



LHCb Upgrade Electronics

Introduction



New mailing list:

lhcb-upgrade-electronics@cern.ch

Please subscribe using SIMBA system at:

<http://listboxservices.web.cern.ch/listboxservices/>



Architecture & Sub-detectors

Details of architecture under study:

draft document in preparation

eg synchronisation, buffering schemes to be studied

Initial fruitful discussions with all sub-detectors have taken place

Some engineering manpower has been identified

..... more is needed

Will ask for some presentations at next meeting



Common Projects

Work packages on common R&D for future detectors.

Of particular interest to LHCb:

WP1: "Rad-hard technology & common building blocks" ~ 3+ years
support for ASIC designs, IP blocks

WP2: "On-detector power management" ~ 3 years
DC-DC convertors, on-chip regulators

 WP3: "Radiation-hard optical link" ~ 4 years
qualified optical components, GBT chip-set

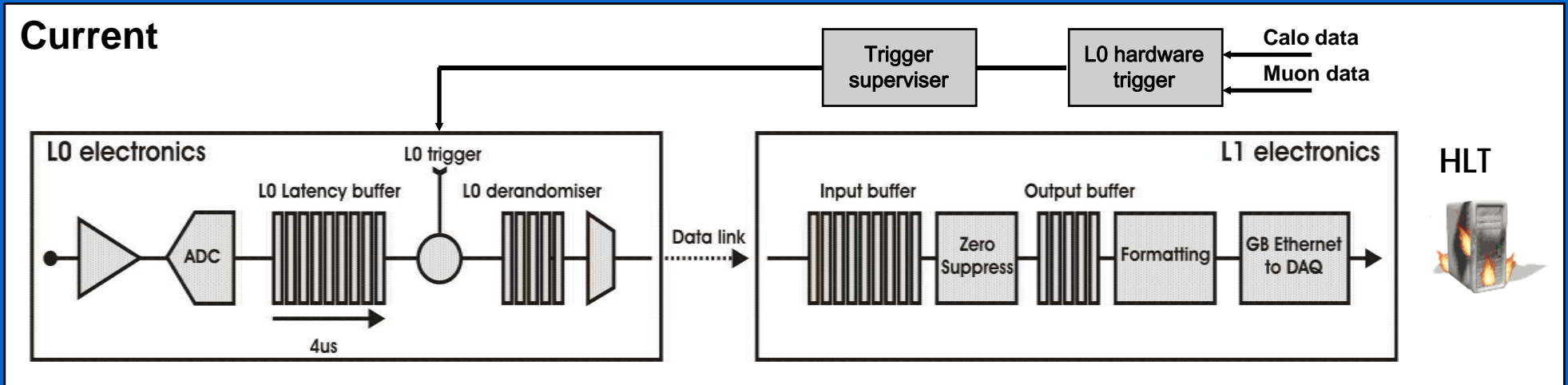
WP6: "Interconnect Technology and Quality Assurance"
module reliability, bump-bonding

Status report:

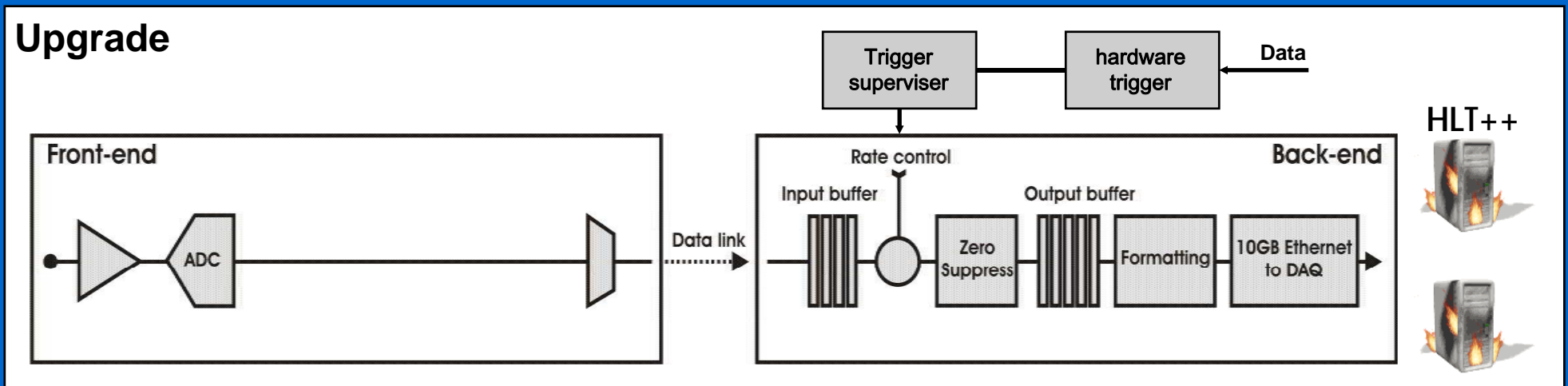
<http://ph-dep.web.cern.ch/ph-dep/InfoCommunication/FM/FM04Nov08/Linssen.pdf>

Current vs Upgraded Electronics Architecture

Current



Upgrade



Read out data from every bunch crossing