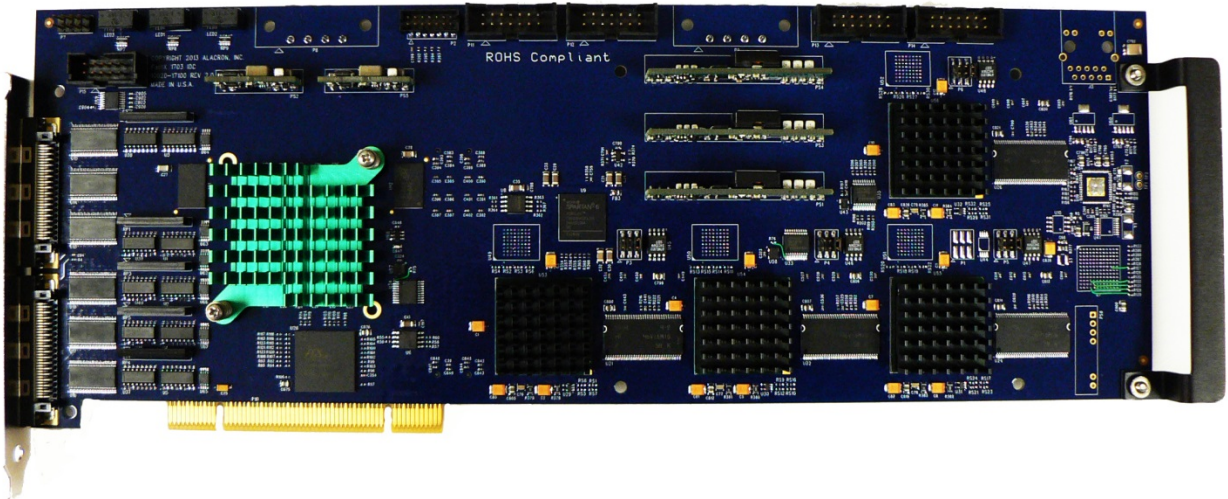


FASTIMAGE1703 PCI Board

The FastImage1703-PCI is an Autonomous Imaging System (AIS) that offers a balanced architecture of flexible I/O and processing power with computational and memory bandwidth, typically required by demanding, real-time imaging, vision and DSP applications. FastImage1703 is based on the PNX1702 microprocessor which interfaces with the PCI bus

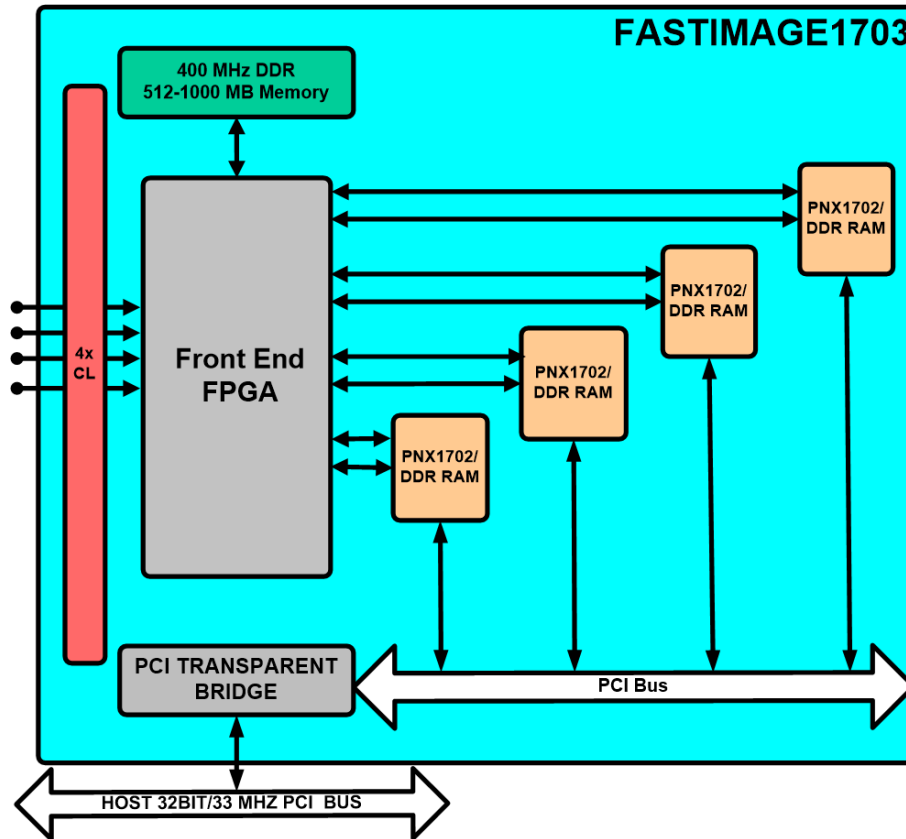


FastImage 1703 Key Features:

- Collects data from up to four base camera link cameras, two medium, or one full and a base.
- Up to 2000 MFLOPS / 2500 MIPS per TM1702 processor.
- Up to four TM1702 processors
- 256MB SDRAM per processor
- Four 85 MHz, 28 bit bi-directional Channel Link ports (part of the Camera Link interface, output is supported).
- Real-time operating system for single and multiple processors, for Windows™ XP, Win7, Solaris™ and Linux
- Programmable FPGA's for I/O interface
- Input Options • Digital, 19 data bits (RS-422, LVDS) can be used to interface a 16 bit LVDS Camera



FASTIMAGE 1703-PCI



INTERFACE OPTIONS

DIGITAL VIDEO CAPTURE

- Common mode input range - -5V to +5V (0 to 2.4V with LVDS option)
- Input sensitivity - 250mV differential (100mV with LVDS option)
- Input hysteresis - 50mV typical
- Max. clock rate - 200MHz, 200MB/sec input to each processor maximum
- Max. input data width - 16 bits
- Formats supported - ITU-R BT.656 (4:2:2 interlaced color), 8/10-bit mono. variable/line scan, 8/10-bit raw data, 8/10-bit RGB, 16-bit raw
- RS-422, LVDS signaling

PROPRITARY EXPANSION INTERFACE

- PCI Bus 32 Data Bits Clock rate - 33MHz.
- Peak DMA rate - 132 MB/sec. Via PCI
- First Processor 32 bits VI data in at 400MB/sec – 8 Bits VO data out at 100MB/sec.
- Second through fourth processor 16 bits VI data in at 200MB/sec





FASTIMAGE 1703-PCI

CAMERA CONTROL

- Serial port - Asynchronous. RS-232, 600-115,200 Baud to PC, LVDS/RS422 to camera
- 19 digital outputs (LVDS/RS422)
- Digital outputs used to drive up to 3 of the CC Camera Link Signals
- Digital outputs can provide clocks.
- Digital outputs can provide general purpose I/O
- LVDS/RS422 inputs can accept triggers for cameras
- RS-422, LVDS signaling

CHANNEL LINK (LVDS)

- Differential output voltage- 250-450 mV
- Data Rate - >2500 Mbs (85MHz channel link)

GigE Interface

- On board connector internal to PC
- Consult factory should you wish to use this interface

