

# PCI DVa

PCI digital video interface (version a) for AIA



## Description

The PCI DVa is an AIA interface that provides high-resolution image capture for digital video. It uses an 80-pin connector to support a wide variety of cables and cameras.

The board fits in any PCI or PCI-X bus. Images are captured and displayed in real time, and camera speed, resolution, and number of buffers are limited only by host bandwidth and memory.

Provided with the board are drivers for supported operating systems and a software development kit that includes C language libraries, examples, utilities, image capture and display GUI, and camera configuration files.

## Applications

Astronomy / biology / microscopy  
Aerial mapping / traffic systems  
Commercial film / multimedia  
Medical and nuclear imaging  
Remote scientific monitoring  
Manufacturing / inspection  
Machine vision / robotics  
Security / surveillance  
Scanning / archiving

## Features

AIA interface fits in a PCI or PCI-X bus  
Accepts images of any resolution; sends data directly to host via DMA  
Provides onboard region-of-interest control  
Supports data rates up to 220 MB/s, as supported by host

## Specifications

Memory	FIFOs for up to several lines of data; no frame memory	
Data Rates	Peak Typical	Up to 220 MB/s 190 MB/s or maximum supported by host
AIA Compliance	Supports most AIA format (LVDS or RS422) cameras that provide line- and frame-valid signals and a continuous pixel clock. For a list of tested cameras, see <a href="http://edt.com/pcidv_cameras.html">edt.com/pcidv_cameras.html</a> .	
EU Compliance	CE RoHS WEEE	Contact EDT RoHS directive 2002/95/EEC WEEE directive 2002/96/EC
PCI Compliance	PCI version Direct memory access (DMA) Clock rate / data width	PCI 2.3 Yes 66 MHz / 32 bits
Noise	0 dB	
MTBF	Estimated at 150,000 hours	
Triggering	Via CC lines, or externally via connector (opto-coupled Berg or optional DB 9-pin subpanel – CTG DB9M 09480)	
Serial	RS232 or RS422, transmit/receive lines in 80-pin data/control connector, onboard UART programmable from 9600 to 115,200 baud	
Connectors	AMP high-density 80-pin – mate to AMP 749621-8, backshell 749196-2	
Cabling	Cabling is purchased separately; consult EDT for options	
Physical	Weight Dimensions	3.3 oz. typical 5.0 x 4.2 in.
Environmental	Temperature (operating / non-operating) Humidity (operating / non-operating)	10° to 40° C / -20° to 60° C 20% to 80% non-condensing at 40° C / 95% non-condensing at 40° C
System and Software	System must have a PCI bus, 66 MHz or faster (33 MHz will work, but at reduced data rates). Software is included for Windows and Linux; for versions, see <a href="http://edt.com">edt.com</a> .	

## Ordering Options

- Signal levels: **LVDS** / RS422
- Triggering (external): DB 9-pin subpanel

**Bold** is default. **Ask about custom options.**