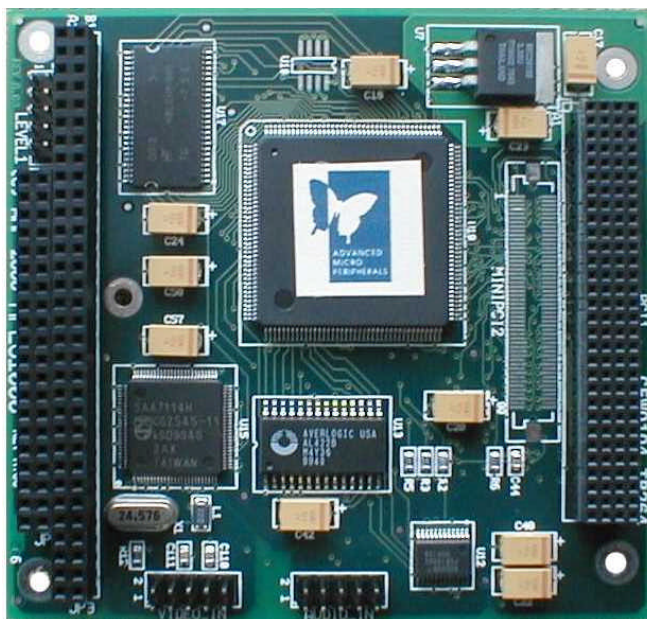


MPEG1000 Real-Time MPEG-1 Video Encoder for PC/104+



General Description

The **MPEG1000 Video Capture and Encoder** Controller is a high performance real time Video and Audio capture card on a compact PC/104+ format. Utilising the 32-bit PCI architecture, the **MPEG1000** allows high quality real-time video and audio capture and compression from a PAL or NTSC video source to disk. Sound and Images can be captured and compressed using MPEG-1 encoding for continuous storage to disk or for local network transmission or over the Internet. The high performance video data compression and reduced bus utilisation allows up to four **MPEG1000** cards to be fitted in a PC/104+ system for multiple stream video recording. The **MPEG1000** is supported by a suite of drivers for DOS, Windows98/NT/CE/2000, Linux and a number of Real-Time Operating Systems (RTOS). The **MPEG1000** is an ideal solution for solid-state video recording, machine vision, multimedia content creation and Internet video streaming. An enhanced version, the **MPEG1000D**, supports 2 concurrent hardware encoders on the PC/104+.

Features

- Live input from NTSC/PAL/SECAM
- Composite or S-Video input
- Real-time MPEG-1 Video Compression
- Video/Audio Synchronised Recording
- JPEG Still Image Capture
- Up to 4 MPEG1000 cards per system
- High Performance PC/104+ Bus Master
- Drivers for MSDOS, Win95/98/NT, Linux
- Compact 3.6 x 3.8in PC/104+ form factor
- Single +5V power supply

Applications

- Solid-State Digital Video Recorder
- Digital Video Server
- Intranet/Internet Video Streaming
- Remote Video Surveillance
- Medical and Industrial imaging
- Motion detection and Traffic monitoring
- Robotic systems and OCR
- Disc based Video Recorder
- Video Acquisition and Analysis

*Rev 1.00 subject to change without notification

MPEG1000

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PC104+ Bus Interface	Compliant with PCI Rev 2.1 132MBytes/sec bandwidth at 33.33 MHz bus speed Consumes less than 2MBytes/sec at maximum image capture rate Live multi-stream (MPEG1000D version) capture to memory or disk
Analogue Video Input	Digital Line-Lock technology for reliable locking to any video source Three input video multiplexer 2 Composite and 1 S-Video inputs Dual flash Analogue-to-Digital converters 2X oversampling - 28.64MHz for NTSC, 35.47MHz for PAL
Video Input Formats	Standard CCIR601-NTSC, CCIR-PAL NTSC-M, NTSC-Japan PAL-B, PAL-D, PAL-G, PAL-H, PAL-I, PAL-M, PAL-N SECAM
Audio Input	Analogue Stereo sound Input Provides Audio/Video Synchronisation Supports I2S interface for Audio pass-through
Video Input Adjustments	C ontrast (or luma gain) adjustable from 0 - 200% of original value S aturation (or chroma gain) adjustable from 0 - 200% of original value B rightness (or luma level) can be adjusted from 0 - 255 steps
Video Encoding	Real-time MPEG-1 encoding in IBP syntax Real-time Motion JPEG encoding Supports SIF (352x288) and QSIF (176x144) resolution Supports NTSC (30fps) and PAL (25fps) frame rates Single Frame encoding from disk at up to 720x576 Live video snapshot (720x576) capture to disk in JPEG or MPEG-1
Miscellaneous	Single +5V at less than 450mA Operating Temp of 0 to 60degC (Extended Temp option) Standard 3.6 x 3.8in PC/104+ form factor
Software	Drivers for DOS, Windows95/98/NT/2000, Linux Sample video recording application in C/C++ source code Other Operating Systems such as QNX, PharLap, pSOS, etc can be supported on demand
Enhancements	An enhanced double-headed version called the MPEG1000D supporting 2 independent hardware encoding channels is available. The MPEG1000D supports 2 simultaneous MPEG-1 streams (from 2 separate Video inputs) to disk.
Ordering Information	Single-headed (standard) card, order as MPEG1000 Double-headed (enhanced) card, order as MPEG1000D