

The Basic FastVision is for OEMs who require a framegrabber with high bandwidth data capture. The Basic FastVision is a full-length PCI board with up to 256 MB of dedicated high speed (528 MB/sec) SDRAM. Up to two Channel Link ports are available for data capture. The Basic FastVision board can interface with any high speed Channel Link compatible camera. Applications include medical imaging, semiconductor wafer and mask inspection, wood and PCB Inspection.

### *Basic FastVision Key Features*

- Single slot PCI board for data capture and transfer
- 64 to 128 MB of distributed SDRAM per port
- Two bi-directional Channel Link ports for packet switched inter-card transfers at 1.85 Gbits/sec per port
- 33 or 66MHz, 64 or 32 bit primary PCI bus interface with a (non-transparent) bridge to local PCI bus

### *Channel Link Cameras*



- ◆ L301bc - digital color line scan
- ◆ L100b Series - Line Scan Monochrome 1k or 2k
- ◆ A201b - digital monochrome area scan
- ◆ A201bc - digital color area scan

### **PULNIX**

- ◆ TM-1040 - 1" Progressive Scan-1k x 1k- 30 fps
- ◆ TM-6710 - 1/2" Progressive Scan 120 fps
- ◆ TM-1020-15CL – Progressive Scan CCD
- ◆ TM-1320-CL – 1" Progressive Scan 1.3k x 1k
- ◆ PL5000 SF - High Resolution Line Scan CCD
- ◆ TMC-1000 - 1k x 1k Progressive Scan color camera
- ◆ TMC-6700 – VGA Progressive Scan color camera

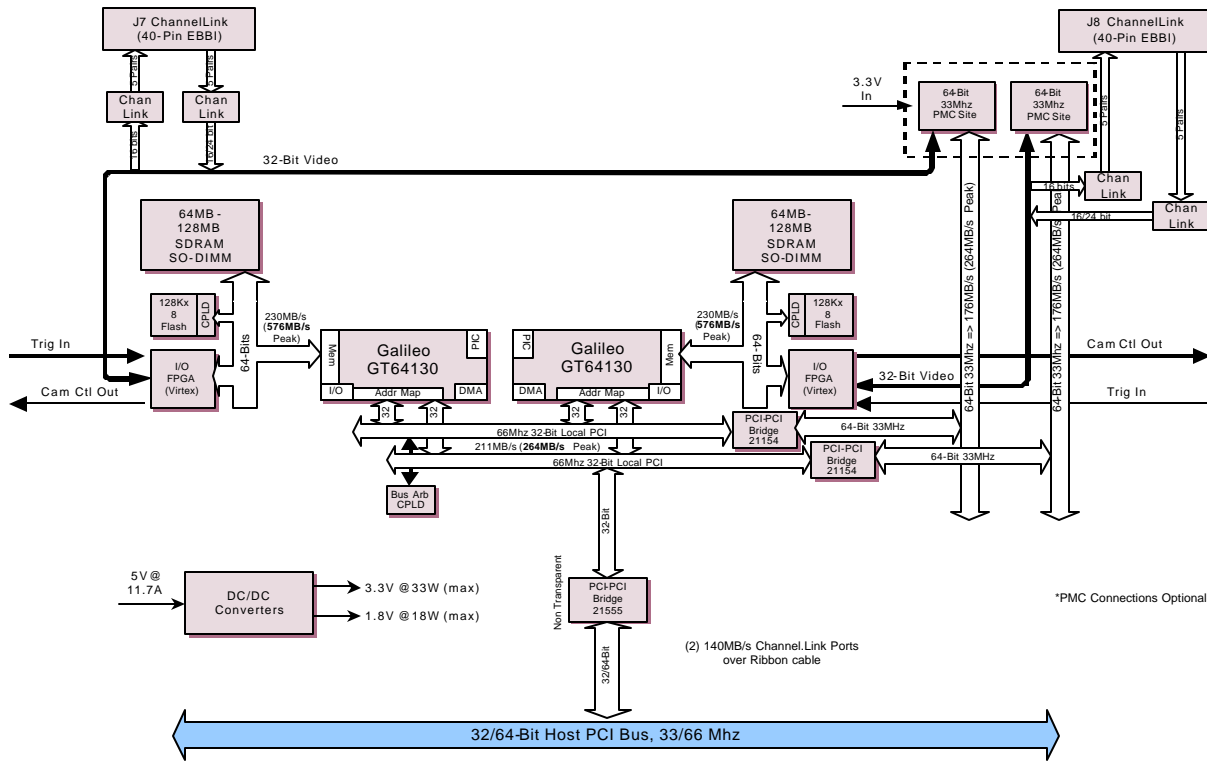
Alacron supports all additional Channel Link cameras. Please call manufacturer for details.

### *Basic FastVision™ Daughter-card Features*

Two PMC connectors on the back of the Basic FastVision board allow one to increase and expand the computational processing power and I/O capabilities. These PMC connectors are PCI Rev. 2.1 compliant, guaranteeing third-party PMC compatibility.

Alacron has the following daughter-cards available:

- ◆ **Fast4:** A PMC board that expands the FastImage PCI Board with up to eight additional TriMedia processors
- ◆ **FastI/O:** A PMC daughter-card that lets you add extra I/O ports to your FastImage or FastFrame PCI board
- ◆ **FastMem:** A PMC daughter-card with 512 Megabytes of additional memory



**PCI Interface**

- ◆ Clock rate – 66 or 33 MHz
- ◆ Data width – 64 or 32 bits
- ◆ Standards compliance – PCI Rev. 2.1
- ◆ Peak DMA rate – 132 MB/sec. (PMC)

**Camera Control**

- ◆ Two exposure control outputs
- ◆ Two pixel clock inputs
- ◆ Four line/frame valid inputs
- ◆ Two external trigger inputs
- ◆ Power – no camera power provided by card; use an external supply
- ◆ RS-422 signaling

**Channel Link**

- ◆ Two 66 MHz 28 bit channel link ports for either camera inputs (3) 8 bit taps at 50MHz, or inter-board communication port (100MB/s).

- ◆ Each port as a camera input, bi-directional (one in, one out) inter-board I/O link, or 32 bit bi-directional FastChannel interface

*Interfaces via PMC Daughter-card*

**NTSC/PAL Comp. Video Cap.**

- ◆ Input levels 1V peak-to-peak nom., 0.3 to 1.2V peak-to-peak max.
- ◆ Input impedance – 75Ω
- ◆ Channel crosstalk – -50 dB max.
- ◆ Resolution – 8 bits
- ◆ Formats supported – PAL BGHI, PAL N, PAL M, NTSC M, NTSC N, NTSC 4.43, NTSC-Japan, SECAM

**Analog Video Capture (3 channels)**

- ◆ Input levels 1V peak-to-peak nom., 2.0V peak-to-peak max., 50mV min. sync level when using composite sync
- ◆ Input Impedance – 75Ω

- ◆ Resolution – 8 bits x 3 channels
- ◆ Formats supported – line scan and area scan
- ◆ Each input can operate async with an 80 MHz sample rate

**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 – 80 MHz
- ◆ Max. input data width – 64 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 at 20 MHz (40 MB/sec.)
- ◆ RS-422, LVDS, PECL signaling