



TB preparation meeting

Status on LLR jobs



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ΩMEGA
Microelectronics

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LAL
LABORATOIRE
DE L'ACCÉLÉRATEUR
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Status on LLR jobs



➤ Electronics

- ☐ Modify CCC to deliver 40Mhz 😊
- ☐ LV cables:
 - Check existing 😞
 - Make new internal cables for SMB5 😞
- ☐ Update DIF firmware:
 - Move to 40MHz and 5Mhz 😊
 - Add gated clock 😊
 - Add OneWire + control command 😊
- ☐ Synchro between DAQ 😊



Status on LLR jobs



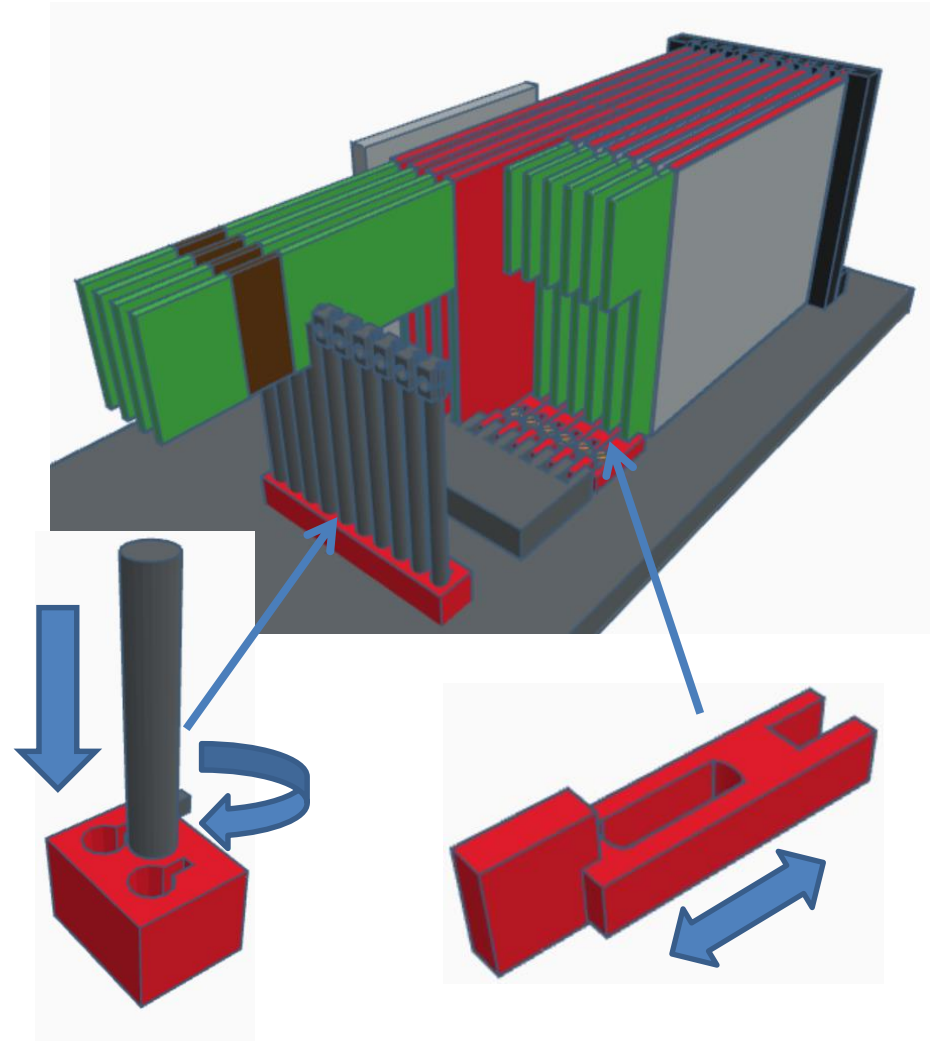
- Mechanics: study solution to integrate FEV board + SMB4/5 or SL board in the U:
 - ☐ Reduce length and thickness of U in carbon for SL board (need final code) 😐
 - ☐ Keep solidity with 2 pieces of carbon for SMB4 (need to brainstorm with mechanics engineer) 😞
 - ☐ Find a solution for kapton 😞
 - ☐ Modify mechanical structure for 10 slabs with SMB4 or SMB5 😊

