



AXION 1xB

The Axion-CL is the most powerful CL frame grabber BitFlow has ever manufactured. A natural addition to this family was obvious...a CL Base version. The Axion xB series will be replacing the Neon series of Camera Link frame grabbers.

The Axion-CL also benefits from other products in BitFlow's line up. The Axion-CL uses the Cyton-CXP's backend: the StreamSync DMA engine and buffer manager. A brand new PCIe Gen 2 interface, with DMA optimized for modern (fully loaded, fully busy) computers.

Moving from the Neon family to the Axion family is simple. No need to make changes to your code, just recompile with the latest SDK. If you are using a 3rd party application, such as Cognex Vision Pro or LabVIEW, just download the latest driver and your program will already be supported. The same application can support both the Axion and the Neon family (as well as our CXP line of frame grabbers).

Connectors on the Axion 1xB are the same as those on the Neon CLB, so your existing cable infrastructure will not need to be changed.

Hardware Specifications

- Base Camera Link interface
- All tap Camera Link tap formats are supported
- Supports a single Base CL camera
- Supports Power over Camera Link (PoCL)
- Supports both PoCL and non-PoCL cameras
- Provides Safe Power – full protection from all CL power line faults
- Fully backwards compatible with non-PoCL cameras and cables
- Half-Size x4 PCI Express Board
- Acquire up to 24 bits at 85 MHz
- Both CL and I/O connector on one bracket (only one slot needed)
- MDR Camera Link connector
- StreamSync technology means that no on-board memory is needed, even with the fastest cameras
- DMA at data rates up to 1.8 GB/S
- Supports images up to 32K pixels x 16M lines
- No frame rate limit (tested to over 250K FPS)
- Triggers and encoders for external control of acquisition
- Sophisticated triggering modes for complex applications
- Acquire, trigger controlled, variable length frames with line scan cameras
- Quadrature encoder support including sophisticated triggering schemes
- Encoder divider/multiplier
- Two general purpose, on-board timing generators (exposure control, strobe, solenoids, etc.)
- RoHS compliant

Software Specifications

- Drivers, utilities and examples for Windows and Linux
- Supported on both 32-bit and 64-bit platforms
- Camera Link Specification compliant serial port support
- Fully supports GenICam based CL cameras (CL Protocol)
- GenTL producer supplied for working the GenICam based applications
- GenICam based camera control application, Ximilon, available for free
- Drivers for most 3rd party processing environments (e.g. HALCON, LabVIEW, VisionPro, MATLAB, etc.)
- Acquire image sequences well beyond the 4GB barrier