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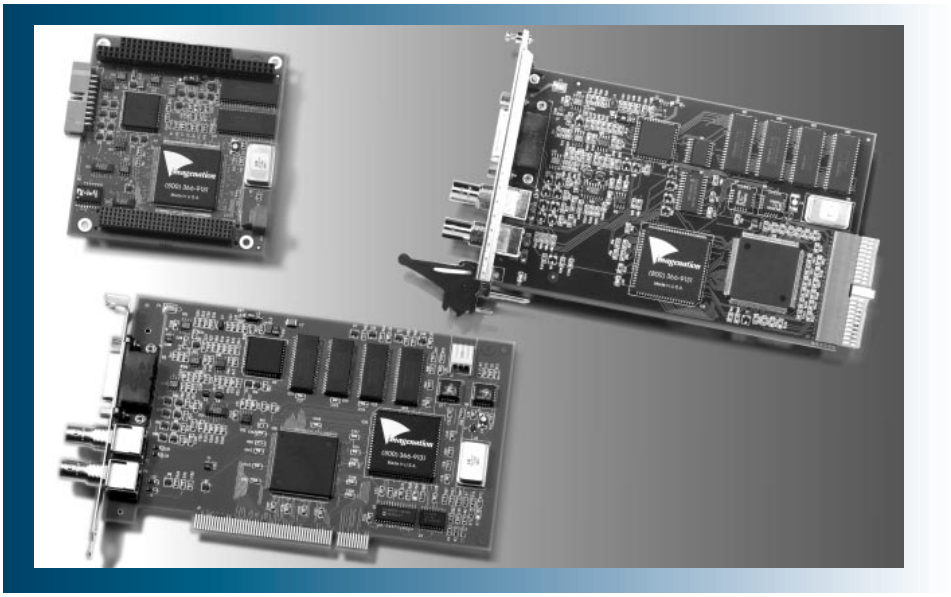
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Find the *CyberOptics / Imagenation PX-610A-00* at our website: *Click HERE*

PX610 Precision Video Frame Grabber

imagenation
vision system specialists

Real-time video capture with support for progressive scan cameras — available in standard PCI, embedded PC/104-*Plus* and *CompactPCI* formats.



A total solution for many PCI bus applications.

The PX610 offers full support for non-interlaced video from progressive scan cameras, which eliminates blur seen in images of fast-moving objects captured by standard CCD cameras.

In addition to non-interlaced video, the PX610 supports standard RS-170/CCIR video and resettable cameras. Acting as a bus master, it handles data transfers while the main CPU is free to run other parts of your application or other applications. Image data can be transferred to a buffer in main memory or directly to another PCI device.

The PX610 accepts up to four video inputs and can select the active source under software control. Standard capture resolutions of 640 x 480 (RS-170/NTSC) and 768 x 576 (CCIR/PAL) provide square pixels for precise measurements. The PX610 also supports vertical and horizontal cropping and scaling, versatile capture modes, software adjustable offset and gain, and automatic look up table (LUT) load.

The PX610 integrates easily into your application.

As a plug and play-compliant device, the PX610 automatically configures itself when installed in a computer with a Plug and Play BIOS. It also offers support for needs like these:

- Working in tandem with resettable cameras, the PX610 ensures reliable first field captures and tolerates erratic video sources, including VCRs.
- Dual strobe output offers software control over cameras and other external equipment, with trigger input for synchronizing image acquisition to an external event.
- The PX610 is compatible with standard machine vision application software like XCaliper from Optimas and VisionBlox from Integral Vision.

Count on Imagenation for tools and assistance to get your system up and running quickly.

Demo programs for Windows and DOS enable the PX610 to be used right out of the box, without writing a single line of code. Comprehensive support is included for standard languages like C/C ++ and Visual Basic. A separate library for DOS and Watcom makes it easy to develop menu-based user interfaces.

Technical support plus current software and examples are available through Imagenation's web site. Or call toll-free to talk directly with our design engineers if questions arise.

With Imagenation, your technology investment is protected.

Because our products are built to be compatible with standard PC components, they provide easy migration to new operating systems, as well as support for the latest machine vision application software packages.

