



NXP PCI Development Board OM4965/PNX1005E/2

PCI Development Platform for HD video processing based on PNX1005

Based on the latest PNX1005 from NXP Semiconductors, the OM4965 development board enables a software engineer to develop a range of algorithms and applications on the PNX1005, while using a standard and easy development environment on a PC. The development board comes with a range of inputs and outputs for audio and video, in both analog and digital way, providing the developer with the flexibility, needed to develop a wide range of software components.

Key features

- ▶ Based on PNX1005 TriMedia DSP media processor.
- ▶ HDMI up to 1080p/60 input and output
- ▶ Analog 4 channel composite video input
- ▶ Audio analog stereo input and output
- ▶ Ethernet
- ▶ USB
- ▶ Standard PCI form factor
- ▶ On board connectors for GPIO, EJTAG, I2C
- ▶ Schematics, Gerber files available

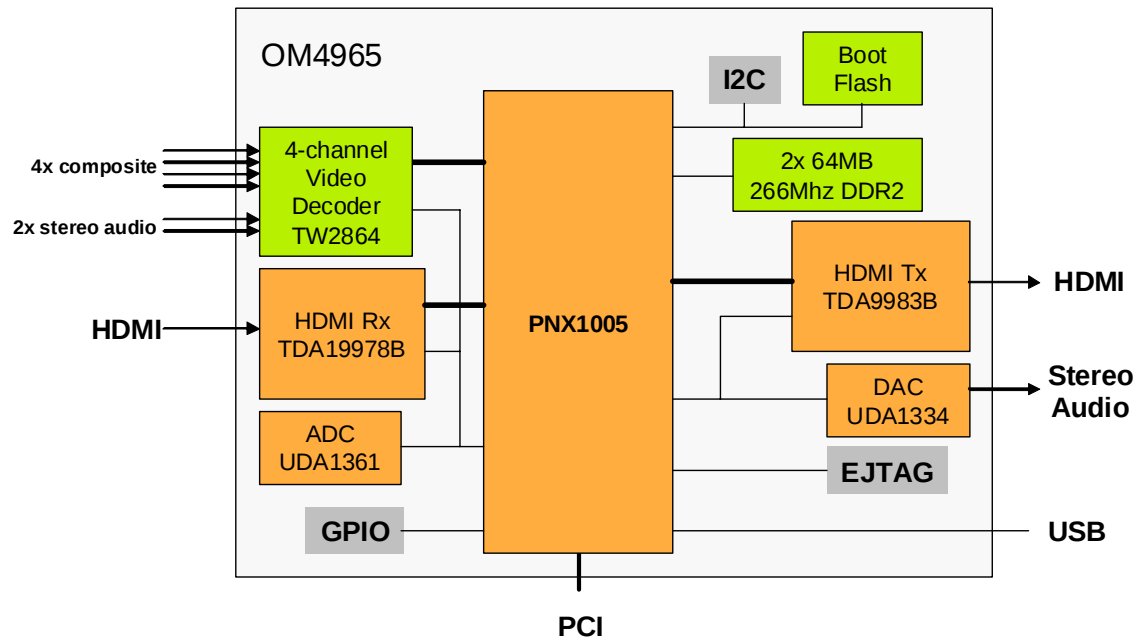
Key benefits

- ▶ Easily integrates in any standard PC
- ▶ PCI connection allows for fast debugging, access to files and network on the PC
- ▶ HDMI in/out enables zero-loss video inputs and outputs

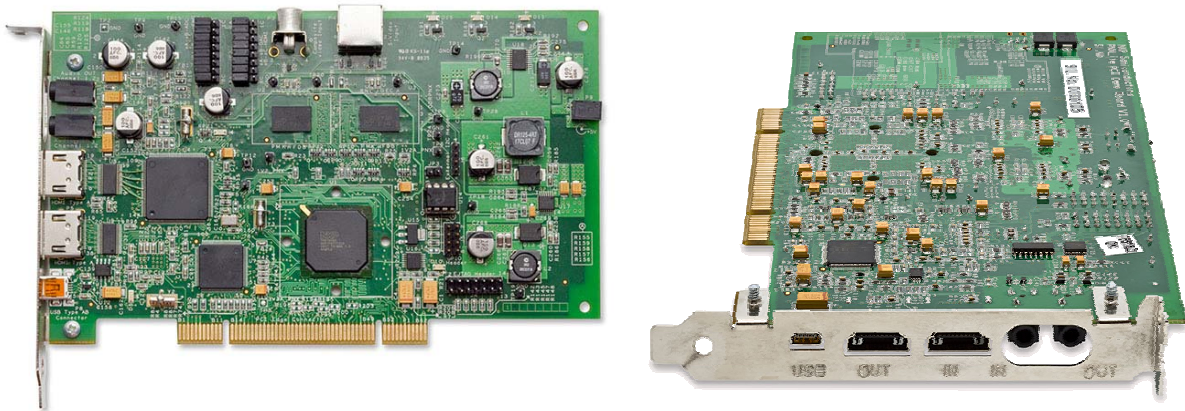
Applications

- ▶ Video compression and decompression algorithms
- ▶ Video analytics for security
- ▶ Video optimization : intra-frame calculation and enhanced deinterlacing
- ▶ Algorithms for multi-channel acoustic procession
- ▶ USB and Network components

Block diagram



Front and side view



Specifications

- ▶ Processor: PNX1005E/400 400Mhz
- ▶ Memory: 128 MB DDR2 333Mhz DRAM operating at 266Mhz clock (533Mhz data rate)
- ▶ Analog audio/video input : Techwell TW2864 4-channel video decoder
- ▶ Digital audio/video input : NXP TDA19978B HDMI receiver (up to 1080p with 8 channel audio)
- ▶ Video audio/output : NXP TDA9983B HDMI transmitter (up to 1080p with 8 channel audio)
- ▶ Analog audio input/output: NXP UDA1361 and UDA1334 stereo ADC and DAC
- ▶ USB 2.0 High-Speed OTG with a mini-AB connector
- ▶ General Purpose I/O : 8 GPIO lines on 1" pitch IDC header
- ▶ EJTAG interface, I2C interface and jumper blocks
- ▶ PCI Interface : Universal 3.3/5V signaling card, PCI 2.2 compliant, supports 66Mhz operation
- ▶ Dimensions: Full height, half length PCI card