



FAST-UXGA FRAME GRABBER

The Fast-UXGA is a two thirds raw-length PCI board with two (four muxed) UXGA input channels each with up to 205 MHz data acquisition rates. The front end data is formatted and preprocessed by a FPGA before being sent to the memory subsection, processor, GigE interfaces or other outputs. Finally, the Fast-UXGA interfaces to the host computer through a 4xPCIe or PCI-X interface for state-of-the-art data acquisition. Options include the addition of multiple(8) Serial ATA (SATA) 150 MB/sec interfaces for continuous high-speed data storage without the usual OS or PCI transfer delays and four GigE ports.



The Future of Image Acquisition and Processing

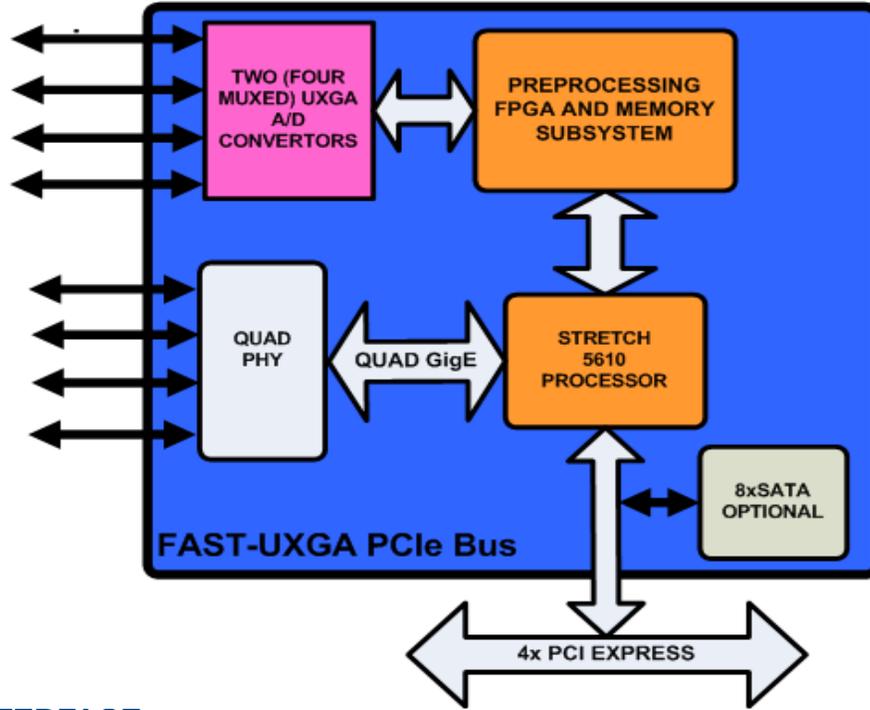
Fast-UXGA PCI-e and PCI-X Key Features:

- Raw PCI form factor board with 1-2GB dedicated high speed DDRAM for sustained real-time on-board storage
- STRETCH 5610 processor standard with 4 GigE interfaces for 100MBytes/sec per channel actual transfer I/O
- Collects data from two asynchronous (four muxed) UXGA 205 MHz channels
- Programmable FPGA for I/O interface configuration and processing
- PCI-X or 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™





FAST-UXGA BOARDS



PCI-e INTERFACE

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

PCI-X INTERFACE

- Data width - 32/64 bits
- Peak transfer rate of 133 MHz

PROCESSOR OPTIONS

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

SERIAL ATA I/O OPTION

- Up to eight SATA 150 MB/Sec disk I/O channels for high-speed real-time storage as JBOD or Raid

CAMERA CONTROL

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

MEMORY OPTION

- One to two gigabytes of DDRAM memory directly connected to the input fpga for high-speed input

PCI-EXPRESS OPTION

- If sustained high-speed storage is desired up to eight SATA ports are available on the FAST-Xe for JBOD or RAID storage of hundreds to thousands of gigabytes of storage per card.

