

# Dimono Alpha2

## Advanced Monochrome Industrial Image Grabber Card

### Features

- 32-bit, PCI bus image grabber card
- Industrial frame grabber compatible with monochrome analog cameras (single or dual-tap)
- Two 8-bit 32MHz A/D converters
- High-resolution, typically 1300 x 1030
- Independent camera control: 2 timing generators, 2 trigger & strobe lines
- Asynchronous reset, shutter control and progressive-scan support
- 8-Mbyte frame buffer
- Libraries, ActiveX controls and DLLs included



### Introduction

#### General

The Domino Alpha2 is a flexible industrial frame grabber card compatible with monochrome analog cameras. It is the ideal solution for on-the-fly applications.

The Domino Alpha2 provides acquisition from two single-tap or one dual-tap analog cameras on a single PCI board. The Domino Alpha is fitted with 2 camera connectors and two digitizers. Simultaneous acquisition from both channels is possible. Two timing generators, two trigger and strobe lines are available for independent camera control.

The Domino Alpha supports standard as well as top-notch high-resolution cameras with a pixel clock frequency up to 32MHz.

Asynchronous reset, exposure control and progressive scanning are supported. It comes with the MultiCam driver, which drastically simplifies its integration into your machine vision application.

### Applications

- Quality control
- Semi conductor inspection
- On-the-fly image acquisition
- High frame rate image acquisition

### Specifications

#### Acquisition

- Two 8-bit 32MHz A/D converters
- Two 8-bit input look-up-tables
- 20, 10 or 5MHz programmable input filter
- Programmable gain and offset control

#### PCI Interface

- PCI rev 2.2 compliant interface
- Support of DMA and bus mastering

#### Camera Support

- Support of single-tap and dual-tap analog cameras
- Support of high-resolution cameras, typically up to 1300 x 1030 pixels
- Interlaced or progressive scanning
- Asynchronous reset and shutter control
- Camera pixel clock support
- Typical configurations supported
  - Two independent single-tap cameras
  - One dual-tap camera

#### Timing Generators

- Two independent timing generators
- The timing generator X supports analog and digital synchronization
- The timing generator Y only supports digital synchronization
- A digital synchronization requires H, V and pixel clock signals from the camera while an analog synchronization only uses the video signal

#### Frame Buffer

- 8-Mbyte SDRAM frame buffer

### Connections

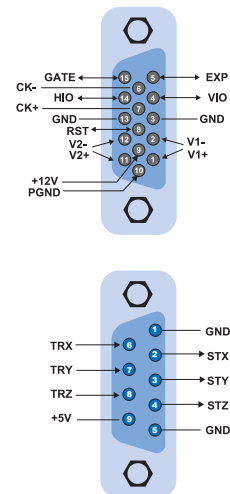
#### Camera Connection

Two DB15HD connectors on the main bracket including:

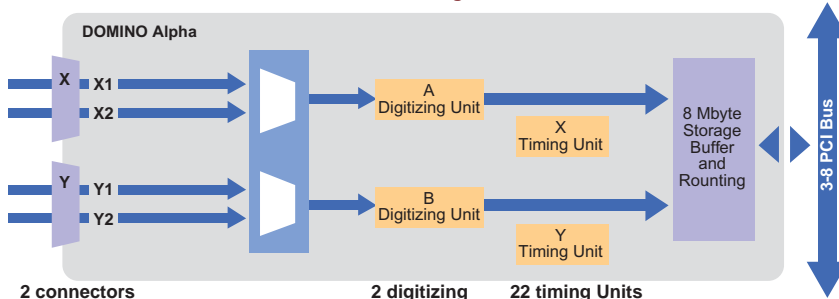
- Differential / single ended video inputs (75 ohms)
- Reset, VD, HD, exposure control and pixel clock lines
- Specific connection for 12 V camera supply

#### I/O Connections

Trigger-strobe (3 lines each) DB9 connector.



Block Diagram



### Software Support

DLLs and ActiveX controls for windows NT/95/98/2000

### Ordering Information

- **Domino Alpha2**  
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