



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 (formerly TriMedia) PNX1302 microprocessor from Philips Semiconductors.



The Future of Image Acquisition and Processing

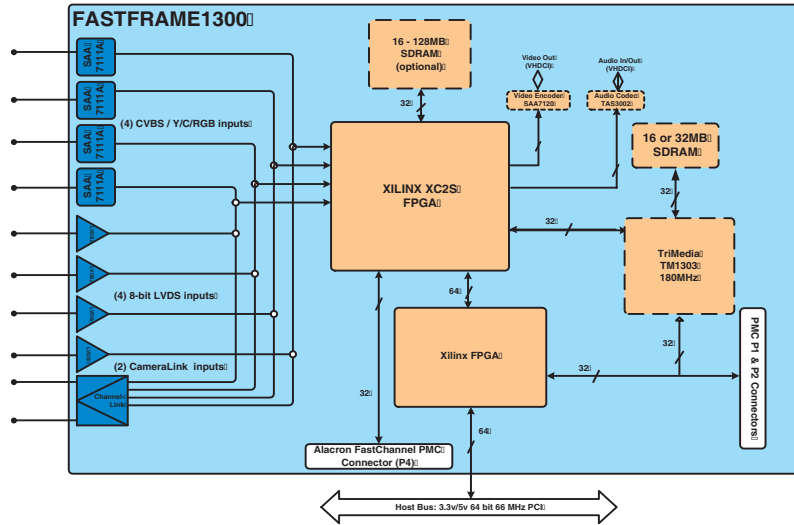
FastFrame 1303 Key Features:

- Half-length PCI board with none or one 200MHz PNX 1302 TriMedia processor with up to 64MB of dedicated high speed (572 MB/s) SDRAM.
- Up to 667-720 MFLOPS / 883-900 MIPS per TM1302 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 FPGAs 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™ 9X/NT/2K and Solaris™ and Linux





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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 – 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

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 20MHz (40MB/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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