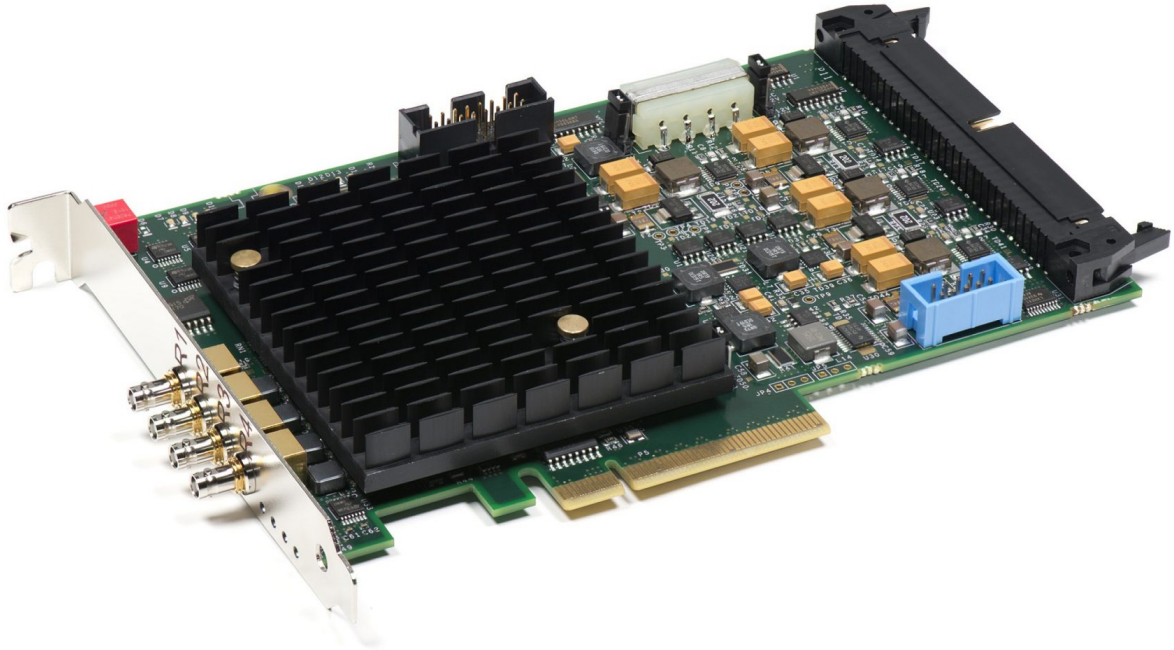
Frame grabbers for machine vision



CLAXON CXP4

The Claxon Platform

BitFlow has been shipping CoaXPress frame grabbers since 2012. The standard has not stood still and BitFlow has continued to advance its products. The latest is the Claxon, a quad CXP-12 PCIe Gen 3 frame grabber. CXP-12 is the latest CoaXPress speed jump, now transmitting video at 12. 5 Gb/S. While the speed of data through the frame grabber has doubled, the overall architecture has remained the same as the previous generation Cyton, allowing user to easily migrate to the newer cameras without major software changes.

The Claxon-CXP4 is the first product on the Claxon platform. Since it's launch we now

have added to the family with the Claxon CXP1, Claxon CXP2 and Claxon FXP (CXP over Fiber – CoF)

Specifications

- Half-Size x8 PCI Express Gen 3.0 frame grabber
- CoaXPress 1.x/2.x compliant
- Supports one to four CXP-12 cameras
- Supports multi-link CXP-12 cameras (up to four CXP links)
- Supports CXP speeds from 3.25 to 12.50 Gb/S
- Supports simultaneous capture from four CXP-12 cameras
- Low speed uplink supported on all links
- Uses micro BNC connectors
- Provides power for all cameras (up to 13 Watts per link)
- Provides Safe Power, full protection from all power line faults
- Cameras are Plug and Play with automatic link speed and camera parameter detection
- Cable lengths of up to 100 meters are supported
- Cameras can be accurately synchronized, or can be completely independent
- Compatible with all PCIe x8/x16 slots Gen 1.0/2.0/3.0
- Separate I/O for each camera
- Highly deterministic, low latency frame grabber to camera trigger
- Supports simultaneous command and control to all cameras
- Windows “sees” a separate virtual frame grabber for each camera
- StreamSync technology maximizes data through-put while minimizing image latency
- Acquire variable length frames from line scan cameras
- Triggers and encoders for external control of acquisition
- Drivers, utilities and examples for Windows and Linux
- Supported on both 32-bit and 64-bit platforms
- Drivers for most 3rd party processing environments (e.g. HALCON, LabView, VisionPro, MATLAB, etc.)
- Full GenICam support for camera control and capture
- Programmable signal generator for camera control (independent for each camera)
- Quadrature encoder support including sophisticated triggering schemes
- Encoder divider/multiplier
- RoHS compliant
- Supports BitFlow BitBox