



LHCb Upgrade Electronics

Meetings in 2015 (Thursday, 2pm, 13-2-005):

8th October

3rd December

<http://lhcb-elec.web.cern.ch/lhcb-elec/html/upgrade.htm>

Mailing list:

Go to egroups.cern.ch, search for lhcb-upgrade-electronics

ALSO:

[cern-electronics](#) email group has a lot of activity



Common components

Updated version of GBTX manual

Many small (important) details added

Stay tuned for updates & give feedback

<https://espace.cern.ch/GBT-Project/GBTX/Manuals/Forms/AllItems.aspx>

Procurement on-going for:

GBTXs: wafers delivered, pre-production about to start

VTTx, VTRx, DC-DCs according to plan

VLDB + sundries: under test now..... Coming soon

But please note current shortage of VTRx.....

alternative is commercial SFP+

First version of chip:

Perfect digital functionality (also at 1.2V supply)

ADC is only '8-bit' & suffers from radiation

=> re-design chip, targeting end 2015

=> current chip can be used for prototyping

LHCb goal: test all front-end ASICs with GBT-SCA before its final submission

Firmware/software: see talk later

Use system with miniDAQ + VLDB in Building 14

Velo VeloPix does not communicate with SCA

UT SALT I2C already tested

RICH CLARO SPI already tested: levels to be decided

SciFi PACIFIC I2C to be tested

Calo ICECAL SPI to be tested (via FPGA?)

Muon nSYNC I2C/SPI to be tested