

## APPLICATION NOTE

# Usage of frame grabbers with Goldeye Camera Link cameras

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## Scope of this document

Goldeye Camera Link (CL) cameras are able to operate with the majority of Camera Link Base frame grabbers. However, not all frame grabbers are tested with Goldeye CL cameras. Therefore, this document refers to frame grabbers which have been successfully tested by Allied Vision with the Goldeye CL family.

## Goldeye Camera Link interface

Goldeye CL provides a Camera Link Base interface with up to two taps:

- a tap geometry of 1X\_1Y with the Mono8, Mono12, and Mono14 pixel formats,
- a tap geometry of 1X2\_1Y with the Mono8, and Mono12 pixel formats.

Maximum clock frequencies are as follows:

- Goldeye CL-008 models: 40 MHz
- Goldeye CL-032 models: 40 MHz
- Goldeye CL-033 models: 85 MHz
- Goldeye CL-034 models: 85 MHz

The camera has an SDR26 connector, and a Serial Control Channel. The Goldeye CL-033 can achieve a speed of 301 fps. With full resolution of  $640 \times 512$  it can reach an output of 98.6 MB/s. The Goldeye CL-034 can achieve a speed of 303 fps. With full resolution of  $636 \times 508$  it can reach an output of 98.6 MB/s.



### Further information available online

For a detailed description of the Goldeye Camera Link interface refer to the Goldeye G/CL Technical Manual at [www.alliedvision.com/en/support/technical-documentation/goldeye-gcl-documentation.html](http://www.alliedvision.com/en/support/technical-documentation/goldeye-gcl-documentation.html)

## Tested frame grabbers

| Manufacturer         | Series          | PCIe    | CL Plug   | GenCP |
|----------------------|-----------------|---------|-----------|-------|
| Active Silicon       | Firebird AS-FBD | x4      | SDR       | Yes   |
| Active Silicon       | Firebird AS-FBD | x8      | MDR       | Yes   |
| Bitflow              | Neon-CLB        | x4      | MDR       | Yes   |
| Bitflow              | Neon-CLD        | x4      | MDR       | Yes   |
| Bitflow              | Neon-CLQ        | x4      | SDR       | Yes   |
| Euresys              | GRABLINK        | x1 / x4 | MDR / SDR |       |
| Epix                 | PIXCI® E8       | x8      | MDR       |       |
| National Instruments | PCIe-1433       | x4      | MDR       |       |
| Silicon Software     | microEnable IV  | x1 / x4 | MDR       |       |

Table 1: Frame grabbers testes by Allied Vision

## Goldeye CL cameras and Power over Camera Link (PoCL)



### Take note when using PoCL-capable frame grabbers

Goldeye CL cameras do not conform to the PoCL standard, and can not be powered by PoCL. Use of PoCL-capable frame grabbers does not effect camera operations.

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