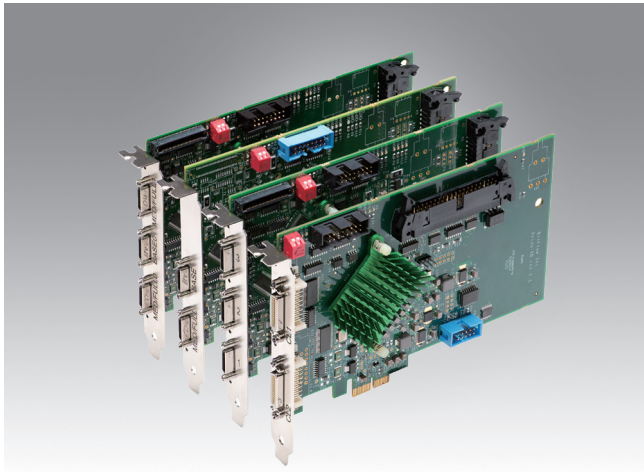


# CameraLink Series



## Features

- Camera Link Base/Medium/Full/80-Bit
- Supports up to 4 independent cameras
- Supports PoCL and non-PoCL cameras with SafePower
- Reformats all tap configurations on the fly
- Camera Link clock up to 85 MHz
- 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

The Axion family has been designed to work with all Camera Link compliant cameras. It can capture almost any resolution image at any frame rate. It handles all CL tap formats, Base/Medium/Full, as well as 80-bit (Full+) cameras. In fact, the 2xE can acquire from two 80-bit/85 MHz cameras simultaneously, while the 4xB can acquire from four Base cameras at the same time.

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 include for controlling strobes, solenoids, etc.

Adding the Axion 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.

No Machine Vision challenge is too complicated for the Axion-CL.

## Specifications

Camera Interface	Compatibility	Camera Link 2.x
	Configuration	Base/Medium/Full/80-bit (Full+)
	Connectors	SDR and MDR Camera Link connectors
	Bus Interface	PCI Express x4 Gen 2 interface (also works in x8/x16 slots and Gen3/4 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
	Overload Current Protection	Present
	PoCL (Power over Camera Link)	4 W per CL connector
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
PCIE-1121B-AE	Axion 1xB, 1-port PCI Express Camera Link, Base Frame Grabber
PCIE-1122B-AE	Axion 2xB, 2-port PCI Express Camera Link, Base Frame Grabber
PCIE-1123B-AE	Axion 3xB, 3-port PCI Express Camera Link, Base Frame Grabber
PCIE-1124B-AE	Axion 4xB, 4-port PCI Express Camera Link, Base Frame Grabber
PCIE-1121-AE	Axion 1xE, 1-port PCI Express Camera Link, Base/Medium/Full/80-bit Frame Grabber
PCIE-1122-AE	Axion 2xE, 2-port PCI Express Camera Link, Base/Medium/Full/80-bit Frame Grabber