

Frame grabbers: At the forefront of high-speed imaging

Given the increase in embedded electronics and custom-designed computer vision products, we're seeing buoyant demand for our embedded vision systems and block cameras. But frame grabbers are also a vital tool for vision engineers, and here's why.

What role does the frame grabber have?

CoaXPress v2.0 is much faster than standard PC digital interfaces and our latest CXP-12 boards offer 50 Gbps - way beyond USB 3.0 or even 10GigE.

Interfaces dedicated to machine vision are designed for reliable 24/7 image acquisition without CPU intervention. Frame grabbers also allow very fast real time triggering of the camera from the PC, with line scan trigger rates up to 500kHz.



Frame grabbers for accelerated image processing



Having a frame grabber in your vision system makes a huge difference to the speed of image acquisition and processing.

Using a **GPU** with a frame grabber can speed up image processing further, while leaving space on the CPU for other functions.

Our **CoaXPress** and **Camera Link frame grabbers** support 3rd party APIs including NVIDIA's GPUDirect for Video and AMD's DirectGMA.

FireBird cards are supported by Active Silicon's software development kit, **ActiveSDK**. Camera and frame grabber control is delivered by our **ActiveCapture** front-end software. All FireBird frame grabbers are fully **GenlCam compatible**, including our Camera Link boards.

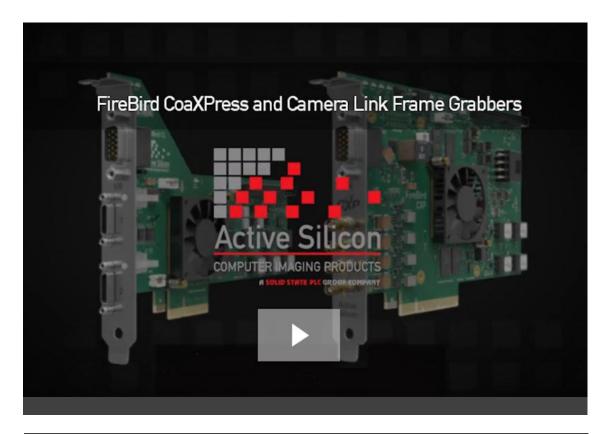
Customization options

The **dedicated software** supplied with frame grabbers can often be tailored to specific applications such as the medical sector (which requires specific compliance) and defense (which needs heightened security).

Hardware and firmware **custom solutions** can also be provided.

View the FireBird range of frame grabbers

See all the features in our product video



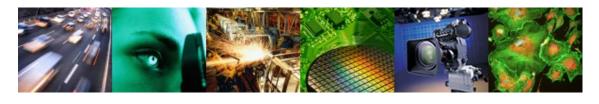
FireBird Features

- High-speed, real-time acquisition (ActiveDMA technology)
- No CPU overhead
- Comprehensive I/O
- Fully **GenICam** compliant (GenTL Producer)
- Variety of form factors available
- Windows, Linux and QNX supported
- GPU Processing supported (NVIDIA GPUDirect for Video, AMD DirectGMA)

Advancements in frame grabber design and operation are keeping them at the forefront of high-speed imaging – definitely a product for engineers to consider when requiring high-speed, highly-reliable image acquisition.

View our CoaXPress frame grabbers and Camera Link frame grabbers online or get in touch to see what our boards could bring to your vision system.

Active Silicon is a leading manufacturer of imaging products, embedded systems and custom solutions. If you would like to stay informed of upcoming events, products and news in general, then please follow us on one of our social media channels below.















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