PCI-MPG24

4-CH MPEG4 Hardware Real-time Video Compression Card

Features

- **4-CH MPEG4 hardware video encoder**
- **Real-time Full D1 video encoding up to 120 fps**
- **Supports real-time video raw data preview**
- **On-board 64 MB SDRAM memory buffer**
- **On-board TTL I/O lines**
- **Build-in watchdog timer**
- **Security protection circuit**

Applications

- Digital Video Recorder (DVR)
- Intelligent traffic monitoring systems
- Remote surveillance systems
- Factory monitoring systems

Software Support

Windows® Platform

- Available for Windows® 2000/XP/XPe
- Available for Microsoft® DirectX®
- Recommended programming environments: C#/.NET/ VC++/VB/C++ Builder/Delphi
- Sample programs included

Linux Platform

- Red Hat 9.0, Kernel 2.4.23

ViewCreator™

ViewCreator assists developers in evaluating initial tests and functions.

Ordering Information

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4-CH MPEG4 hardware real-time video compression card

Introduction

The PCI-MPG24 is a MPEG4 hardware video compression card that provides 4 channels of real-time Full D1 MPEG4 video encoding and decoding with a preview function for digital video surveillance applications. This 32-bit, 33 MHz PCI bus frame grabber simultaneously captures and encodes four video analog streams in real time. It accepts standard composite color (PAL, NTSC) or monochrome video formats (CCIR, EIA) cameras inputs. Each PCI-MPG24 card has a unique hardware ID number. System integrators can design protections to lock their system product. System integrators will benefit from a watchdog timer (for fault-tolerant applications) and easy-to-use standard connectors.

Real-time Video Encoding
Supports real-time Full D1, quarter or downscale video size encoding. Full D1 video format:

- NTSC (720 x 480) at 30 fps per channel, 4-CH total up to 120 fps
- PAL (720 x 576) at 25 fps per channel, 4-CH total up to 100 fps

Adjustable Video Quality
Bit and frame rates are adjustable to fit variable bandwidths, as seen in remote Internet applications.I, IP, IBP, and IBBP GOP structures are programmable for enhanced video quality.

Real-time Video Encoding

- Single Channel: real-time preview at VGA resolution
- 4-CH: simultaneously real-time preview at quad resolution

Video Decoding
Enhanced software decodes video for playback or remote client monitoring. The PCI-MPG24 card is not needed for playback.

Video Saving
The PCI-MPG24 saves video in the AVI video file format.which can easily be viewed on standard video player software (such as Microsoft® Windows® Media Player®).

I/O Lines
TTL compatible I/O lines are provided, supporting 4 inputs, 4 outputs, and one +5 V output for device control.

Watchdog Timer
A hardware watchdog is available on the PCI-MPG24.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.

Minimum System Requirements

- Platform: Intel® Pentium® III, 850 MHz CPU, and 512 MB SDRAM or above
- VGA Display: AGP 4X above (VIA or SiS VGA chipset solution not recommended)
- Display Setting: 800 x 600 above resolution, 16-bit above color format
- OS: Windows 2000 Professional with SP4 or Windows XP Professional with SP1
- Software Requirement:
  - For end users: Microsoft DirectX 9.0 End-User Runtime
  - For developers: Microsoft DirectX 9.0 SDK
  - DivX Video Decoder (Optional)

As software decoding consumes system resources, a system platform upgrade must be made for system decoding.