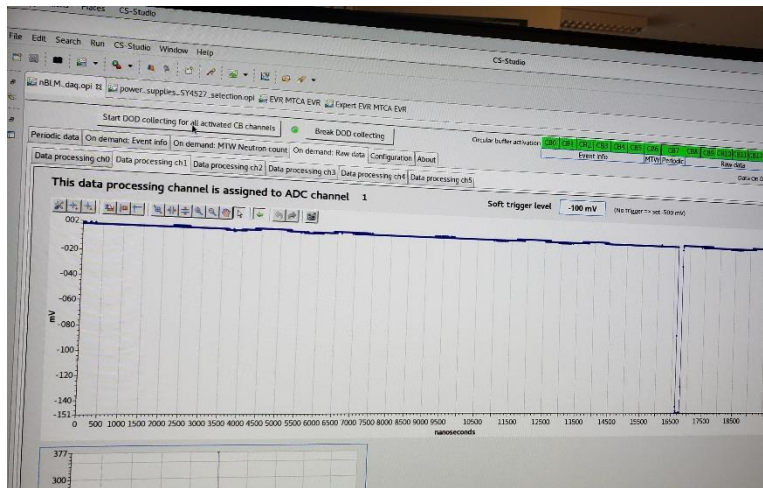
Integrated Control Systems

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ESS/ICS
Date: 2020-10-07

xBLM Status

- CEA Test in BI Lab



xBLM Status

- CCT AMG6x CPU (aka “new cpu”) working with IFC1410:
 - DMA burst operation failure with CT-CPU AMG6x
 - Lodz firmware does not run...
 - <https://jira.esss.lu.se/browse/ICSHWI-3657>

Fixed.



xBLM Status

- Boot issues when using multiple IFC1410 in a crate – Status: **solved**.

➤ <https://jira.esss.lu.se/browse/ICSHWI-3010>

 Ross Elliot added a comment - 2019-Nov-29 10:45 +0100

UPDATE: Thanks to support from Concurrent engineers, the issue with accessing multiple IOxOS IFC14xx devices from a single root-complex Concurrent CPU has been traced to the I/O BAR size being specified in the PCIe endpoint IP.

IOxOS were specifying 8K of I/O resources per card.

An Intel CPU can only allocate a **maximum of 64K** of I/O resources, and the CCT CPU card requires a little more than 16K of that resource itself.

This leaves less than 48K of I/O resource to be shared amongst all the downstream PCIe resources.

- Tosca Turbo 2.3.x Performance evaluation

➤ <https://jira.esss.lu.se/browse/ICSHWI-3950>

▼  Grzegorz Jablonski added a comment - 2020-Apr-28 19:27 +0200

Hello Cédric,

Now I do not have FIFO overflows. Perfect. But not only in mode 3, but also in mode 0.

Regards,

Grzegorz

▼  Cedric Gaudin added a comment - 2020-Apr-29 10:12 +0200

Hello Grzegorz,

Now only mode 3 will forbid request on other ports. I just made a small modification.

Regards,

Cédric

▼  Grzegorz Jablonski added a comment - 2020-Apr-29 20:42 +0200

Hello Cédric,

It works.

Regards,

Grzegorz

xBLM Milestones

- New CPU migration
- Full Yocto migration
- [ICSHWI-1662](#) - IFC1410 AXI Framework
- [ICSHWI-5405](#) – Power up calibration
- [ICSHWI-5358](#) - nBLM Verification procedure
- [ICSHWI-5364](#) - [IFC14XX] ADC Firmware Simulation
- Evaluate CEA nBLM EPICS application with DMA turbo (tested with bitstream v0.71).