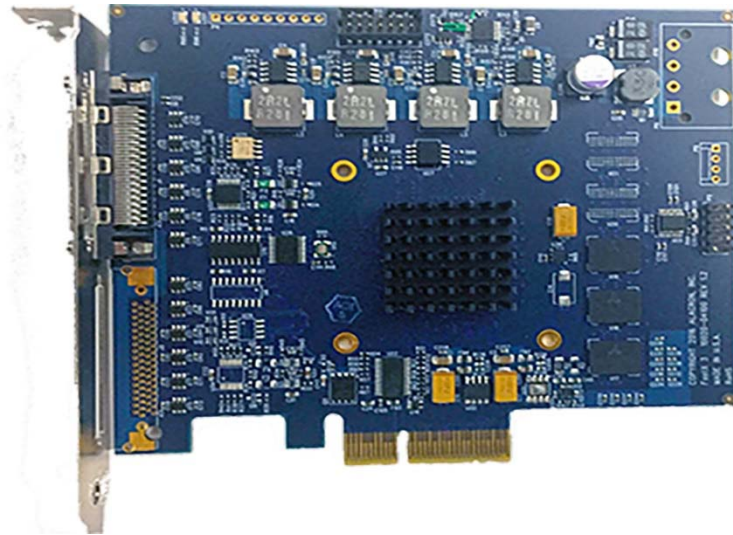




ALACRON

FASTX3 FRAME GRABBER

The FastX3 frame grabber series is for users who anticipate a demand for extreme I/O requirements and/or higher bandwidth, complex image processing and real-time high-speed storage in a cost effective platform. The base FastX3, is a one half-length raw form factor PCIe (X4) Gen2 board with either six basic 85 MHz Camera Link Channels up to two extended full Camera Link camera interfaces. The front-end data is formatted and preprocessed by an Artix FPGA before being sent to the PCIe (X4) Gen 2 interface. It also is POCL and has isolated inputs including three LVDS I/Os.

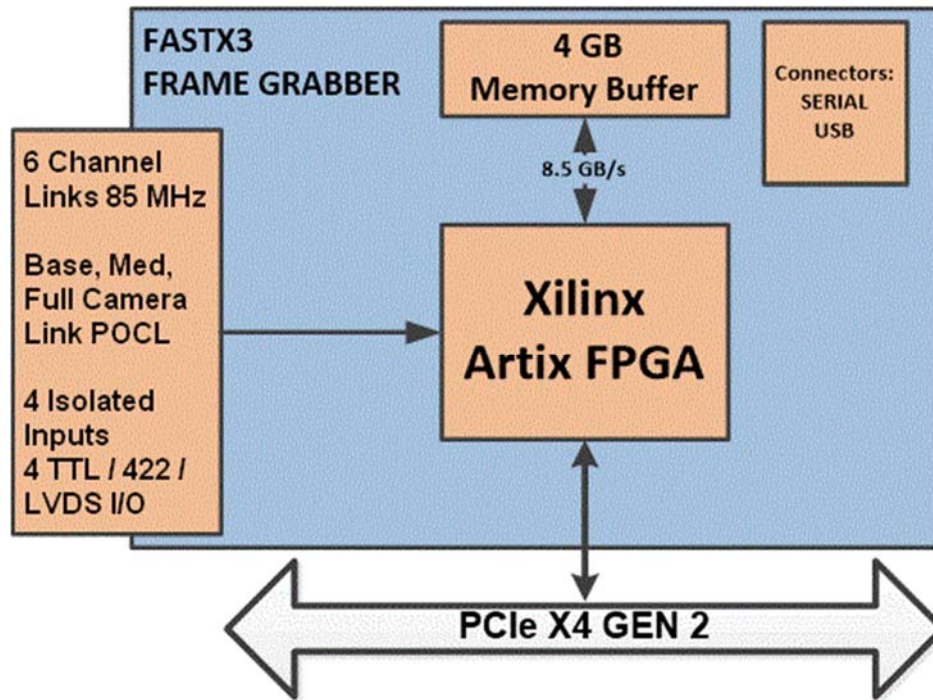


FASTX3 PCIe KEY FEATURES:

- Raw PCI form factor board with 4 GB dedicated high speed DD2 DRAM for the front end Xilinx Artix FPGA (XC35, XC70, and XC160) for sustained real-time front-end processing
- Collects data from up to six asynchronous Camera (channel) Links with POCL
- Programmable Artix FPGA for I/O interface configuration and processing
- Four lane PCIe gen 2 bus interface
- Supported by industry standard firmware development tools, including fully optimized basic data manipulation, data formatting and image processing routines written in open CL
- Drivers for Windows™ 7, 10, and Linux



FASTX3 BOARD OVERVIEW



I/O INTERFACE

- Up to six 85 MHz Camera (channel) Link Inputs with POCL
- Base, Medium, Full Camera link, two cameras.
- 4 Optically Isolated Inputs
- 4 LVDS/RS422/TTL Input/Outputs

PCI-e INTERFACE

- Data width is four lane PCI-express gen2
- Peak DMA rate - 2GB/sec bidirectional.

CAMERA CONTROL

- Serial port- Asynch., RS-232 which runs from 75 to 11.2Kbaud
- USB interface to PC for serial
- Camera Link controls (optional)

FPGA/MEMORY OPTION

- Four GB DDR2 DRAM memory directly connected to the input ARTIXFPGA for high-speed input
- Multiple Artix FPGA size options (35, 70, and 160) for high-speed input and processing

