High-speed image acquisition with real-time GPU processing

Alongside the adoption of FPGAs, it's interesting to take a look at how image processing via a **GPU** remains an immensely efficient and flexible option. Offering lower implementation costs and accessibility than dedicated hardware solutions, a GPU alleviates the burden on a CPU, freeing up memory and capacity for other functions.

High-speed imaging via a GPU can add value to a vision system

How to make faster processing a reality

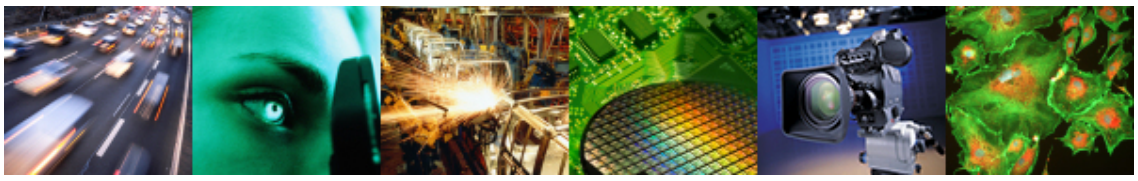
We've written an article outlining how accelerated GPU processing can be achieved, and which applications will benefit most. Deep Learning is adding to the volume of heavy computational algorithms required, meaning more processor power is needed. For certain applications, **FPGA**s can also be incorporated for greater flexibility.

Processing via GPUs is a simple and cost-effective way to speed up image acquisition which can be implemented easily and quickly into most modern vision systems. At Active Silicon, we are leaders in providing reliable and robust components which are compatible with GPU technology. Our Camera Link frame grabbers accept clock rates of up to 85 MHz while our new CoaXPress v2.0 quad boards offer data at a transfer rate of up to 50 Gbps. Fitting easily into existing systems and requiring readily-available software skills, speeding up imaging and implementing Deep Learning has never been easier.

Read more about how processing via a GPU could speed up your inspection system, and what to look for before commencing the project.

Read the article

Active Silicon is a leading manufacturer of imaging products and embedded vision systems. 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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