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 latest FPGA and memory technology to produce a card with superior performance, low power, and storage for frame buffering/processing.
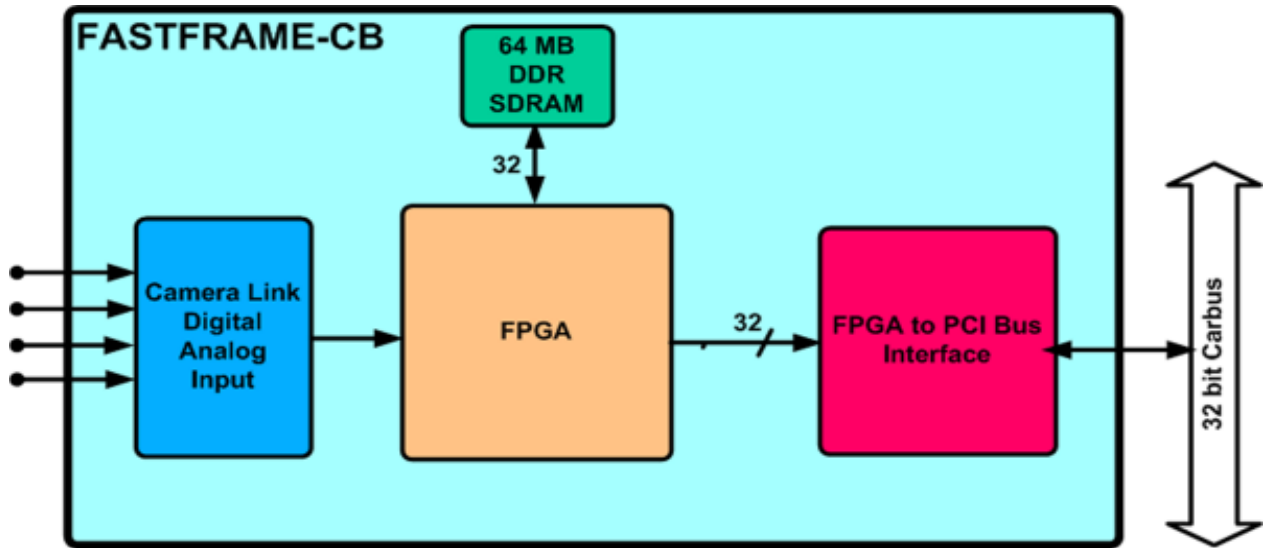

The Future of Image Acquisition and Processing

FastFrame-CB Key Features:

- ■ PCMCIA form factor
- ■ Digitizes four simultaneous channels of RS-170/NTSC/PAL/SECAM
- ■ Up to 8 VCBS multiplexed inputs
- ■ 36 programmable single ended or 18 pairs differential input signals
- ■ 85 MHz Camera Link Base, Medium or Full interface
- ■ Programmable FGPAs for I/O interface and application development
- ■ PCI 32/133 interface
- ■ 64 MB of on-board memory
- ■ Multiple Software environments available:
  - ■ FastMotion Application for Stand-alone data collection and storage
  - ■ FastMotion DLL for Visual C/C++, VB, Labview and Matlab development
  - ■ Drivers for Windows™ 2K/XP/XP64/Vista32/Vista64, Solaris™ and Linux

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FASTFRAME-CB

```
                    64 MB
                    DDR
                    SDRAM
                      ↕ 32

Camera Link          FPGA      32      FPGA to PCI Bus
Digital                                Interface          32 bit Carbus
Analog
Input
```

INTERFACE OPTIONS

NTSC/PAL COMP. VIDEO CAP.

■ **Four Analog input decoders, Digitizes two simultaneous channels**

■ **Formats supported - NTSC (M, 4.43), PAL (B, D, G, H, I, M, N), and SECAM (B, D, G, K, K1, L) video data, RS-170**

■ **ITU-R BT.601 standard sampling**

■ **High-speed 9-bit ADC**

■ **Input impedance – 75Ù.**

■ **Channel crosstalk – -56 dB max.**

DIGITAL VIDEO CAPTURE

■ **15 pair differential or 30 bit single ended operations.**

■ **Comprehensive standards support: LVCMOS; LVTTL; PCI, PCI-X; LVDS, Bus-LVDS, MLVDS, LVPECL; with programmable On Device Termination (ODT)**

■ **Programmable direct via FPGA Firmware**

■ **Max. clock rate – 595 MHz**

CHANNEL LINK

■ **Bi-directional Camera Control interface**

■ **Base, Medium, or Full Camera Link supported**

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 comsumption 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)**

ALACRON