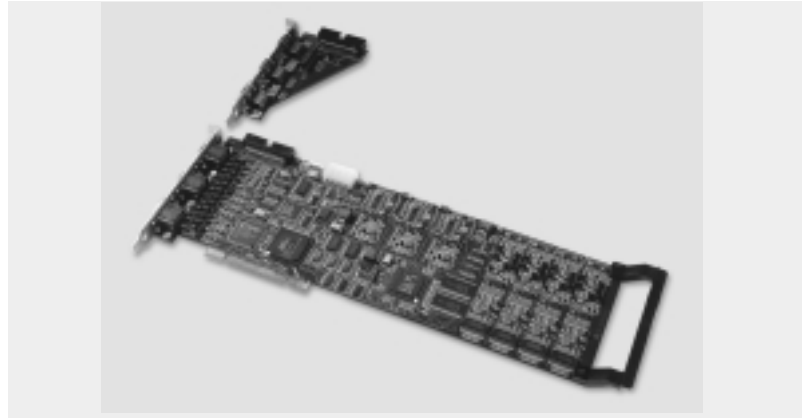


Domino Gamma

Image Acquisition from High-End Analog Cameras

Features

- Support of monochrome (single or dual-tap) & RGB analog cameras
- Four 10-bit 40MHz A/D converters
- High-resolution, typically 1300 x 1030
- Independent camera control: 3 timing generators, 3 trigger strobe lines
- Asynchronous reset, shutter control and progressive-scan support
- 16 Mbyte frame buffer
- Libraries, ActiveX controls and DLLs included



Introduction

The Domino Gamma is the ideal solution for **high-end multiple-camera applications**.

The **Domino Gamma** provides acquisition from typically **three analog cameras** (up to 6) on a single PCI board. The **Domino Gamma** is fitted with **3 connectors** and **four digitizers**.

Simultaneous acquisition from all channels is possible. Three timing generators, three trigger and strobe lines are available for **independent camera control**.

The Domino Gamma supports top-notch high-resolution cameras with a pixel clock frequency up to **40MHz**. It is compatible with single-tap, dual-tap and RGB cameras and generates 8-bit or 10-bit pixels per channel. 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.

Application

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

Software Supporting

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

Specifications

Acquisition

- Four 10-bit 40MHz **A/D converters**
- Four 10-bit input **look-up-tables**
- Support of automatic precise **input calibration**
- 20, 10 or 5MHz programmable **input filter**
- Programmable **gain and offset** control

PCI Interface

- PCI rev 2.2 (5V and 3.3V) compliant interface
- Support of DMA and bus mastering

Camera Support

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

Timing Generators

- Three independent **timing generators**

Frame Buffer

- **16 Mbyte SDRAM** frame buffer

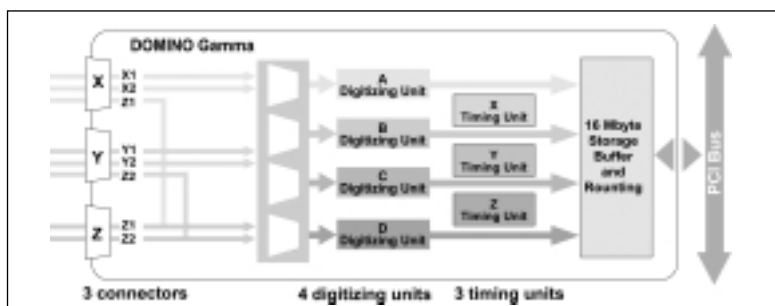
Connections

Camera connection

Three DB15HD connectors on the main bracket including:

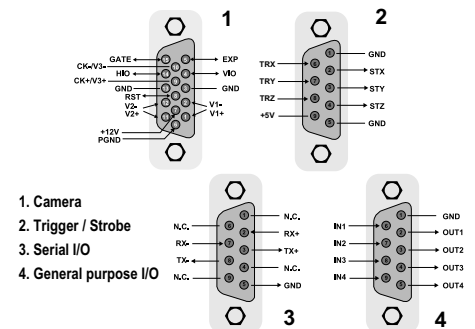
- Differential / single ended video inputs (75 ohms)
- Reset, VD, HD, exposure control and pixel clock lines
- Specific connection for 12 V camera supply

Block Diagram



I/O Connections

- RS-232 (default) or RS-485 (optional) DB9 connector on the extra bracket
- Trigger-strobe (3 lines each) DB9 connector on the extra bracket
- General purpose I/O DB9 connector on the extra bracket



Ordering Information

Domino Alpha

Advanced for high-end Multi-Camera applications.