



PIXCI® E4G2 PCI Express x4 Gen 2.0 Camera Link Frame Grabber

Applications

- High Data Rate
- Industrial
- Multi-Camera



Frame Grabber Features

- PCI Express x4 Gen 2.0
- Captures from two Medium, Full, or 80-Bit Camera Link Cameras
- Captures from four Base Camera Link Cameras
- Line Scan or Area Scan
- Capture Individual Lines or Frames
- Capture Continuous Video for Seconds, Minutes, or Hours
- 64-bit memory addressing
- 20 gigabit per second burst transfer rate
- Triggered Image Sequence Capture
- Camera Integration & Async Reset Control
- DMA Image Data to Motherboard Memory

Software

- XCAP-Lite image capture, display, and save program included
- Capture video to computer memory with XCAP-LTD

- Stream video to disk with XCAP-STD
- XCLIB programmer libraries for frame grabber and camera control
- PXIPL image processing, measurement, and analysis libraries
- 3rd Party software available
- Windows & Linux, 32 & 64-bit

EPIX® SOFTWARE Support:

Supported by XCAP-Lite (no charge with board purchase), XCAP-Ltd, XCAP-Std, XCLIB, and XCLIBPL. Compatible with 32-bit & 64-bit Windows 8, 7, Vista, XP, 2000, LINUX, and 32-bit DOS. Also TWAIN and Image-Pro Compatible.

$$\nabla^2 f(x,y) = \frac{\partial^2 f}{\partial x^2} + \frac{\partial^2 f}{\partial y^2} \quad \frac{d_2 \cdot f}{f}$$

```

for(;;) {
capture();
difference();
lowpass();
if (findblobs())
reportlargest();
}

```

$\begin{bmatrix} \cos\theta & \sin\theta & 0 \\ -\sin\theta & \cos\theta & 0 \\ 0 & 0 & 1 \end{bmatrix}$	Pixel Clock: 45MHz Pixel Jitter: 1.0 ns Resolution: 6144 x 4096 Buffers: 253 Pixel Bits: 8 Camera: Area Scan Trigger: TTL Field Delay: 5
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$$\frac{1}{d_1} + \frac{1}{d_2} = \frac{1}{f}$$

Blobs Found: 259
Center of Mass: (23.65, 78.78)
Subpixel Edge @: (97.3498, 87.5000)

$$\delta = 1.22 \frac{\lambda d_1}{l} \quad s.n.r. = \frac{\bar{x}}{\sqrt{\sum(x_i - \bar{x})^2/n}}$$

FEATURES

- Quick & Easy Access to PIXCI® Imaging Boards.
- DLL for 32 bit Windows 95, 98 & ME Applications.
- DLL for 32 bit Windows NT, 2000, XP, Vista, 7 & 8 Apps.
- DLL for 64 bit Windows XP, Vista, 7 & 8 Apps.
- Object Code for 32 bit & 64 bit Linux Programs.
- Object Code for 32 bit DOS Programs.
- High Level Functions eliminate Register Level Programming.
- Custom Area-Scan or Line-Scan Formats.
- RS-170, NTSC, or S-Video Formats.
- Analog or Digital Video Interfaces.
- CCIR, PAL, or S-Video Formats.
- Dual Buffer "Ping-Pong" Capture.
- Multi-Buffer FIFO Capture for Video to Disk.
- Image Sequence Capture.
- Triggered Image Capture.
- Image display on S/VGA.

