



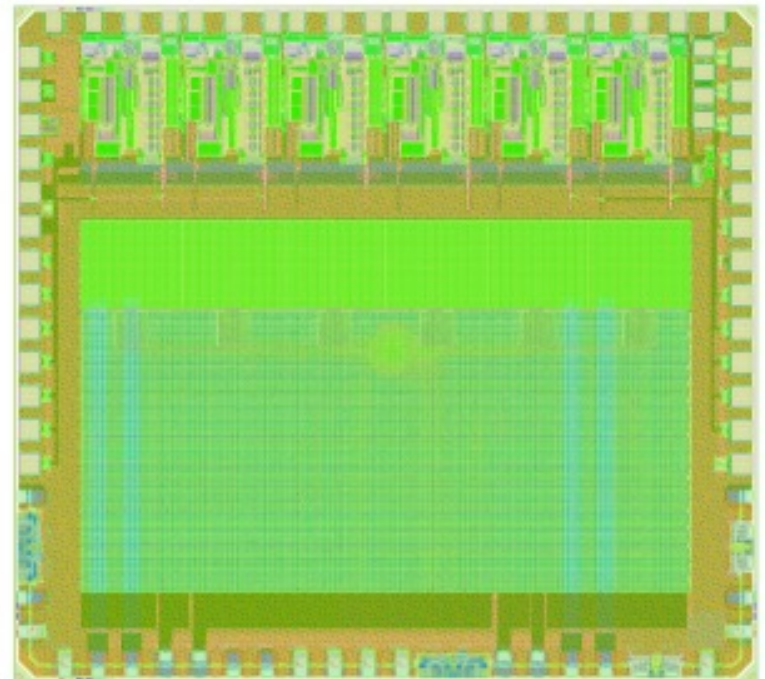
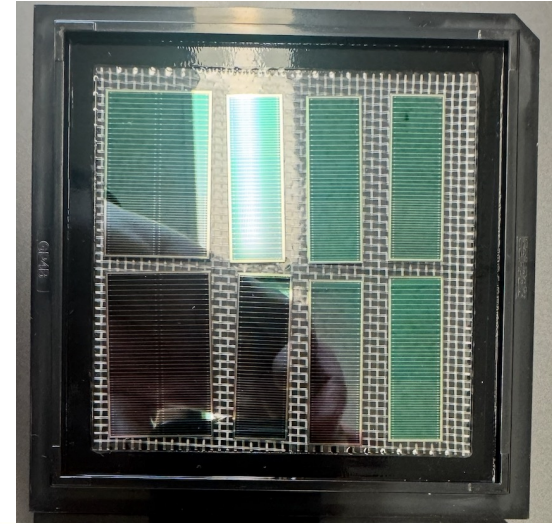
FCFD status

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*EPIC Electronics & DAQ WG meeting : eRD109 Monthly Progress Reports
June 4, 2026*

FCFD1.2 design status

- FCFD1.2 was submitted on April 12, 2026
- Expect the chips back from TSMC in middle of July
- Working on the design of the test boards and development of the readout firmware
 - Discussions with Tonko to make sure our designs proceed in sync
- We will use the half-sized sensors for testing
- Extensive testing planned for testing of the all-new ingredients separately, and the whole chip together
- We need to start toward signing off on the specifications of the Variant chip



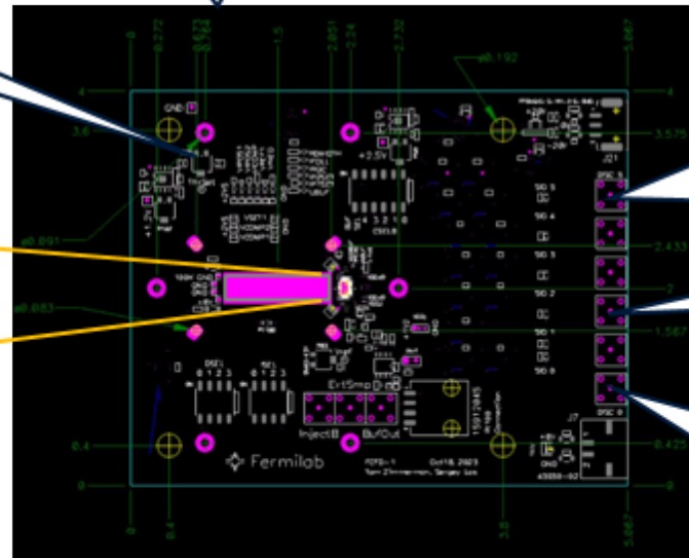


FCFD12 Test Brd.

Board size 5,067"x4,000" (128.7mm x 101.6mm)

On-board voltage regulators to minimize variations when using different external power supplies

Half-size AC-LGAD sensor will be used for measurements, 12 channels with 500um pitch and 50um strips will be centered against the FCFD12-chip



I2C/Reset header with parallel MCX con.
1. Possible use of an I2C dongle and external push-buttons for resets
2. Can be uniformly connected to an FPGA board
3. Uses 1.4-1.6V pull-up to be compatible with the 1.8V logic

All FAST signals are dual MCX connectors CK320/DATA-OUT/TEST-IN/TEST-OUT

Additional MCX connectors for testing
1. DiscBuf (x4)
2. LSB (x2)

Sergey Los | Planning for system-tests with FCFD1.2