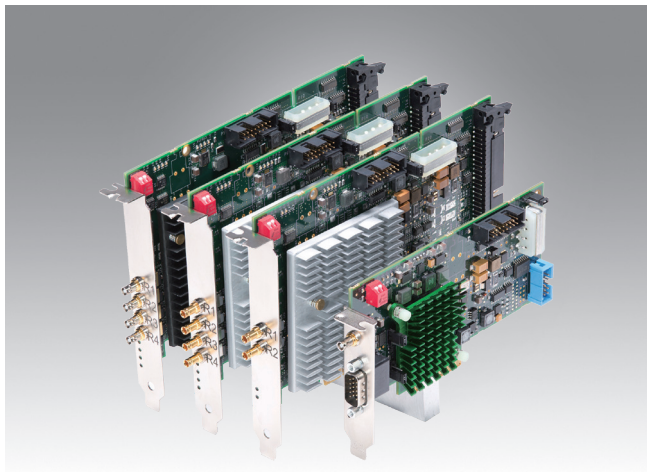


# Cyton Series



## Features

- CoaXPress Frame Grabber
- Supports up to 4 independent cameras on one grabber
- Support data rates up to 6.25 Gb/S (CXP-6)
- Camera power supplied over coax (12 W per camera)
- CXP 1.x compliant
- Image sizes up to 268,435,456 x 16,777,216
- No frame rate or line rate limit
- Independent I/O (trigger, encoder, strobe, etc) for each camera
- Supports quadrature encoders
- On board timing sequencers
- Half-Size PCI Express Board
- Quadrature encoder support
- Programmable signal generator

## Description

CoaXPress (CXP) is the latest Machine Vision industry designed camera-to-frame grabber interconnect standard. CXP supports a high speed downlink for video data, a low speed uplink for camera control, and power, all over standard coaxial cables. Multiple CXP connections can be aggregated to even higher speed cameras.

BitFlow's Cyton supports all CoaXPress cameras up to CXP-6 with 1 to 4 CXP links. The output of cameras with more than one CXP link will be aggregated into a single image stream. Also, multi-link Cytons can acquire from more than one camera. For example, Cyton-CXP4 can acquire from four single link CXP cameras. All cameras can be run independently, and each camera can have its own trigger/encoder (or they can all be synced from the first camera's trigger/encoder).

All BitFlow Frame Grabbers come with sophisticated I/O functionality. They provide support for quadrature encoder controlled acquisition. Many different trigger configurations are supported for a wide range of industrial applications. Generic I/O is also included for controlling strobes, solenoids, etc.

Adding the Cyton to your application is simple with our SDK, which supports both Windows and Linux. Applications can be developed using C/C++/C# or Python and our sophisticated buffer management APIs. In addition, free drivers can be downloaded from BitFlow's web site for most 3rd-party machine vision software packages.

## Specifications

Camera Interface	Compatibility	CXP 1.x
	Configuration	CoaXPress cameras running on coax
	Connectors	DIN 1.0/2.3
	Bus Interface	PCI Express x8 Gen 2 interface (also works in x16 slots and Gen 3/4 slots)
Processor and Software Support Package	Processor Architecture	x86, ARM64
	Operating System	Windows 10, 11 (x86 only), Linux (x86 and ARM)
	Supported APIs	C, C++, C#, Python
Power Requirements	Input Voltage	3.3 and 12 V <sub>DC</sub> direct from PCIe slot, 12 V <sub>DC</sub> if needed for PoCXP from auxiliary connector
	Overload Current Protection	Present
	PoCXP (Power over CXP)	13 W per connector (coax models only)
Environment	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 80°C (-4 ~ 176°F)
	Operating Humidity	5 ~ 95% RH
Certification	Compliance	FCC CE Class A

## Ordering Information

Part Number	Description
96PD-AONPC2CXP1	1-port PCI Express CoaXPress, CXP6 Frame Grabber
96PD-CYTPC2CXP2	2-port PCI Express CoaXPress, CXP6 Frame Grabber
96PD-CYTPC2CXP4	4-port PCI Express CoaXPress, CXP6 Frame Grabber
96PD-CYTPC2CXP4V	4-port PCI Express CoaXPress, CXP6 Frame Grabber with Ventilator