

FASTXe FRAMEGRABBER

The FastXe framegrabber 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 FastXe, 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. An auxilliary I/O connector provides a header for adaptation of other high speed interfaces such as GigEx4, high speed analog formats such as UXGA or DVI, or CoaXPress. The front-end data is formatted and preprocessed by a Kintex FPGA before being sent to the PCIe (X4) Gen 2.



FASTXe PCIe KEY FEATURES:

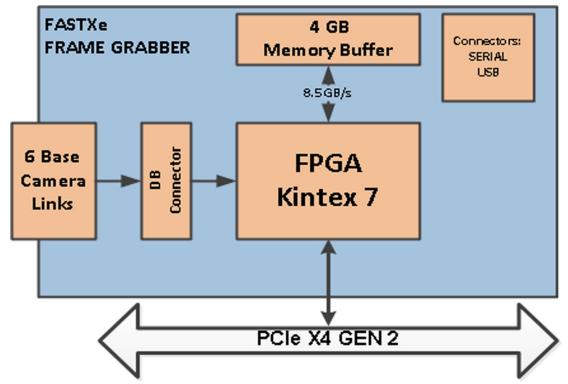
- Raw PCI form factor board with 4 GB dedicated high speed DD2 DRAM for the front end Xilinx Kintex FPGA for sustained real-time front-end processing
- Collects data from up to six asynchronous Camera (channel) Links
- Programmable Kintex FPGA for I/O interface configuration and processing
- Four lane PCle gen 2 bus interface
- Optional high speed I/O interface for alternative input formats such as GigEx4, **UXGA/DVI.** or CoaXPress



- Supported by industry standard firmware development tools, including fully optimized basic data manipulation, data formatting and image processing routines written
- **Drivers for Windows™ 7. Linux**



FASTXe BOARD OVERVIEW



I/O INTERFACE

- Up to six 85 MHz Bidirectional Camera (channel) Link I/O
- Optional header for other input/output options including digital GigEX4, UXGA or DVI, or CoaXPress

PCI-e INTERFACE

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

CAMERA CONTROL

- Serial port- Asynch., RS-232 which runs from 75 to 11.2K baud
- USB
- Camera Link controls (optional)

FPGA/MEMORY OPTION

- Four GB DDR2 DRAM memory directly connected to the input Kintex FPGA for high-speed input
- Multiple Kintex 7 FPGAs for high-speed input and processing



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