



Testing and characterization: next steps

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Recap of the plans for MOSAIX/LAS characterization

General strategy:

- close collaboration with ITS3 in performing MOSAIX characterization
- development of key elements of the testing setup steered by SVT institutes
- focus on SVT-specific needs (e.g. need of testing large volumes of sensors)

DAQ setup developments at software/hardware and firmware levels

- SVT requires unique SW/HW features, beyond what used by ITS3

Testing and characterization:

- performed with wafer probe/DAQ setup
- characterization of the EIC-specific blocks

Preparation for LAS testing:

- Adapt the reading/testing setup developed to the LAS
- Dedicated irradiation studies needed for LAS sensor, support chip, COTS, optic cables, FPC, ...
- Large scale tests of LAS sensors and corresponding ancillary blocks for LAS V1 and production LAS sensors

Recap of the plans for MOSAIX characterization (II)

The wafer probe setup at CERN can characterize all the MOSAIX sensors for both ITS3 and for SVT (baseline plan):

Schematic list of the foreseen tests:

- Impedance scan
- Digital scan
- Noisy-pixels scans
- Threshold scans
- *Characterization with sources (on wafer probe)*

Currently, we did not identify tests that are needed for SVT but not for ITS3

→ *the first MOSAIX tests will be essential to understand possible limitations and motivate additional SVT-specific studies*

ITS3 will construct a first prototype with ER2 sensors and SVT is planning the same (see next slides)

BACKUP