



# ALACRON

## FastFrame-CB PCMCIA Board

*Alacron introduces the FastFrame-CB. Available in analog, digital, and Camera Link configurations for greater flexibility and cost savings. The FastFrame-CB uses the Nexperia PNX1302 microprocessor from Philips Semiconductors for image processing and custom application development directly in the PCMCIA card.*



***The Future of Image Acquisition and Processing***

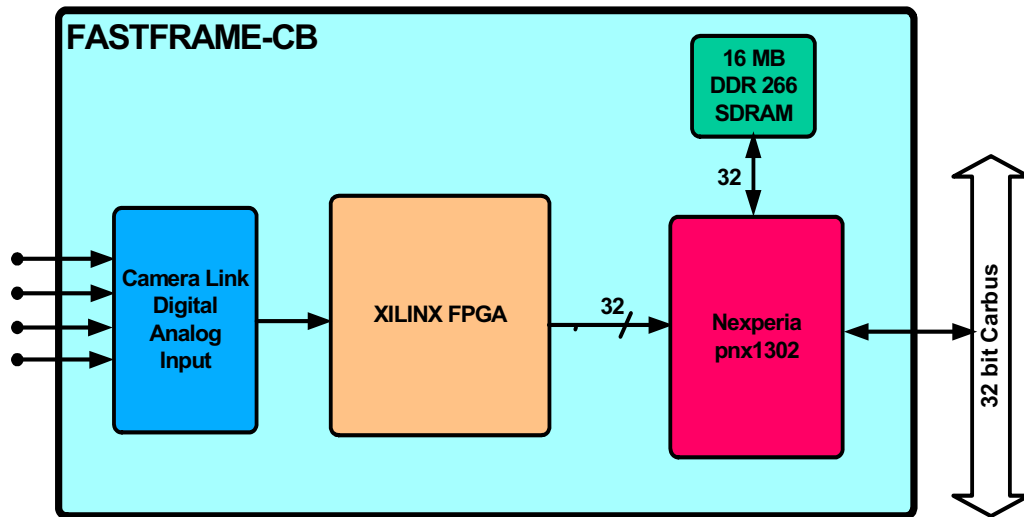
### FastFrame-CB Key Features:

- PCMCIA form factor Board with a PNX 1302 Nexperia processor with 16MB of dedicated high speed SDRAM.
- Collects multiplexed data from up to four NTSC/PAL/SECAM cameras
- Digital capture, 32 data bits (RS-422, LVDS) with control and clock
- One 85 MHz Camera Link (Channel Link) input
- Programmable FGPAs for I/O interface configuration and application development
- 32 bit cardbus PC interface
- Multiple Software environments available:
  - FastMotion Application for Stand-alone data collection and storage
  - FastMotion DLL for Visual C/C++, Visual Basic, Labview and Matlab development
  - Nexperia software development environment (NDK) and runtime software for Windows™ 2K/XP, Solaris™ and Linux with support for standard software development tools, including fully optimized microcoded signal and image processing libraries (FOIL)





# FastFrame-CB PCMCIA Board



## INTERFACE OPTIONS

### NTSC/PAL COMP. VIDEO CAP.

- Formats supported - PAL BGHI, PAL N, PAL M, NTSC M, NTSC N, NTSC 4.43, NTSC-Japan, SECAM, S-Video or VCBS
- Customization is possible to any timing below 27MHz dot-clock
- Image data can be provided in color (RGB24) or monochrome (8 bit) to the host PC
- Color is in 4:2:2 mode
- Input levels 1V peak-to-peak nom., 0.3 to 1.2V peak-to-peak max.
- Input impedance – 75Ω
- Channel crosstalk – -50 dB max.

### 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
- RS-422, LVDS signaling
- Maximum input video rate 80MB/sec

### CHANNEL LINK

- One 85 MHz 28-bit bi-directional channel link (Basic Camera Link)
- Maximum input video rate 80MB/sec

### CAMERA CONTROL

- Serial port - Asynch. RS-232, 600-19,200 Baud
- Frame/line start outputs
- External trigger
- RS-422, LVDS signaling

### PCMCIA INTERFACE

- Clock rate - 33MHz max.
- Data width - 32 bits, no 16 bit legacy mode support
- Standards compliance - PCMCIA Rev. 8.0
- Peak DMA rate - 132 MB/sec
- DMA to Host 90MB/s
- DMA to Board 60MB/S

### ENVIRONMENTAL

- Power consumption less than 1.0 Watt.
- Temperature range 0 to 50 degree C
- Optional Industrial temperature range version for -20 to 85 degree C operation (Consult factory)

