

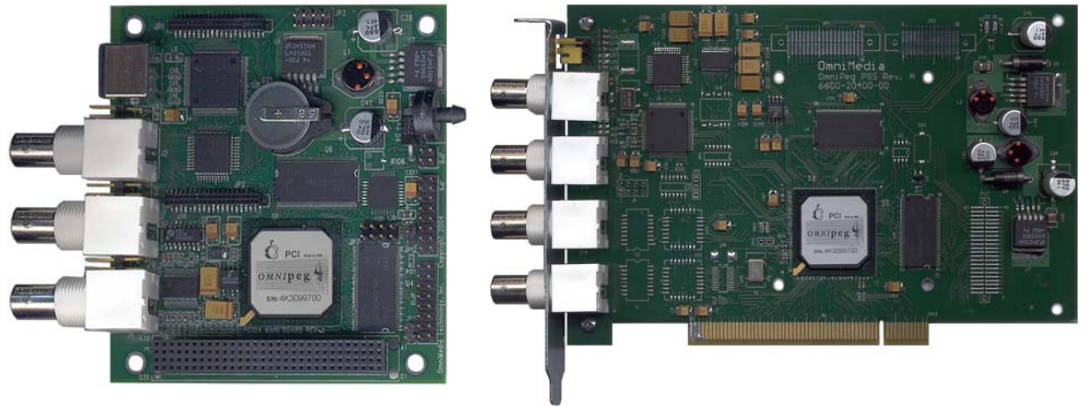


## OmniPeg-PC104+ and OmniPeg-PCI Solid State Encoder/Decoder Cards

PC104+  
PCI

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 **PC104+** and **PCI** 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 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

<b>Video/Audio Input</b>		<b>Video/Audio Output</b>	
<b>Composite Video</b>	RCA or BNC Connectors (Jumper or switch selectable)	<b>Composite Video</b>	RCA or BNC Connectors (Jumper or switch selectable)
<b>S-Video</b>	DIN Connector (Jumper selectable)	<b>S-Video</b>	DIN Connector (Jumper selectable)
<b>Stereo Audio</b>	RCA or BNC Connectors (Jumper or switch selectable)	<b>Stereo Audio</b>	RCA or BNC Connectors (Jumper or switch selectable)
<b>Video/Audio Encoding</b>		<b>Video/Audio Decoding</b>	
<b>Video Encoding Format</b>	MPEG-4, -2 and -1 encoding for NTSC or PAL	<b>Video Decoding Format</b>	MPEG-4, -2 and -1 decoding for NTSC or PAL
<b>Video Bit rate</b>	Constant or variable bit-rate from 22.5 Kb/s to 15 Mb/s	<b>Video Bit rate</b>	Constant or variable bit-rate from 22.5 Kb/s to 15 Mb/s
<b>Audio encoding</b>	<ul style="list-style-type: none"> <li>• MPEG-1 Layer I, II and III (MP3)</li> <li>• MPEG-2 Layer I and II</li> <li>• Sampling frequencies: 8, 16, 22.05, 24, 32, 44.1, 48 and 96 KHz.</li> </ul>	<b>Audio decoding</b>	<ul style="list-style-type: none"> <li>• MPEG-1 Layer I, II and III (MP3)</li> <li>• MPEG-2 Layer I and II</li> <li>• Sampling frequencies: 8, 16, 22.05, 24, 32, 44.1, 48 and 96 KHz.</li> </ul>
<b>Video Horizontal Resolution</b>	Horizontal resolution between 128 and 720 pixels in 16-pixel steps	<b>with PC104+ cards only</b>	
<b>Video Vertical Resolution</b>	Vertical resolution between 80 and 480 pixels (NTSC) or 576 pixels (PAL) in 16-pixel steps	<b>Contact closures and sensors (Up to a total of 9)</b>	<ul style="list-style-type: none"> <li>• 2, 4, 6 or 8 normally closed contact switches</li> <li>• 2, 4, 6 or 8 normally open contact switches</li> <li>• 1 or 5 contact closure sensors</li> </ul>
<b>GOP Structure</b>	Programmed GOP structure and length: I, IP, IBP and IBBP	<b>Video Watch Dog Timer Embedded</b>	Programmed internal reset
<b>Streaming or Storage Output</b>	<ul style="list-style-type: none"> <li>• MPEG-1 System Stream</li> <li>• MPEG-2 PS or TS</li> <li>• MPEG-4 embedded in MPEG-2 TS</li> </ul>	<b>System Requirements</b>	
<b>Delay</b>	Programmed low delay mode	<b>PC System</b>	Win XP or Win 2K PC104+, Pentium III or Pentium 4.
<b>Mechanical Requirements</b>		<b>Embedded pressure Gauge</b>	0 to 50 PSI
PC104 Card Size PCI Card Size	4x4 in (10x10 cm) 7x5 in (18x12 cm)	<b>Embedded Temperature Gauge</b>	-25 to 125 Degrees C
Shipping Weight	1 lbs (0.6 Kgs)	<b>Ordering Information</b>	
<b>Electrical Requirements</b>		<b>Model Part #</b>	OmniPeg4-PC104B- BNC Connectors 2104-10130-01
PCI Bus Power	5 Volts , 5Watts	<b>Model Part #</b>	OmniPeg4-PC104R- RCA Connectors 2104-10140-01
Temperature	-20 to +70 Dgrees C Operating. MIL-810F specs per Methods 501.4 and 502.4.	<b>Model Part #</b>	OmniPeg4-PCIB- BNC Connectors 2104-10110-01
Humidity	10% to 95% non-condensing	<b>Model Part #</b>	OmniPeg4-PCIR- RCA Connectors 2104-10120-01

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

Also available as PC104+ and PCI cards with RCA connectors



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