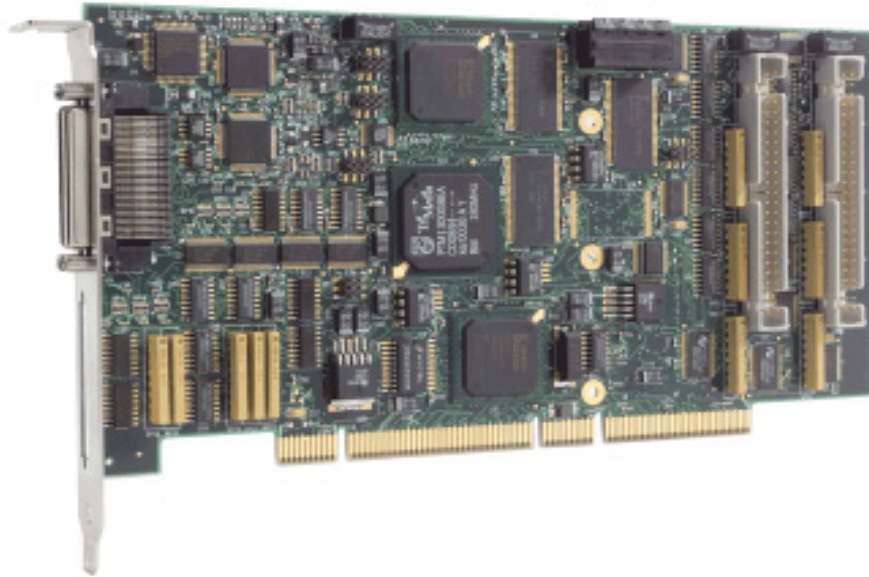




ALACRON

FastFrame 1303 PCI Board

Alacron introduces the FastFrame 1303. Available in both analog or digital-only configurations for greater flexibility and cost savings. FastFrame 1303 uses the Nexperia PNX1302 microprocessor from NXP Semiconductors.



The Future of Image Acquisition and Processing

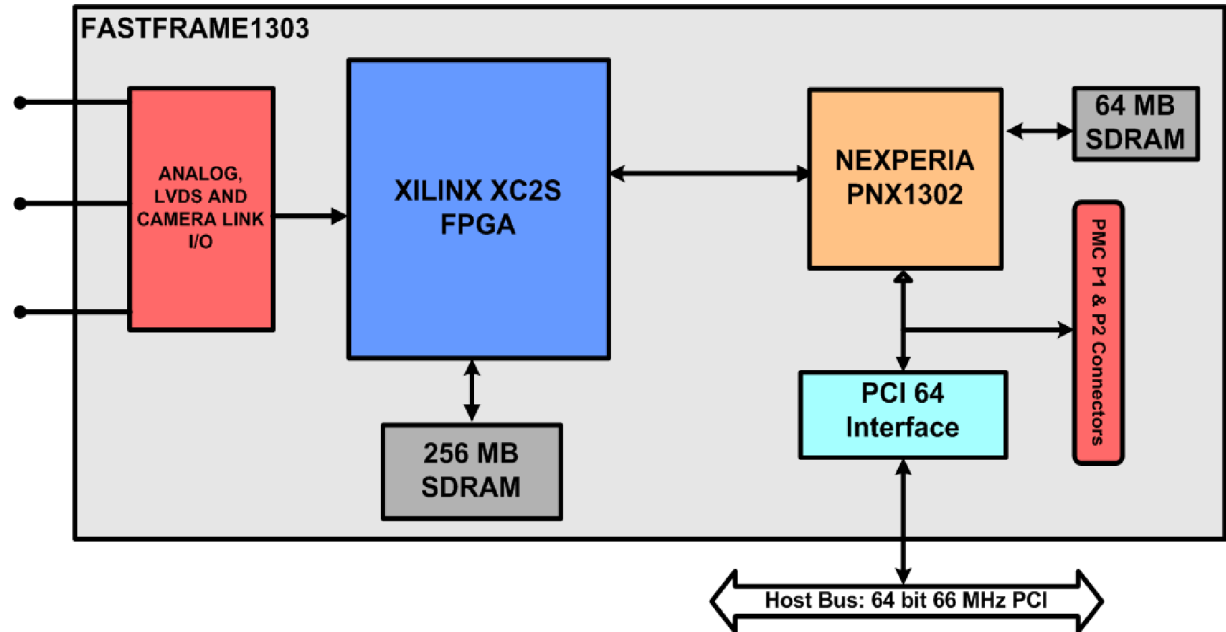
FastFrame 1303 Key Features:

- Half-length PCI board with none or one 200MHz PNX 1302 Nexperia processor with up to 64MB of dedicated high speed (572 MB/s) SDRAM.
- Up to 667-720 MFLOPS / 883-900 MIPS per PNX1302 processor.
- Collects data from up to four asynchronous analog cameras and one NTSC/PAL/SECAM or up to four digital cameras
- Digital capture, 32 data bits (RS-422, LVDS) with control and clock
- Two 85 MHz Camera Link (Channel Link) inputs
- Programmable FGPAs for I/O interface configuration
- 32-256 MB SDRAM frame buffer memory
- 64/32 bit external PCI bus
- Supported by standard software development tools, including fully optimized micro-coded signal and image processing libraries (FOIL)
- Optional TriMedia software development environment (SDE) and runtime software for Windows™ XP/2K and Solaris™ and Linux





FastFrame 1303 PCI Board



INTERFACE OPTIONS

NTSC/PAL COMP. VIDEO CAP.(4 channels)

- Input levels 1V peak-to-peak nom., 0.3 to 1.2V peak-to-peak max.
- Input impedance – 75 Ω
- 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

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 - 80MHz
- Max. input data width - 32 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 signaling

PCI INTERFACE

- Clock rate - 33MHz max.
- Data width - 64/32 bits
- Standards compliance - PCI Rev. 2.1
- Peak DMA rate - 256/132 MB/sec.

PMC INTERFACE

- Clock rate - 33MHz max.
- Data width - 32 bits
- Peak DMA rate - 132 MB/sec.

CAMERA CONTROL

- Serial port - Asynch. RS-232, 600-19,200 Baud
- Two frame/line start outputs
- Two exposure control outputs
- Two master clock outputs programmable in 0.07 Hz steps up to 40 MHz
- Four general purpose outputs
- Two external triggers
- RS-422, LVDS signaling

CHANNEL LINK

- Two 85 MHz 28 bit bi-directional channels

FAST CHANNEL

- 80 MHz 32 bit persistent channels in 4 bit increments for intra- and interboard communication
- Data traffic does not affect host CPU or PCI bus



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