

Time Distribution

Time acquisition and distribution to multiple interfaces



Description

Time Distribution is an auxiliary board that receives a time code signal (from a 1 pps or IRIG-B time code source) and distributes it to multiple EDT main boards to timestamp data.

One header allows communication from the main board back to the Time Distribution board, which enables control of the signal source.

The board can interface with up to twelve EDT main boards and their attached mezzanine boards.

Applications

Acquisition and distribution of time code information / timestamping

Features

Auxiliary board – works with an EDT main board (PCI GS or PCIe8 LX) in a PCI, PCI-X, or PCIe slot

Microcontroller with 16 MHz clock, programmable to 1, 8, or 12 MHz

Time code: 1 pps, IRIG-B, or other input, with user-configurable output (can be distributed to as many as twelve main boards)

Specifications

Product Type	Time Distribution is an auxiliary board that acquires and distributes time code data; it requires a main board.	
Microcontroller Resources	Microcontroller (TI MSP430F2272 ultra-low power – see details at www.msp430.com) with these resources: RAM 1 KB Flash 32 KB Clock 16 MHz, programmable to 1, 8, or 12 MHz	
Data Rates	SPI serial bus	10,000 B/s, full duplex, programmable
Data Format (I/O)	Time code (from external receiver)	1 pps, IRIG-B, or other input, with user-configurable output
Connectors and Cabling	Consult EDT for purchase options: To 7-pin Lemo on board, from time code source To/from main board	Via one DB9 (for 1 pps or IRIG-B) or BNC (for IRIG-B only) Via twelve 8-position Bergs (up to twelve ribbon cables, with two included)
Physical	Weight Dimensions	1.5 oz. typical 4.2 x 1.5 x 0.5 in. (6.6 x 4.2 x 0.5 in. with a main board)
Environmental	Temperature Humidity	Operating 0° to 40° C Non-operating -40° to 70° C Operating 1% to 90%, non-condensing at 40° C Non-operating 95%, non-condensing at 45° C
System and Software	System requirements and EDT-provided software driver packages are discussed in the 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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Ordering Options

- Main board: PCI GS / PCIe8 LX
- Mezzanine board: Any
- Cabling: DB9 / BNC, plus up to 12 ribbon cables

For more options, see main board datasheet.