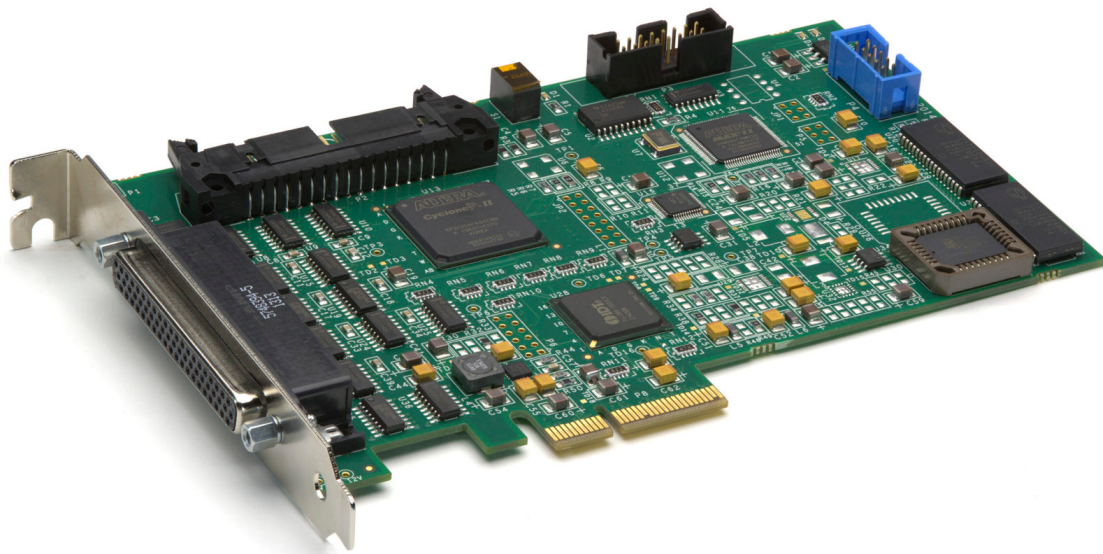


# ADVANTECH

# BitFlow

Frame grabbers for machine vision



## NEON DIF

# Neon-DIF

The machine vision industry is constantly advancing with new buses, new interconnect standards and new software standards. However, many applications do not require cutting edge technology or require “tried and true” standards. Some applications are simply recycling older technology, following the “why throw it out if it still works?” motto. With this in mind, BitFlow has introduced the Neon-DIF. We have taken our robust Neon platform and replaced the camera link front end with a 32-bit differential interface. In some

ways, this board is the best of both worlds – it melds the latest PCIe speed and features with older, but very robust, differential data devices.

## Specifications

- 32-bit differential interface
- Accepts LVDS (RS644) and RS-422 signals
- Programmable clock output
- Connector pin-out compatible with BitFlow's Road Runner and R3-Dif families
- Compatible with cables used with Road Runner and R3-Dif
- Serial communication support on main connector
- Half-Size x4 PCI Express Board
- Acquire up to 32 bits at 85 MHz
- I/O on internal connector, accessory cables available to bring signals out of PC
- FlowThru technology means that no on-board memory is needed, even with the fastest cameras
- DMA at data rates up to 528 MB/S
- Supports images up to 256K x 128K
- No frame rate limit
- Triggers and encoders for external control of acquisition
- Programmable signal generator for camera control
- Sophisticated triggering modes for complex applications
- Acquire variable length frames with line scan cameras
- Quadrature encoder support including sophisticated triggering schemes
- Encoder divider/multiplier
- On board timing generator supports high-resolution exposure control
- Drivers, utilities, and examples for Windows XP/2003/Vista/Windows 7
- Supported on both 32-bit and 64-bit platforms
- Drivers for most 3rd party processing environments
- Acquire image sequences well beyond the 4GB barrier
- RoHS compliant