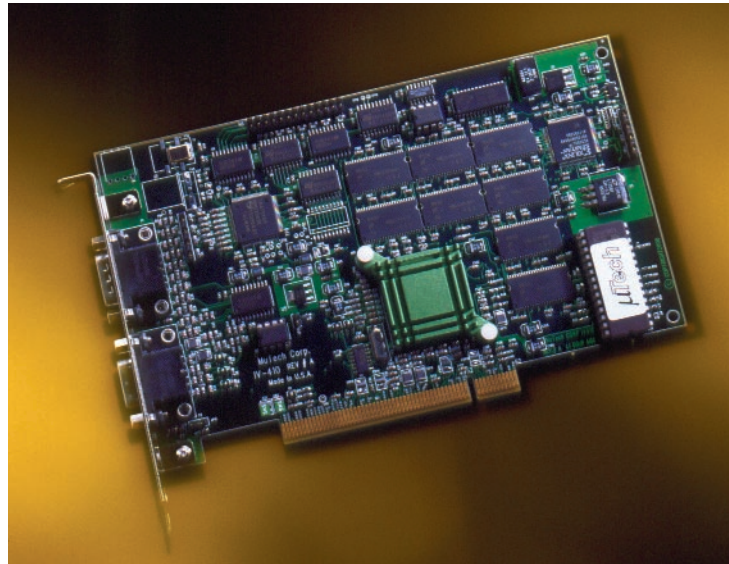


Image/VGA-410

Image/VGA-410

PCI Bus Frame Grabber



PCI Bus Frame Grabber

The Image/VGA-410 is a single-slot PCI board that contains an integrated frame grabber and 128-bit 3D accelerated VGA display controller. High quality video images can be digitized and displayed in real time inside a resizable video window on the computer's VGA monitor. Text and graphics can be written into the VGA memory and, using a color key, overlaid non-destructively on top of the live video. Chroma keying is supported so that a background can be underlaid behind the video scene.

The Image/VGA-410 is a fully functional VGA controller. Resolutions, with a live video window, of up to 1280x1024x32 bits are supported. The VGA graphics and video may have different pixel depths. The VGA data can be independently double buffered.

The Image/VGA-410 provides 12V DC power through the DB-9 connector for supplying power to the camera.

A strobe signal, controlled by a 16-bit counter, can be used to control the camera exposure/integration. The event trigger starts the strobe on an external event. A hardware trigger allows the capture of the next field or next frame of video.

Applications

- Industrial Vision
- Image Analysis
- Image Data Base
- Identification Systems
- Medical Imaging
- Microscopy
- Security

Features

- Single slot PCI board frame grabber and VGA Display
- Real time digitizing/display of video
- Programmable position/size of digitizing window
- DMA transfer to system memory
- Non-destructive color key overlay of text and graphics on live video
- Chroma key to underlay background
- NTSC, PAL, S-Video (Y/C) input
- YUV/YcbCr 4:2:2 Format
- Locks to VCRs
- Event/strobe pair for camera control
- Hardware triggered grab
- 12V DC camera power output
- Software Developer's Kit under DOS Windows 9X, Windows NT and Windows 2000

Image/VGA-410

A capture utility that allows the user to easily grab/display a frame of video and store/recall the frame in .tif, .tga or .bmp file format (.jpg optional) is included with the board. A software developer's kit that allows full board control along with sample source code examples is available.

Image/VGA-410 SPECIFICATIONS

Analog Video Input

- 3 Composite, 1 S-Video software selectable
- NTSC (RS-170) and PAL (CCIR) software selectable
- DB-15HD connector

Decoder

- Phillips SAA7114 digitizer
- 640x480 for NTSC, 768x576 for PAL
- YUV/YCbCr 4:2:2 high quality color
- Monochrome (Y only) w/8 bit input LUT(4 banks)
- Programmable gain control
- Brightness, Contrast, Hue, & Saturation programmable
- Field/frame acquisition
- Live video can be mirrored horizontally

VGA Display Controller

- S3 Savage Pro VGA accelerator
- 1280x1024x32 bits @ 75Hz with live video window

Memory

- 8 or 16 MB SDRAM
- VGA data and Video data stored in separate areas of the buffer
- VGA data can be independently double buffered
- VGA and Video data may have different pixel depths

External Control

- Event trigger to start the strobe
- TTL programmable output for strobe/integration control with 16 bit hardware counter
- Hardware trigger for frame/field grabbing
- 12 volt DC output for camera
- Interrupt on event, trigger, and vertical blank

Bus

- Master Mode transfer to/from system memory enables video sequence capture

Software Developer's Kit

- DOS library
- Windows 9x, Windows NT, Windows 2000 DLLs
- Source code examples provided

Specifications subject to change without notice

