

# PCI DVa

PCI digital video framegrabber for AIA (LVDS or RS422)



## Description

The PCI DVa is an AIA framegrabber 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 compact, half-length board fits in any PCI or PCI-X slot. 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 or display GUI, and camera configuration files.

## Applications

Astronomy

Aerial mapping

Computer microscopy

Intelligent traffic systems

Manufacturing / inspection

Remote scientific monitoring

Medical and nuclear imaging

Image archiving

Machine vision

Multimedia

Security

## Features

AIA framegrabber fills one PCI or PCI-X slot (32/64 bits, 33/66 MHz)

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

Product Type	PCI DVA is a PCI digital video framegrabber for AIA (LVDS or RS422).	
Memory	FIFOs for up to several lines of data; frame memory is not included	
Data Rates	Theoretical Typical	Up to 220 MB/s 190 MB/s or maximum supported by host
AIA Compliance	Supports most AIA 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://www.edt.com/pcidv_cameras.html">www.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 (will work in a PCI-X slot) Yes 33 or 66 MHz / 32 bits
Noise	0 dB	
MBTF	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  Humidity	Operating 10° to 40° C Non-operating -20° to 60° C  Operating 20% to 80%, non-condensing at 40° C Non-operating 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, Solaris, Linux, and Mac OS X and can be requested for VxWorks; for supported versions, see website.	

## Support

EDT offers engineer-to-engineer customer support, from phone consultation to custom design of hardware, firmware, and software. Contact us for options and details.

## Ordering Options

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

**Bold** is default. Consult EDT for more options.

## Contact

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