Analog Data Acquisition and Processing FPGA-based Solutions Integrated in Area Detector using FlexRIO technology

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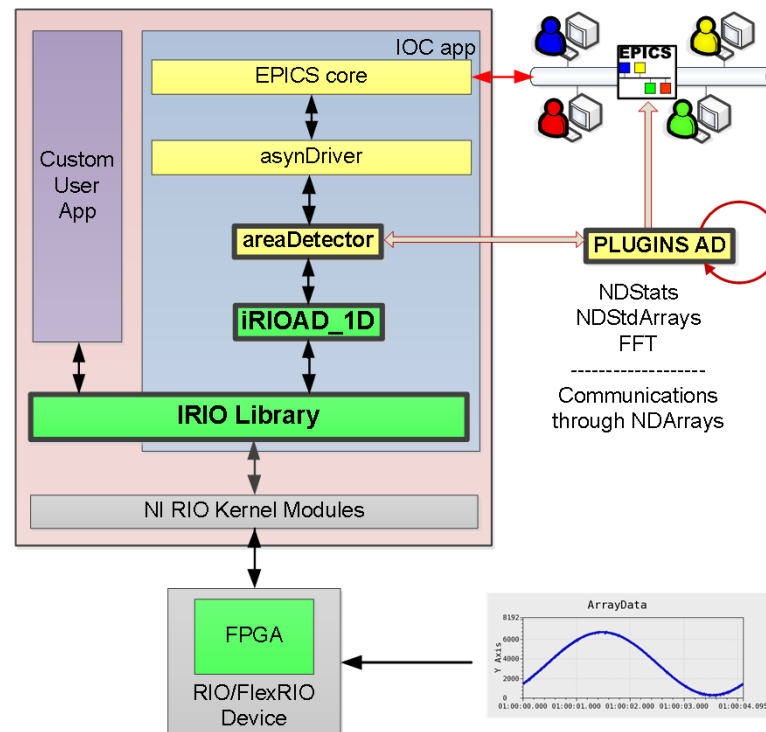
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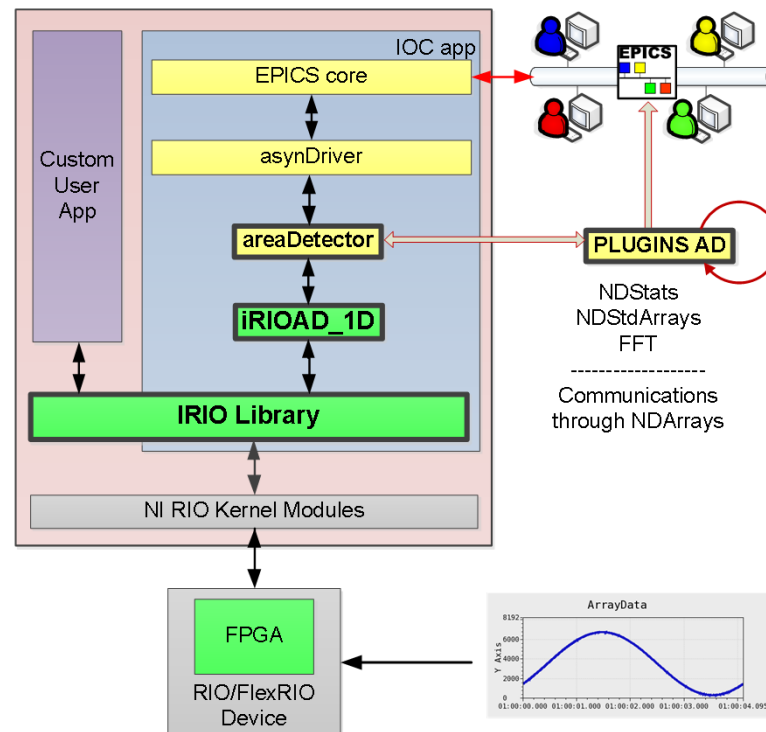
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Integrate FPGA-based DAQs in EPICS using areaDetector and IRIO:

- FPGA = Preprocessing capabilities, deterministic behavior
- EPICS = Widely spread solution for distributed control systems
- areaDetector = Initiative to standardize EPICS drivers interface
- IRIO = One driver, multiple hardware implementations

Advantages:

- IRIO FPGA Templates: Ready-to-use templates. Easily customizable.
- Object-Oriented Implementation: Control your custom DAQ extending provided base classes. Core functionality already implemented.
- ADPlugins: On-the-fly reconfiguration of software processing chain

1-D areaDetector for FPGA-DAQs