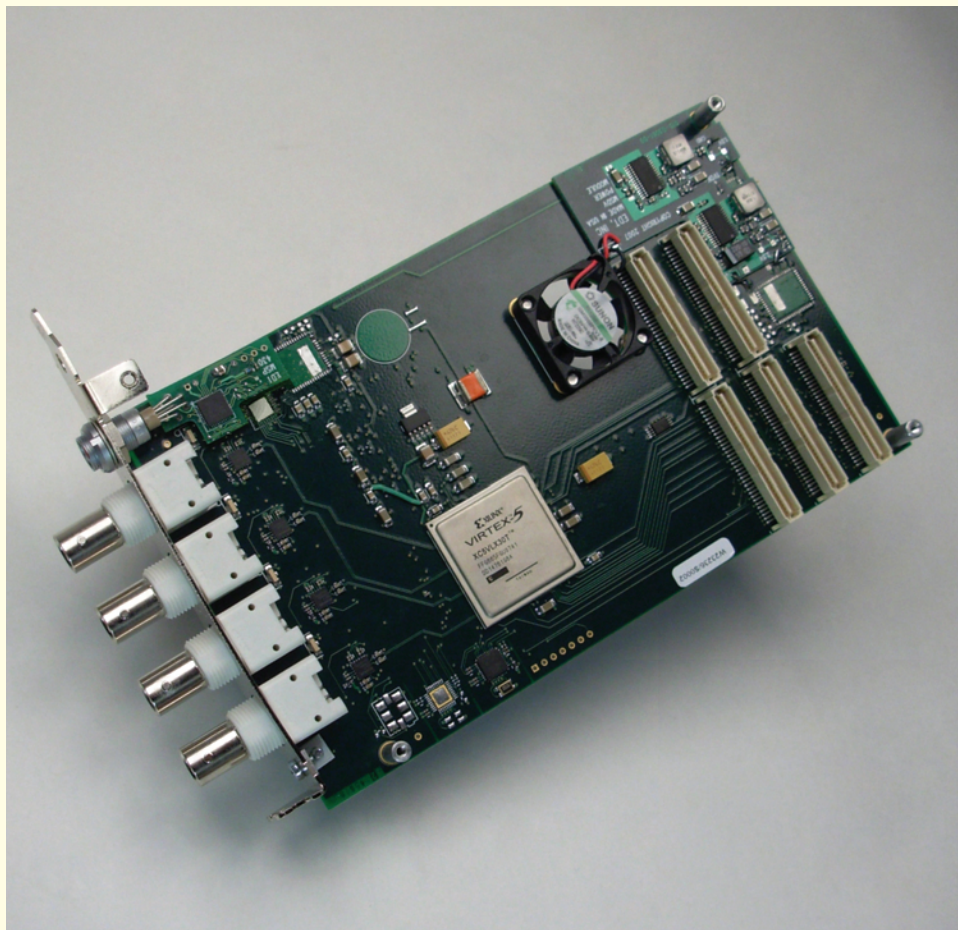


MSDV

Multi-rate serial digital video interface for DVB-ASI/SMPTE



Description

The MSDV is a mezzanine board that pairs with an EDT main board (for PCI or PCI Express) for high-speed data transfer. It has four BNC connectors to support up to four serial digital video signals in DVB-ASI/SMPTE format.

The MSDV includes a programmable Xilinx Virtex 5 LXT FPGA. It also has a 1 pps or IRIG-B time code input for precise timestamp data.

EDT provides FPGA configuration files that perform multi-rate decoding and framing, making it possible to acquire raw, decoded, or framed transport stream data. Custom configuration files can be requested.

The main board supplies high-speed DMA, plus additional memory and programmable FPGA resources.

Features

Mezzanine board – pairs with an EDT main board (in a PCI, PCI-X, or PCIe bus), which adds high-speed DMA, programmable FPGA resources, and memory

Channels 0, 1, 2, 3: Four bidirectional BNCs, each supporting serial digital video (DVB-ASI/SMPTE)

Encoding: Raw, 8b/10b, or framed data collect

Time code: 1 pps, IRIG-B, or other input, with user-configurable output

FPGA: One programmable Xilinx Virtex 5 LXT XC5VLX30T

Applications

Acquisition of multiple DVB-ASI/SMPTE signals

Interface between computer and television satellite receivers

Serial digital video signal testing

Specifications

Product Type	MSDV is a multi-rate serial digital video mezzanine board for DVB-ASI/SMPTE; it requires a main board.		
FPGA Resources	One programmable FPGA (Xilinx Virtex 5 LXT XC5VLX30T), plus FPGA on main board		
Memory	SRAM	0	
	DRAM	0	
Clocks	One, with jitter attenuation, set for DVB-ASI/SMPTE (also programmable to other frequencies)		
Data Rates	Data rates are dependent on data format and main board.		
Data Format (I/O)	Time code (from external receiver)	1 pps, IRIG-B, or other input, with user-configurable output	
	Other	DVB-ASI/SMPTE	
Connectors	One 7-pin Lemo for time code input Four 75-Ω BNCs for DVB-ASI/SMPTE		
Cabling	Consult EDT for purchase options: To 7-pin Lemo on board, from time code source		Via one DB9 (for 1 pps or IRIG-B) or BNC (for IRIG-B only)
Physical	Weight	5.0 oz. typical	
	Dimensions	6.6 x 4.2 x 0.5 in. (with a main board)	
Environmental	Temperature	Operating 0° to 40° C Non-operating -40° to 70° C	
	Humidity	Operating 1% to 90%, non-condensing at 40° C Non-operating 95%, non-condensing at 45° C	
System and Software	For details on system requirements and EDT-provided software driver packages, see specifications for your EDT main board.		

Support

EDT offers engineer-to-engineer customer support, from phone consultation to custom design of hardware, firmware, and software. Contact us for options and details.

Contact

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503-690-1243 (fax)
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Ordering Options

- Main board: PCI SS / PCI GS / PCIe8 LX
- Cabling (for time code input): DB9 / BNC

For more options, see main board datasheet.
Ask about custom options.