SDI Master Quad/o PCIe LP


Features
- Four independent SDI outputs on one PCIe card
- Each output transmits uncompressed SDI at 270 Mbps
- Total aggregate bit rate of 1.08 Gbps
- Single Lane PCI Express v1.1 interface
- Low profile PCIe card form factor
- Supports all NTSC and PAL standard component and composite serial video data rates (525/625 lines)
- Transmits 8 or 10 bit 4:2:2 SMPTE 259M digital video signals without adjustment
- ANSI/SMPTE 259M-1997 Level C serial digital video standard compliant
- Ships with drivers for Windows® 7 32 and 64 bit, Windows® 2000, Windows® XP, and Linux®
- Windows XP/Server 2003/Server 2008/ Linux API
- Sample Windows® and Linux® applications for reading or writing to disk
- Uncompressed Video Streams on DVD – for testing SDI equipment – can be provided
- Firmware is field upgradeable
- Mini-BNC to BNC adapter cables included

Overview

SDI is a SMPTE protocol for sending uncompressed 4:2:2 CCIR 601 digital video over a single coaxial cable from a source to a destination.

The SDI Master Quad/o PCIe LP serial digital output board gives video professionals reliable, real-time access to uncompressed standard definition video (SMPTE 259M), enabling applications for video effects and video editing. SDI Master Quad/o PCIe LP is designed to provide users with real-time, frame-accurate transmission for Disk Based video players.

Our SDI Master Quad/o PCIe LP is a low profile PCI Express interface board capable of transmitting up to four channels of continuous serial streams at eight or ten bits of precision. We embrace open system solutions through seamless integration into the Windows® 7, Server 2003/2008, XP, Vista, and Linux® environments and support the DirectShow® framework. All video input and output is performed from standard files within the standard file system.

This product was designed to allow inexpensive computers to replace dedicated tape decks and other devices that use digital video. This technology has altered the way in which SDI is used in the broadcast industry.

Applications
- SDI file playback
- SDI switch
- Encoding to MPEG-XXX
SDI Master Quad/o PCIe LP

Capabilities

- Compatible with PCI Express Bus Specification v1.1
- Full support for SDTI
- Transports all primary and auxiliary data present in SDI signal including embedded audio without change
- Clock Reference Input Connector
- Audio Support: Assumed to be embedded in SDI signal per SMPTE 272M
- Now with Direct Show® filters for Output and A/V separation
- RoHS compliant

Specifications

<table>
<thead>
<tr>
<th>Dimensions</th>
<th></th>
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<tbody>
<tr>
<td>Width:</td>
<td>2.7 in (6.85 cm)</td>
</tr>
<tr>
<td>Length:</td>
<td>4.8 in (12.19 cm)</td>
</tr>
<tr>
<td>Thickness:</td>
<td>0.58 in (1.47 cm)</td>
</tr>
<tr>
<td>Typical Weight</td>
<td>2.6 oz (75 g)</td>
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<tr>
<td>Output Connectors</td>
<td>75 Ohm mini-BNC</td>
</tr>
<tr>
<td>Audio Support</td>
<td>Assumed to be embedded in SDI signal (SMPTE 272M)</td>
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<tr>
<td>External Clock Input</td>
<td>75-Ohm NTSC/PAL Blackburst (header)</td>
</tr>
<tr>
<td>Data Output</td>
<td>SDI Coaxial Cable, 270 Mbps</td>
</tr>
<tr>
<td>Output Form</td>
<td>8 Bits, 10 Bits</td>
</tr>
<tr>
<td>Typical Power</td>
<td>500 mA @ 3.3V; 25 mA @ 12 V</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 to 55º C</td>
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<tr>
<td>Operating Humidity</td>
<td>To 90%, Non-condensing</td>
</tr>
<tr>
<td>Status LED Indicators</td>
<td>Tx</td>
</tr>
<tr>
<td>Receive FIFO Size</td>
<td>8 Kbytes per channel</td>
</tr>
<tr>
<td>Bus Interface</td>
<td>Single Lane (x1) PCIe 1.1</td>
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</tbody>
</table>

Connector Diagram

Block Diagram

Ordering Information

SDI Master Quad/o PCIe LP (Model 180) – ships with 6” mini-BNC (M) to BNC (F) adapter cables
W – Windows® Support: SDK’s and DirectShow®
L – Linux® Support: SDK’s

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