



# LHCb Upgrade AMC40 firmware

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FE data format news

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Mini DAQ news

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Agenda

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Next AMC40 firmware meeting

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## FE data format news

Since last AMC40 firmware meeting in October 9<sup>th</sup> when it has been showed that FE data format raised the issue of FPGA resources, we have organized data format meeting with each sub-detector which needed it:

- UT (October 17<sup>th</sup> and November 4<sup>th</sup>)
- RICH (November 20<sup>th</sup>)
- SciFi (November 28<sup>th</sup>)
- VELO (November 20<sup>th</sup>)

Data format of CALO and MUON was already known and OK.

→ Review of FE data format this afternoon



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## MiniDAQ news (1/3)

2 workshops were organized since last AMC40 firmware meeting in order to perform the integration of the code from the different AMC40 firmware developers.

1<sup>st</sup> integration meeting (1<sup>st</sup> week of November):

- definition of the simulation architecture
- adding of the hdl files in GIT
- writing of the scripts
- Integration of all the code together to perform a global simulation
- first global simulation



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## MiniDAQ news (2/3)

2<sup>nd</sup> integration meeting (1<sup>st</sup> week of December) :

- Definition of the MiniDAQ firmware architecture
- Adding of the hdl file in GIT
- Writing of the scripts
- Integration of all the code together to perform a Quartus compilation
- First compilation of all the code
  
- Parallel work to improve the Simulation
- Definition of the parameters and files for users
- Documentation for the simulation

In parallel the Software for controlling the MiniDAQ has been discussed and developed too.



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## MiniDAQ news (3/3)

We are now able to provide the simulation framework to the whole collaboration which is the first step for the sub-detector users to start to work.

All the framework and the simulation will be explained to you this morning:

Federico Alessio 's talk

Guillaume Vouters's talk

We are not able to provide the firmware to the MiniDAQ yet . The first compilation have been done last week and there is still a lot to do to check and test the compiled firmware on board.

Some **very preliminary results** will be given by Frederic Hachon



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## Agenda

Thursday, December 12, 2013

- 09:30 - 12:30    Status report on the firmware and software developments for the MiniDAQ setup   
Location: 6-2-004
- 09:30    **Introduction** 10'   
Speaker: Guillaume Vouters (Centre National de la Recherche Scientifique (FR))
- 09:40    **MiniDAQ Simulation framework environment** 40'   
Speaker: Guillaume Vouters (Centre National de la Recherche Scientifique (FR))
- 10:20    **MiniDAQ Simulation features** 40'   
Speaker: Federico Alessio (CERN)
- 11:00    **MiniDAQ Firmware** 20'   
Speaker: Frederic Hachon (Centre National de la Recherche Scientifique (FR))
- 11:20    **MiniDAQ Software** 40'   
Speaker: Pierre-Yves Duval (Centre National de la Recherche Scientifique (FR))  
Material: [Slides](#) 



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## Next Meeting

Next meeting will take place on February