

AVC-cPCIs

8x D1 Video Frame Grabber for CompactPCI -Serial

The AVC-cPCIs is a high-performance 8-channel video capture and overlay controller on a 3U CompactPCI-Serial card. The AVC-cPCIs provides a powerful and flexible solution for capturing up to eight concurrent analog video inputs for local system display or software analysis and processing, ideal for embedded Situational Awareness systems in the most demanding environment.

The AVC-cPCIs allows each of the 8 video channels to be captured at full D1 size, all at full frame rate. The captured video data can be streamed continuously to system memory or disk for either immediate local display or further processing. The capture engine of the AVC-cPCIs features hardware color space conversion to present the captured video data in the format best suited to the end application.

The AVC-cPCIs is supported by drivers for Windows and Linux.



Applications

- High performance image capture
- Vehicle-based Video Capture
- Real-time Situational Awareness
- Law Enforcement
- Crime Scene Recording
- Remote Video Surveillance
- Multi-camera Security Application
- Asset Monitoring
- Traffic Monitoring and Control
- Video Acquisition and Analytics



AVC-cPCIs

Features

- 8 Live NTSC/PAL video inputs
- 8 x D1 size capture at full frame rate
- Windows DirectShow/DirectDraw support
- Efficient PCI DMA cycle operation
- Linux Video4Linux2 support
- Drivers for Windows, Linux
- 3U CompactPCI-Serial form factor.
- Low Power Operation



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THE EMBEDDED VIDEO EXPERTS

Live Frame Capture

up to 8 full size D1

PAL/NTSC/RS170

video inputs at full

frame rate.

Multi-Camera video

preview to system

display

Very Low Latency

Windows

DirectShow

and

Linux V4L

support



AVC-cPCIs

Rev A.00

8x D1 Video Frame Grabber for CompactPCI-Serial

Technical Specification

CompactPCI Serial Bus Interface

3U CompactPCI-Serial card
Live video capture to display, memory or disk

Analog Video Input

Up to 8 concurrent composite PAL or NTSC video input channels
Eight 10-bit Analog-to-Digital converters
Anti-aliasing filters on inputs

Video Input Formats

NTSC-M, NTSC-Japan, NTSC (4.43), RS-170
PAL-B, G, N, PAL-D, PAL-H, PAL-I, PAL-M, PAL-CN, PAL-60
SECAM

Video Input Adjustments

Contrast (or luma gain) adjustable from 0 - 255% of original
Saturation (or chroma gain) adjustable from 0 - 200% of original
Hue (or chroma phase) adjustable from -36° to +36°
Brightness (or luma level) can be adjusted from -128 to 127 steps
Software adjustable Sharpness, Gamma and noise suppression

Video Capture Formats

RGB555, RGB565
YCbCr 4:2:2
YCbCr 4:1:1

System Requirements

x86 PC-Compatible with mini PCI Express socket
PCI VGA Display (if Video Preview to host is required)

Mechanical

Standard 3U CompactPCI-Serial form factor
Operating temp 0°C to 60°C
Operating temp -40°C to +85°C (extended temp option)

Software Drivers

Drivers for Windows, Linux
Sample video overlay and capture application in C/C++ source code

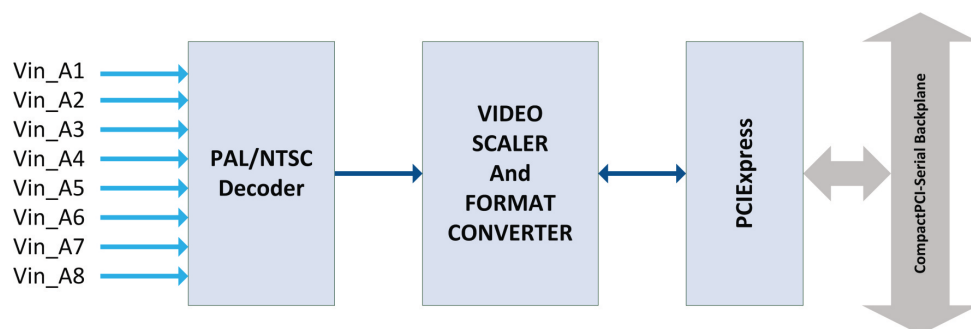
Ordering Information

AVC-cPCIs

Video Capture and Overlay Controller (0 to 60°C)

AVC-cPCIs-EXT

Video Capture and Overlay Controller (-40°C to +85°C)



AVC-cPCIs Functional Diagram



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