LT-124-PCIE

3D/HD Video Acquisition and Compression Board

The LT-124-PCIE is an HD video dual channel capture board that applies H.264 compression to HDTV video in real-time without the use of host computer's CPU resources. The board is placed in aPCI Express slot.

This board captures video from digital HD and SD video sources via DVI-D connectors. This DVI connector is fully compatible with the HDMI 1.4a standard and can provide embedded audio together with the video. In addition to external video sources, the LT-124-PCIE can compress from host internal video sources such as files or DirectShow devices including USB and FireWire cameras. A DVI loop through output option is also available.
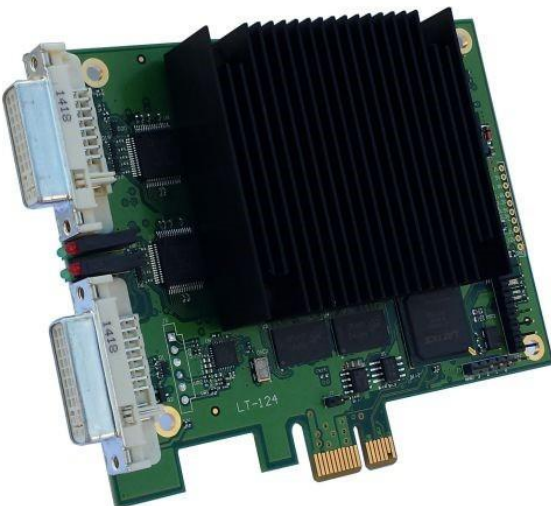
Used in 3D mode, the LT-124-PCIE can capture, synchronize and mix 3D video from 3D video sources.

The LT-124-PCIE compresses video in compliance with the H.264/MPEG-4 Part 10 standards.

This high performance board can compress 1080P at up to 60 frames per second (fps) when using single channel compression or 30fps in dual channel mode.

Compressed bitrates can vary between 64Kbit/s and 80Mbit/s depending on resolution, frame rate and quality desired.

An uncompressed video capture function is also available for simultaneous snapshots or continuous raw video acquisition.
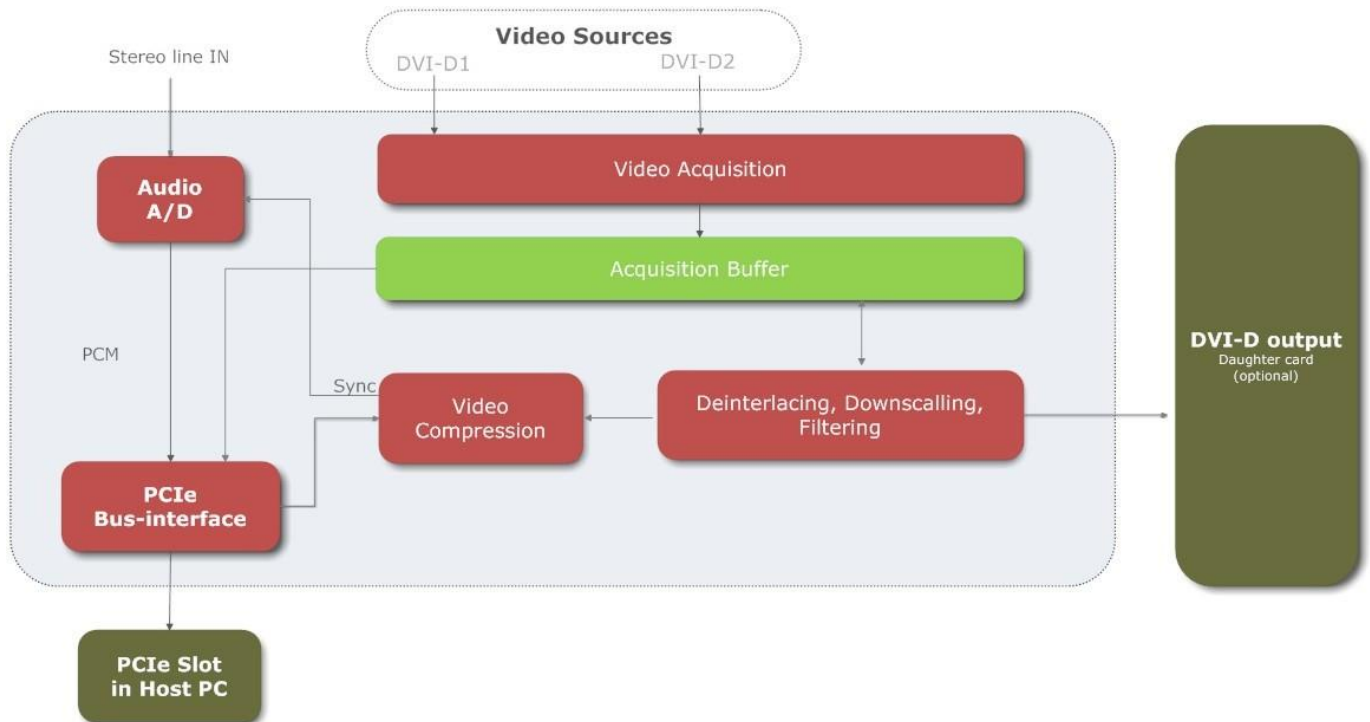
Features

- ✓ H.264 HD video compression
- ✓ Real-time HD/SD video acquisition and compression
- ✓ Uncompressed video capture
- ✓ HDTV 1080p, 1080i, 720p, 576p, 576i, 480p, 480i compatible
- ✓ Very low compression latency
- ✓ DVI loop-through output option
- ✓ Synchronized audio capture
- ✓ HDMI embedded audio capture
- ✓ Analog audio via header connector
- ✓ Text overlay prior to compression
- ✓ IP or I only compression
- ✓ Bitrates from 64Kbit/s to 80Mbit/s
- ✓ DirectShow support
- ✓ Windows drivers
- ✓ Linux drivers

LT-124-PCIE Block Diagram

Key Features

- H.264 / MPEG-4 Part 10 High Profile level 5.0
- I only or IP compression with variable GOP size
- VBR (variable) and CBR (constant) bitrate control
- 1024x512 motion vector search range covered
- Bitrates from 64Kbit/s to 80Mbit/s
- 1 frame maximum latency (can be reduced to a few milliseconds under special circumstances)
- MPEG-TS or ASF container format
- Optional DVI output module
- Simultaneous uncompressed video capture
- 2 channel video capture
- Synchronized audio/video acquisition
- Advanced hardware deinterlacing
- Frame rate reduction feature available
- Video downscaling prior to compression
- Denoise filter prior to compression
- Text overlay prior to compression
- Bitrate reduction via monochrome mode when color is not needed
- Windows 7, Windows 8, Windows 10 32bit/64bit driver
- DirectShow support as well as simple SDK
- Linux support

Applications

- HDTV capture and storage
- Digital video recorders
- Video Medical systems
- Endoscopy DVR
- Video surveillance systems
- Internet broadcasting
- Teleconferencing
- Video over LAN
- Inspection systems
- Machine vision video recorders

Product Codes

- LT-124-PCIE   LT-124 board for H.264, docs, drivers

See Also

- LT-1xx   Family Product