



# ALACRON

## FASTX1703 FRAMEGRABBER

The FastX1703 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 FastX1703, is a two thirds length raw form factor PCI board six basic 85 MHz Camera Link Channels or an extended Camera Link camera interface. An auxilliary I/O connector provides a header for adaptation of other high speed interfaces such as LVDS or high speed analog formats such as UXGA or DVI. The front-end data is formatted and preprocessed by a FPGA before being sent to the memory subsection, up to four PNX1702 500 MHz processors with 256MB memory each. Finally, the FastX1703 interfaces to the host computer through a 4xPCIe interface for state-of-the-art data acquisition.



### FASTX1703 PCIe KEY FEATURES:

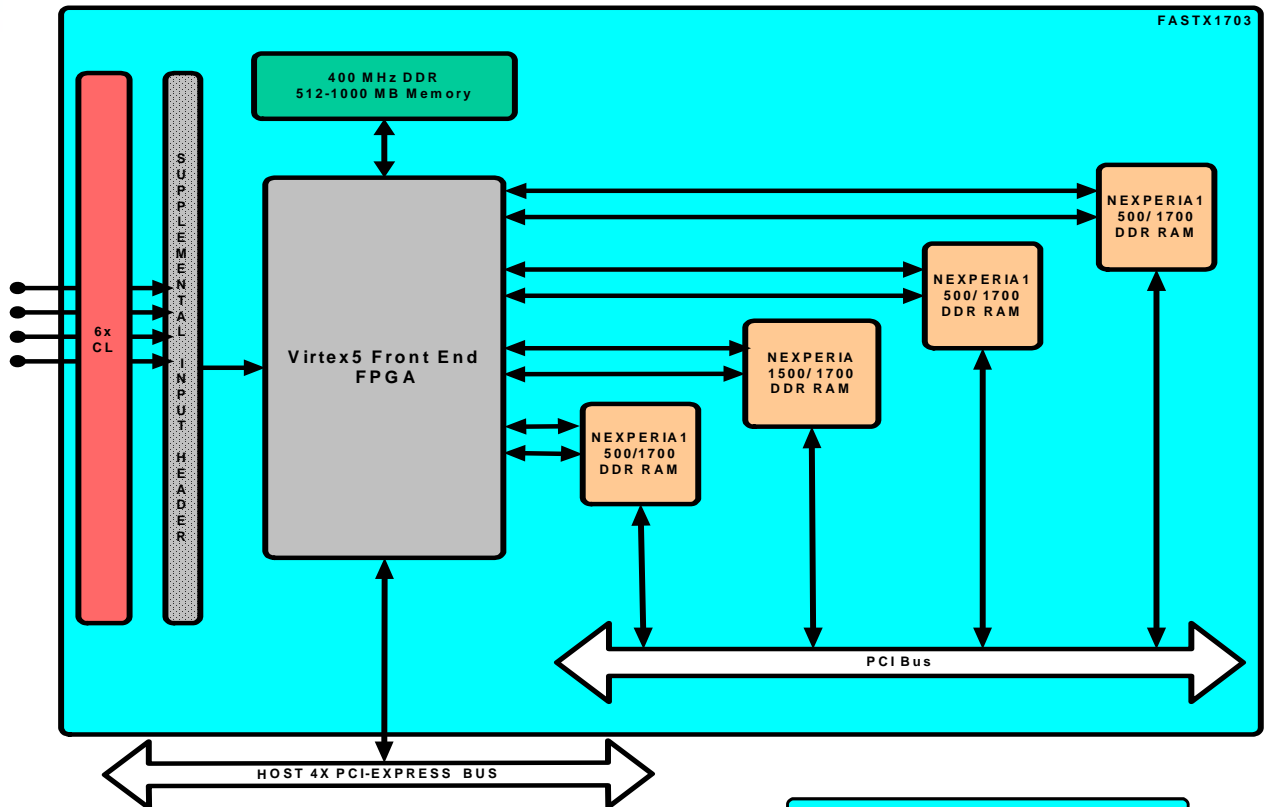
- Raw PCI form factor board with 512MB dedicated high speed DD2RAM for the front end Virtex 5 FPGA for sustained real-time on-board storage and processing
- One to four PNX1702 500 MHz processors standard with 200/400MBytes/sec per channel actual transfer VIVO
- Collects data from up to six asynchronous Camera (channel) Link channels
- Programmable FPGA for I/O interface configuration and processing
- Four lane PCIe bus interface
- Optional high speed I/O interface for alternative input formats
- All connectors are legacy so seamless hardware integration into current environment
- Supported by industry standard firmware development tools, including fully optimized basic data manipulation, data formatting and image processing routines
- Drivers for Windows™ XP/2K, Linux and Solaris



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# FASTX1703 BOARD OVERVIEW



## I/O INTERFACE

- Up to six 85 MHz 28-bit Bidirectional Camera (channel) Link I/O
- Optional header for other input/output options including digital LVDS and Analog inputs such as UXGA or DVI

## PCI-e INTERFACE

- Data width - four lane PCI-express
- Peak DMA rate - 1 GB/sec bidirectional.

## PROCESSOR

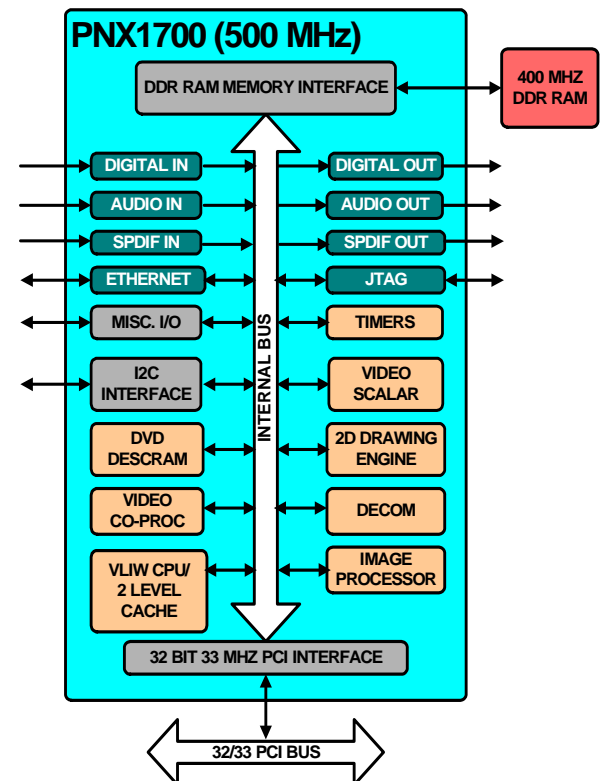
- One to four PNX1702 500 MHz VLIW processor 256 MB DD2RAM memory

## CAMERA CONTROL

- Serial port- Asynch., RS-232 600-19,200 Baud
- Camera Link controls (optional)

## MEMORY OPTION

- 512MB DD2RAM memory directly connected to the input FPGA for high-speed input



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