PIXCI® D2X Frame Grabber Supports Over 300 Digital Output Cameras

If your digital output camera is manufactured by one of these camera companies . . .

Adimec Atmel- Grenoble Basler Cohu Dage-MTI Dalsa Duncan Technologies DVC EPIX Hamamatsu Hitachi	Photo Vision Pulnix Redlake MASD EG&G Reticon Sensors Unlimited Takenaka Teli Toshiba Uniq Vision Technologies Varian PaxScan Zoran
	Zoran

... then there is an excellent probability that the PIXCI D2X imaging board provides the computer interface. Visit the <u>Camera Compatibility</u> <u>Guide</u> for a listing of all camera models currently supported. <u>Contact EPIX</u> if your camera is not yet listed.

 HIGHEST IMAGE QUALITY
The PIXCI D2X is designed for scientific and machine

vision applications that



- Line Scan or Area Scan
- Single or Dual Channel
- 8 to 24 Bit Camera Data
- Asynchronous Capture Control
- Differential Trigger In / Strobe Out
- Camera Integration and Reset Control
- 32 bit PCI Bus Master
- 132 MB/s Burst Transfers
- Compatible with 32-Bit and 64-Bit PCI Buses
- Video Rate Image Sequence Transfer to Motherboard Memory
- RoHS Compliant Boards Available

require the highest image quality. To insure that precise camera data is always delivered to the computer, the PIXCI D2X board never compresses, processes or modifies pixel values.

MAXIMUM DATA TRANSFER RATE - The PIXCI D2X is a 32 bit PCI bus master imaging board that transfers camera data to the host computer at the camera's data transfer rate. The camera's pixel clock

controls the data flow from the camera into the PIXCI D2X; the computer's PCI bus chip set controls the data flow from the PIXCI D2X, through the PCI bus, to the computer's memory (or other PCI bus target).

COMPATIBILITY GUARANTEED - The product designation "PIXCI D2X" refers to a series of 300+ custom-configured imaging boards; each optimized to support one of 300+ specialized digital cameras. Before a camera is added to the <u>Camera Compatibility Guide</u>, EPIX tests the camera and designs a camera-specific interface. Engineers custom program a PIXCI D2X board to exactly support the camera's video timing specifications and electronically tag the board with the camera's identification code. An "Adjust Dialog" menu, optimized to match the camera's capabilities, is added to the XCAP imaging program.

OPTIMIZED IMAGING SYSTEMS - EPIX, Inc. offers complete imaging systems including cameras, imaging boards, software, cables, computers, lenses, and lighting. All components of an EPIX imaging system are configured and tested together, as a system, so we can guarantee that everything will work properly, the first time, right out of the box.

FEATURES

Example of Adjust Dialog for camera with direct software control (actual size).

₩ PIXCI® : SILICON VIDEO 2212C: Capture & Adjust ×	
PIXCIO C.a.P.t. Proc Cir Agc » Buf Res Trig Strobe -Capture - Buffers Current Buffer 0 Frame Buffers 0 Field Count 0 Clear Buffers	SILICON VIDEO 2212C Chan. Gain Timing AOI Misc Communication IPC Connect IPC Mode Off Line IPC Log None
C Live Snap C Unlive Reset	

Example of Adjust Dialog for camera without direct software control (actual size).

CAMERA CONTROL FROM SOFTWARE CAMERA ADJUST DIALOG:

Most cameras supported by PIXCI D2X imaging boards allow software control of exposure, gain, shutter speed, line rate, and more. The <u>XCAP</u> imaging program provides a dedicated camera Adjust Dialog for convenient control.

A camera's Adjust Dialog is automatically displayed when the



PIXCI D2X board is "Opened" from the Lite, Ltd, Std, or Plus versions of the XCAP program. XCAP knows which menu to load by reading the camera identification code from the PIXCI D2X board.

The Adjust Dialog uses camera control names designated by the camera manufacturer. As a result, the camera's user manual provides all the information required to control the camera from XCAP.

If a camera does not allow software control, then the camera is equipped with physical controls and switches — XCAP's camera Adjust Dialog is designed to appear like the camera's control panel using the camera's control labels. Camera control simply requires the operator to set XCAP control parameters to match the actual camera's control positions.

PIXCI D2X VERSATILITY MULTIPLE BOARDS / MULTIPLE CAMERAS:

All versions of the XCAP program (except Demo) recognize all PIXCI PCI imaging boards, regardless of model or order code, and offer dedicated control for as many as 8 PIXCI boards / cameras in one computer.¹ The Multiple Devices menu in XCAP displays each board by the model name of the camera it supports. Check Boxes provide quick and convenient camera selection. Synchronized operation of multiple cameras is available (camera dependent).

SOFTWARE COMPATIBILITY:

Supported by <u>XCAP</u>-Lite (no charge with board purchase), <u>XCAP</u>-Ltd, <u>XCAP</u>-Std, <u>XCLIB</u>, and <u>XCLIBIPL</u>.

Compatible with 32-bit & 64-bit Windows 10, 8, 7, Vista, XP, 2000, LINUX, and 32-bit DOS. Also TWAIN and Image-Pro Compatible.

TTL MODULE



The optional <u>TTL Module</u> minimizes false triggers when using a TTL trigger with a cable longer than one foot. The TTL MODULE converts the TTL trigger into a differential signal for reliable triggering with up to 200 feet of cable. The TTL MODULE also can generate a TTL strobe from

the attached PIXCI® board. Compatible with PIXCI® CL1, CL2, CL3SD, D2X, D3X, SI, and SI4.

SPECIFICATIONS

RESOLUTION:

8 to 4,096 pixels per line 1 to 4,096 lines per image (area scan) 1 to 65,534 lines per image (line scan)

SIGNALS:

Differential RS-644 or RS-422 camera / board signaling (camera dependent). Differential Trigger IN / Strobe OUT²

MAXIMUM FRAME RATE:

Camera Dependent

CONNECTIONS:

1 68-pin (SCSI II) cable receptacle 2 10-pin headers

CE / FCC CERTIFICATION:

PIXCI D2X was tested per EMC directive 89/336/EEC and performed to class B.

BUS REQUIREMENTS:

32 bit, 33 MHz PCI bus master, or 64 bit 66 MHz PCI bus master 3.3V or 5V PCI Signaling

DIMENSIONS:

12.48 cm long by 10.67 cm high (4.913" x 4.20") [short slot]