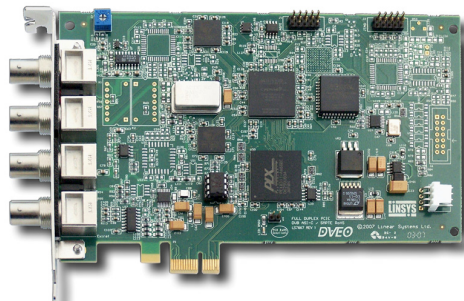


Multi Master S/A™ PCIe

SDI In, DVB-ASI Out, PCI Express Card
Designed for OEMs Who Have Ported a
Software Encoder to Their Intel/AMD
Processor and Need a Card to Input
Uncompressed Digital Content and Output
Compressed Digital Streams via DVB-ASI



Features

- SDI input and DVB-ASI output on one PCI Express (PCIe) card
- Supports all NTSC and PAL standard component and composite serial video data rates (525/625 lines)
- Supports 8 or 10 bit 4:2:2 SMPTE 259M digital video signals without adjustment
- ANSI/SMPTE 259M-1997 Level C, D serial digital video standard compliant
- 270 Mbps, optional 360 Mbps
- 75 ECL-compatible, differential, serial cable-driver receivers/outputs
- Hardware based PID Filtering
- Clock Reference Input Connector (TTL)
- Accurate 25 PPM clock
- Jitter minimization in hardware
- ASI tested at over 100 Mbits throughput
- Drivers for Windows® 7 – 32 and 64 bit, Server 2003, Server 2008, Windows® 2000, Windows® XP, and Linux®
- Windows® XP/Server 2003/Server 2008/ Linux® API
- DirectShow® filter
- Sample Windows® and Linux® applications for reading or writing to disk
- Optional High Stability Oscillator (2 ppm)

Applications

- Encoding SDI footage for satellite and cable
- Electronic News Gathering
- Video servers
- Remote broadcasts
- Reality TV

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. Now it is used everywhere as an I/O for uncompressed digital video.

DVB-ASI is a physical interconnect standard created by the international standardization group known as the DVB Project (www.dvb.org). It is designed to carry MPEG-2 or MPEG-4 compressed transport streams between devices such as satellites and cable TV equipment.

The **Multi Master S/A™ PCIe** comes with an SDK and was developed for those who wish to use this hardware along with their own software. It is a platform that can be used for transmission over satellite uplinks or for redistribution throughout a cable system. It can receive SMPTE 259M-C compliant video streams at a rate of 270 Mbps and can transmit DVB-ASI video streams at a rate of 213 Mbps. **Choose between MPEG-2 or MPEG-4 (H.264) transport streams... all on one half-size PCIe card.**

The SDI input portion can receive continuous serial streams at eight or ten bits of precision. Our product embraces open system solutions through seamless integration into the Windows® 7, Server 2003/2008, XP, Vista, and Linux environments and supports the DirectShow® framework. All video input/output is performed to and from standard files within the standard file system. To use this product with a hard drive one must consider the throughput requirement for SDI. Thus a disk array is needed for concurrent reads and writes.

The ASI output portion features PID filtering, jitter minimization, and packet arrival timestamping. An optional high stability oscillator is available.

Multi Master S/A PCIe is our second-generation SDI in/ASI out card with the enhanced bandwidth of single lane (x1) PCIe.



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Multi Master S/A™ PCIe

Capabilities

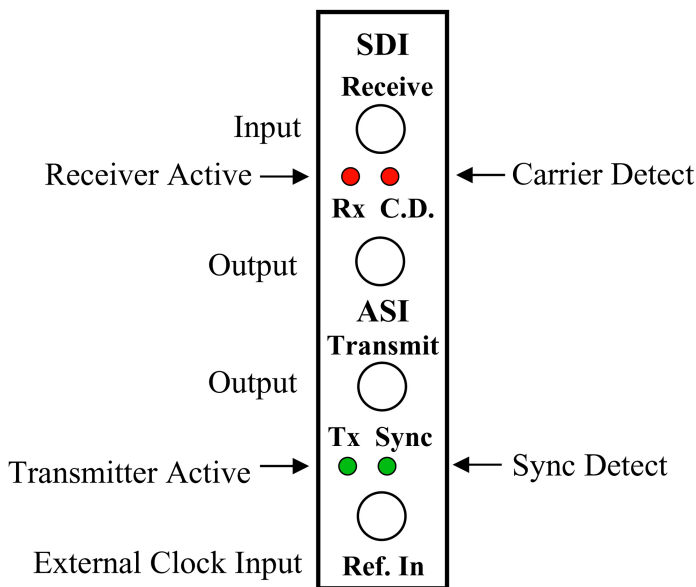
- Compliant with PCIe Bus
- Transports all primary and auxiliary data present in SDI signal including embedded audio without change
- Automatic cable equalization for input permits distances as great as 350 meters (1,100 feet) from switchers, cameras, or servers
- Audio support: Assumed to be embedded in SDI signal per SMPTE 272M
- Scatter Gather DMA
- Packet Arrival Timestamping to help with PCR jitter measurement or management
- Automatic Null Packet Insertion

NOTE: This product needs a high performance Disk System. RAID 5 SCSI is suggested.

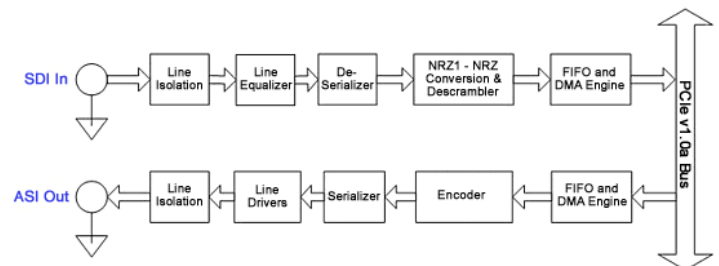
Specifications

Dimensions	
Width:	4.20 in (10.67 cm)
Length:	6.875 in (17.46 cm)
Thickness:	0.58 in (1.47 cm)
Typical Weight	5.2 oz (147 g)
Input/Output Connectors	75 Ohm BNC
External Clock Input	75 Ohm DC Blocked ECL
Data Input/Output	SDI Coaxial Cable
Input Form	8 Bits, 10 Bits
Typical Power	5 V @ 390mA
Operating Temperature	0 to 55° C
Operating Humidity	To 90%, Non-condensing
Status LED Indicators	Tx, Rx, Sync, Carrier
Receive/Transmit FIFO Size	1.5 Kbytes
Bus Electrical Interface	Single Lane (x1) PCIe 1.0a
Bus	32 bit wide, 33 MHz

Connector Diagram



Block Diagram



Ordering Information

Multi Master S/A PCIe
 Multi Master S/A PCIe with Optional High Stability Oscillator

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