Angelo cPCI-RTV24/44
PCI/CompactPCI 4-CH Real-Time Video Capture Modules

Features

- Four color video digitizers operating in parallel
- Up to 120 fps in 64-bit 66 MHz Compact PCI bus
- Color PAL / NTSC, monochrome CCIR / EIA camera support
- On-board TTL I/O lines
- Built-in watchdog timer
- Protection circuit for security issue
- User Friendly ViewCreator utility
- Software trigger supported
- Channel status report LEDs

cPCI-RTV24

Introduction

General

ADLINK Angelo cRTV series is a PXI/Compact PCI acquisition module is designed without compromise for security and video surveillance applications. It's the ideal device for PC based multiple-channel digital video recording.

This 64-bit 66 MHz Compact PCI (including 32-bit and 33 MHz) frame grabber can capture simultaneously four analog video streams in real time. It accepts standard composite colors (PAL, NTSC) or monochrome video formats (CCIR, EIA).

The resolution is programmable including square-pixel (640 x 480 or 768 x 576) and broadcast resolution. Before captured images are transferred to the PC's memory, images can be scaled down using available selectable ratios.

Arbitrary cropping to regions of interest are possible. The RTV series generates bitmaps in all popular color formats such as RGB, YUV, planar or packed.

System integrators also benefit from a watchdog for fault-tolerant applications and easy-to-use standard connectors.

Image Acquisition

Frame Rate: 30 full-frame images acquired per second for each channel.

Color Image: Color video format is compatible with the following composite video input formats: NTSC-M, NTSC-Japan, PCL-B, PAL-D, PAL-G, PAL-H, PAL-I, PAM-M, PAL-N and SECAM

Monochrome Image: The monochrome video acquisition is compatible with CCIR and EIA (RS-170)

Optional scaling: The acquire images or portions of images can be optionally scaled:
- Acquisition of a programmable area of interest.
- Scaling of the image (down to 1:16)

- Adjustment of hue (for NTSC signals), contrast (0 to 200%), brightness and saturation (0 to 200% for U and V signals)
- Automatic chrominance gain control

Channel status LED
The Angelo cRTV series provide channel status is monitored by four dedicated LEDs

I/O Lines
The Angelo cRTV-44 is fitted with TTL compatible I/O lines, supporting 4 inputs, 4 outputs and 4 soft trigger lines with protection against overloads and electrostatic discharges.

Watchdog
A hardware watchdog is available on the cRTV. The watchdog is able to monitor the PC's application operation and will automatically reset the PC after a programmable inactivity time-out. This ensures a reliable operation of remote systems.

Applications
- PC Based Surveillance System
- Digital Video Recorder (DVR)
- Factory Monitoring System
- Machine Vision Inspection System
- Scientific Research Instrumentation
- Medical Research Instrumentation

Platform Support
The Angelo cRTV-44 is ideal for standard 6U Compact PCI platform, while the cRTV-24 is ideal for standard 3U Compact PCI or PXI platforms.

ADLINK solutions
PXI-3710: 3U PXI CPU controller
cPCI-6770F: 6U Compact PCI CPU module
cPCI-3720: 3U CompactPCI CPU module

cPCI-RTV44

Software Support
WDM driver
The driver's supports VC++/VB programming under Windows 98/2000/XP platforms with DLL.

ViewCreator
ViewCreator assists developers to evaluate initial tests and functions.

Ordering Information

- **Angelo cRTV-44**
  6U Compact PCI 4Channels real-time video capture module
- **Angelo cRTV-24**
  3U Compact PCI 4Channels real-time video capture module

* All specifications are subject to change without further notice.