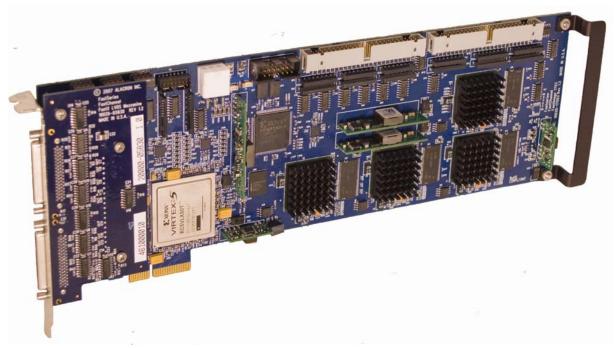


# Q/ALACRON

## **FASTX-DIG FRAME GRABBER**

The FastX-DIG is a raw-length PCI board with two input connectors. Each connector supports 16 data bits, 10 general purpose inputs, and 6 general purpose outputs. Clock rates up to 166 MHz can be supported. All the inputs and outputs are connected to an FPGA on the board are essentially available for any purpose required by the interface. The front-end data is formatted and preprocessed by a FPGA before being sent to the memory subsection, zero to four Nexperia PNX1702 VLIW processors before output. Finally, the Fast-XDIG interfaces to the host computer through a 4 x PCIe interface for state-of-the-art data acquisition.



### The Future of Image Aquisition and Processing

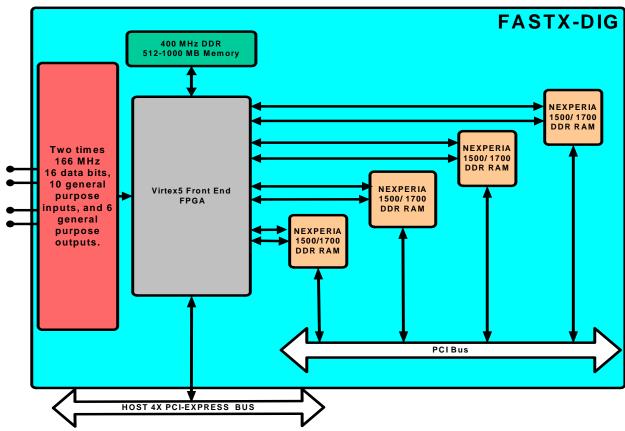
### **FastX-DIG PCI-e Key Features:**

- Raw PCI form factor board with dedicated high speed DDRAM interfaced to a Xilinx Virtex5 for sustained real-time on-board storage
- From zero to four 500 MHz Nexperia PNX1702 VLIW processors
- Collects data from two connectors of up to 52 GP inputs, while providing 12 GP outputs, at up to 166 MHz.
- Programmable FPGA for I/O interface configuration and processing
- PCI-e x4 bus interface
- Supported by standard firmware development tools, including fully optimized basic data manipulation, data formatting and image processing routines
- ■Drivers for Windows™ XP/Vista, Linux and Solaris™





# **FASTX-DIG BOARDS**



### **PCI-e INTERFACE**

- Data width x4 PCI-express
- Peak DMA rate 1 GB/sec bidirectional.

#### PROCESSOR OPTIONS

■ One STRETCH processor with up to 2 GB of PC3200 DDRAM memory

### **CAMERA CONTROL**

Serial port- Asynch., RS-232 600-19,200 Baud

### **MEMORY OPTION**

■ DDRAM memory directly connected to the Xilinx Virtex5 input FPGA for high-speed input