Status on LLR jobs



➤ Modifications to do:

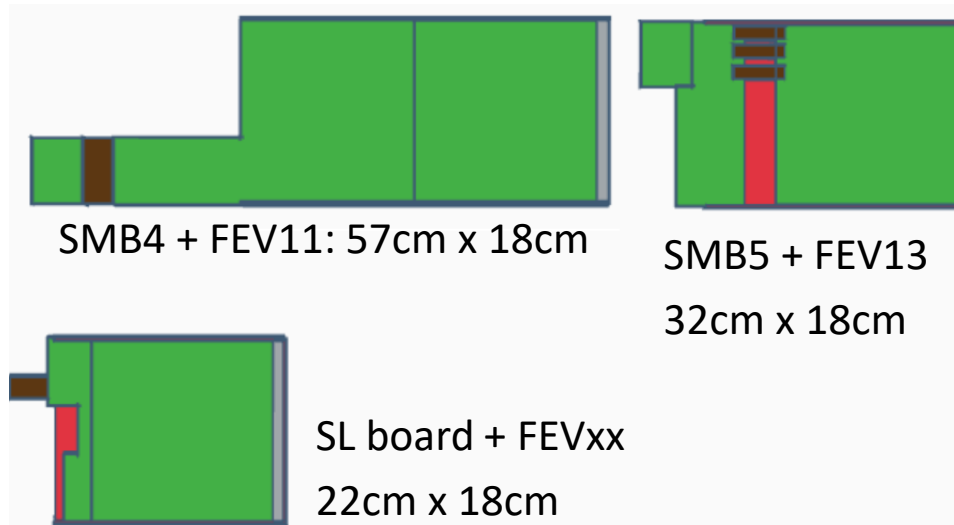
- ☐ Reduce width of chassis
- ☐ Add positioning pieces for SMB4/5
- ☐ Modify the top keep pieces
- ☐ Modify front panel (not priority)
- ☐ LLR meeting 17/01/20 to get delivering schedule
- ☐ LLR mechanics support is not able to support SL board 😞



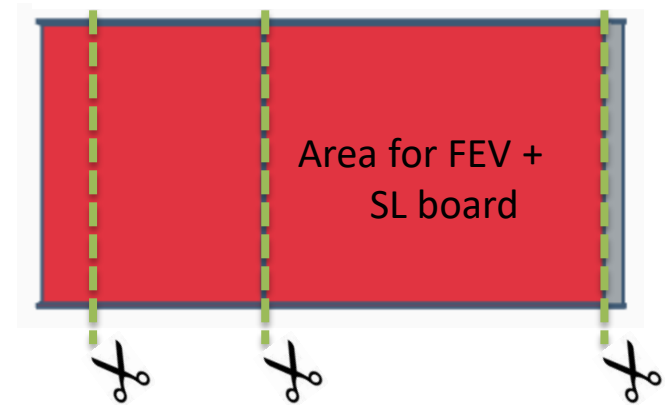
Status on LLR jobs



3 sizes of electronics



U in carbon



Left U in carbon shift behind the right U, SMB is connected to FEV with Gradconn connector and hood maintain rigidity.

To conclude

- Electronics: well progressing 😊
- Mechanics: many steps to brainstorm, pieces to make 😞

New production (assembly) of x SLAB in Japan
with PCB, wafer and chips from LLR but time is short.

6 wafers (500µm thick) send to LPNHE to glue on
IJCLab FEV12 board

**Next beam test in March 2020 at DESY → the largest
number of readout pixel ~ 18kchannel for ECAL group**