



OMNIMEDIA
TECHNOLOGY INC.

OmniPeg-PC104+ Solid State Encoder/Decoder Cards

Preliminary

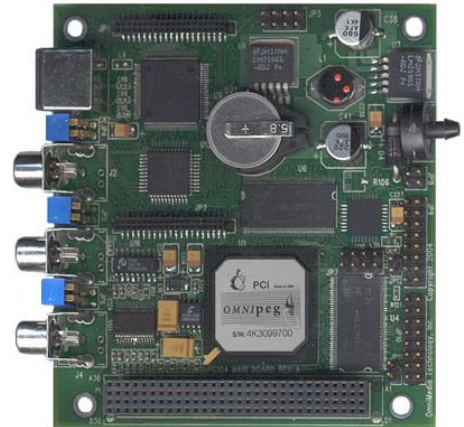
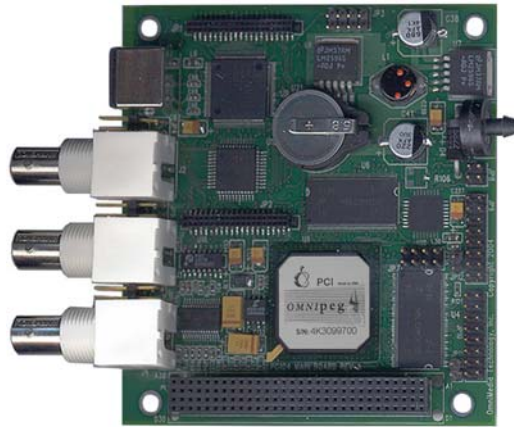
PC104+

MPEG-4

MPEG-2

MPEG-1

Real-Time
Streaming
Encoder
Decoder



Overview

These breakthrough products from OmniMedia Technology bring the power and functionality of latest video compression technology to streaming application. Capable of real-time MPEG-4, -2 and -1 encoding and decoding, these products provide truly affordable streaming of video for broadcasting, monitoring traffic, video surveillance and web casting.

Available as OmniPeg4-PC104+ these cards offer a general purpose solution for streaming.

Applications

- Streaming video distribution over DSL, cable, ethernet, fiber and wireless networks
- Transcoding and transrating among MPEG-4, -2 and -1 streams
- Security, surveillance, traffic monitoring
- Live sports, musical events, continuing education and other web casting
- Video-on-demand servers

Key Features

Support for MPEG-1, MPEG-2 MP@ML, MPEG-4 Simple Profile @ L1, L2 and L3, with extensions to full D1 and interlaced video.

The OmniPeg-PC104+ cards are real-time MPEG-4, -2 and -1 audio/video/system CODEC (simultaneous compression/decompression, or encode/decode) that fully complies with ISO/IEC-11172-2, ISO/IEC-13818-2 and ISO/IEC-14496-2.

The cards accept uncompressed ITU-R.BT-656 video and I2S audio, compress the video into MPEG-4, -2 or -1 formats and compress the audio into MPEG-1, MPEG-2, MP3, AAC or AC-3 audio formats, and output them as transport streams for network applications or program streams for storage applications.

Specifications

Video/Audio Input		Video/Audio Output	
Composite Video	RCA or BNC Connectors (Jumper or switch selectable)	Composite Video	RCA or BNC Connectors (Jumper or switch selectable)
S-Video	DIN Connector (Jumper selectable)	S-Video	DIN Connector (Jumper selectable)
Stereo Audio	RCA or BNC Connectors (Jumper or switch selectable)	Stereo Audio	RCA or BNC Connectors (Jumper or switch selectable)
Video/Audio Encoding		Video/Audio Decoding	
Video Encoding Format	MPEG-4, -2 and -1 encoding for NTSC or PAL	Video Decoding Format	MPEG-4, -2 and -1 decoding for NTSC or PAL
Video Bit rate	Constant or variable bit-rate from 22.5 Kb/s to 15 Mb/s	Video Bit rate	Constant or variable bit-rate from 22.5 Kb/s to 15 Mb/s
Audio encoding	<ul style="list-style-type: none"> • MPEG-1 Layer I, II and III (MP3) • MPEG-2 Layer I and II • Sampling frequencies: 8, 16, 22.05, 24, 32, 44.1, 48 and 96 KHz. 	Audio decoding	<ul style="list-style-type: none"> • MPEG-1 Layer I, II and III (MP3) • MPEG-2 Layer I and II • Sampling frequencies: 8, 16, 22.05, 24, 32, 44.1, 48 and 96 KHz.
Video Horizontal Resolution	Horizontal resolution between 128 and 720 pixels in 16-pixel steps	Contact closures and sensor inputs	
Video Vertical Resolution	Vertical resolution between 80 and 480 pixels (NTSC) or 576 pixels (PAL) in 16-pixel steps	Contact closures and sensors (Up to a total of 9)	<ul style="list-style-type: none"> • 2, 4, 6 or 8 normally closed contact switches • 2, 4, 6 or 8 normally open contact switches • 1 or 5 contact closure sensors
GOP Structure	Programmed GOP structure and length: I, IP, IBP and IBBP	Video Watch Dog Timer Embedded	Programmed internal reset
Streaming or Storage Output	<ul style="list-style-type: none"> • MPEG-1 System Stream • MPEG-2 PS or TS • MPEG-4 embedded in MPEG-2 TS 		
Delay	Programmed low delay mode		
Mechanical Requirements		System Requirements	
PC104 Card Size	4x4 in (10x10 cm)	PC System	Win XP or Win 2K PC104+, Pentium III or Pentium 4.
Shipping Weight	1 lbs (0.6 Kgs)	Embedded pressure Gauge	0 to 50 PSI
Electrical Requirements		Embedded Temperature Gauge	-25 to 125 Degrees C
PCI Bus Power	5 Volts , 5Watts	Ordering Information	
Temperature	-20 to +70 Dgrees C Operating. MIL-810F specs per Methods 501.4 and 502.4.	Model Part #	OmniPeg4-PC104B- BNC Connectors 2104-10130-01
Humidity	10% to 95% non-condensing	Model Part #	OmniPeg4-PC104R- RCA Connectors 2104-10140-01

Warranty: Limited one year warranty for defects in material and workmanship.

Also available as PCI-Cards with BNC or RCA connectors



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