Flexibility is another advantage. The PX610 comes in other form factors and bus standards like PC/104-*Plus* and *CompactPCI* for embedded systems. Your software investment is protected because no rewrite is required if another platform can better satisfy your price and performance requirements in the future. For example, an embedded system may prove more cost-effective than a desktop computer system as you ramp up for volume applications. Imagenation also has a family of color PCI products as well as monochrome frame grabbers and video multiplexers for the ISA bus.

Finally, Imagenation's team of vision system specialists stand ready to provide fully integrated MV systems or subsystems, custom designed to meet all your unique application requirements. Imagenation takes responsibility for your whole system, providing seamless integration, expert consulting and on-going support.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

KEY FEATURES

- Compact, PCI short-card, PC/104-*Plus* core module and *CompactPCI* 3U size card
- PCI bus master design for real-time image capture
- Support for non-interlaced video from progressive scan cameras
- High gray-scale accuracy with low pixel jitter
- Resettable camera support with high precision digital synchronization
- Four multiplexed video inputs with automatic video format detection
- Standard capture resolutions of 640 x 480 x 8 (RS-170) and 768 x 576 x 8 (CCIR)
- Vertical and horizontal cropping and scaling to minimize memory and bus bandwidth requirements
- Continuous, software-initiated or triggered capture of frames or fields
- Input lookup table (LUT)
- Programmable offset and gain
- External trigger input and dual strobe output
- Horizontal and vertical outputs for gen-locking with camera
- Simple software interface
- Software development support for DOS, Watcom DOS/4GW extender, Windows 3.1, Windows 95 and Windows NT applications
- Support for C/C ++ language and Visual Basic
- Software and manual included
- Standard product: FCC verification and CE marked

OPTIONS

- Optional video cache RAM
- Optional video cable
- Optional software protection key for securing your application software

PX610 SPECIFICATIONS

Input composite video format —Monochrome, RS-170 (NTSC) or CCIR (PAL), auto detect

Input video — 1 V peak to peak, 75 Ω

Resolution — RS-170: 640 x 480 pixels (maximum: 768 x 486 pixels); CCIR: 768 x 576 pixels; 256 gray levels, 8 bits

Sampling jitter — Maximum of ± 3 ns relative to horizontal synchronization

Capture time — Real time video capture: RS-170 (NTSC), 1/30 second per frame; CCIR (PAL), 1/25 second per frame

Software programmable look up tables (LUTs) — 256 byte input LUT

External trigger — Input pulled up by 10 kΩ to 5V, trigger requires a TTL pulse of 100 ns (minimum); software programmable edge or level sensitivity; software programmable polarity

Strobe output — Two TTL outputs with independently programmable pulse widths and polarities to control resettable cameras, exposure time, strobe lights, etc.

Overvoltage protection — All inputs and outputs are diode protected

Video input voltage range — Diode clamped to ±1.2 volts

Form factor — PCI short-card, 174.6 x 106.7 mm (6.875 x 4.2 inches); PC/104-*Plus* core module, 91.4 x 96.5 mm (3.4 x 3.6 inches); *CompactPCI* 3U size, 100 x 160 mm (3.94 x 6.3 inches)

Video noise — ≤ 0.8 LSB (least significant bit)

Power — + 5 VDC, 650 mA

Camera power — + 12 VDC output, 1.5 amps maximum

Video multiplexer — Four video inputs which can be a mix of RS-170 and CCIR

Camera gen-locking — Horizontal and vertical drive outputs to gen-lock camera with a frame grabber

File formats — Binary conversion program allows creation of TIFF, GIF, BMP, PIC, PCX, TGA and WPG files

Operating temperature — 0° C to 60°C

Warranty — One year limited parts and labor

PX610 ORDERING INFORMATION

PX610	**Standard product**
Option 20	**Cache RAM for RS-170 (0.5 MB)**
Option 25	**Cache RAM for CCIR (1 MB)**
CB-006-01	**Video Cables for PX610**

The PX610 is available in a standard PCI short-card and embedded system formats for PC/104-*Plus* and *CompactPCI*. Built-in software protection for the PX610 is also available. Contact Imagenation for details.

Contact Imagenation for more information or to discuss your application.

Toll free: (800) 366-9131 Phone: (503) 495-2200 FAX: (503) 495-2201
Email: info@imagenation.com WWW: http://www.imagenation.com

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We buy equipment

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Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

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