

# 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 an output
- Analog 4 channel composite video input
- Audio analog stereo input and input
- Ethernet
- ▶ USB
- Standard PCI form factor
- On board connectors for GPIO, EJTAG, I2C
- Schematics, Gerber files available

# **Key benefits**

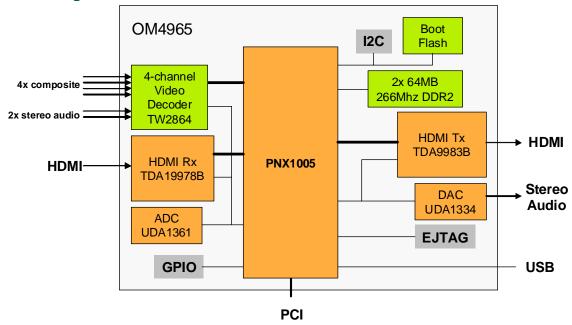
- Easily integrates in any standard PC
- PCI connection allows for fast debugging, access to files and network on the PC
- ▶ HDMI in/out enables zero-loss video inputs and outputs

#### **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

