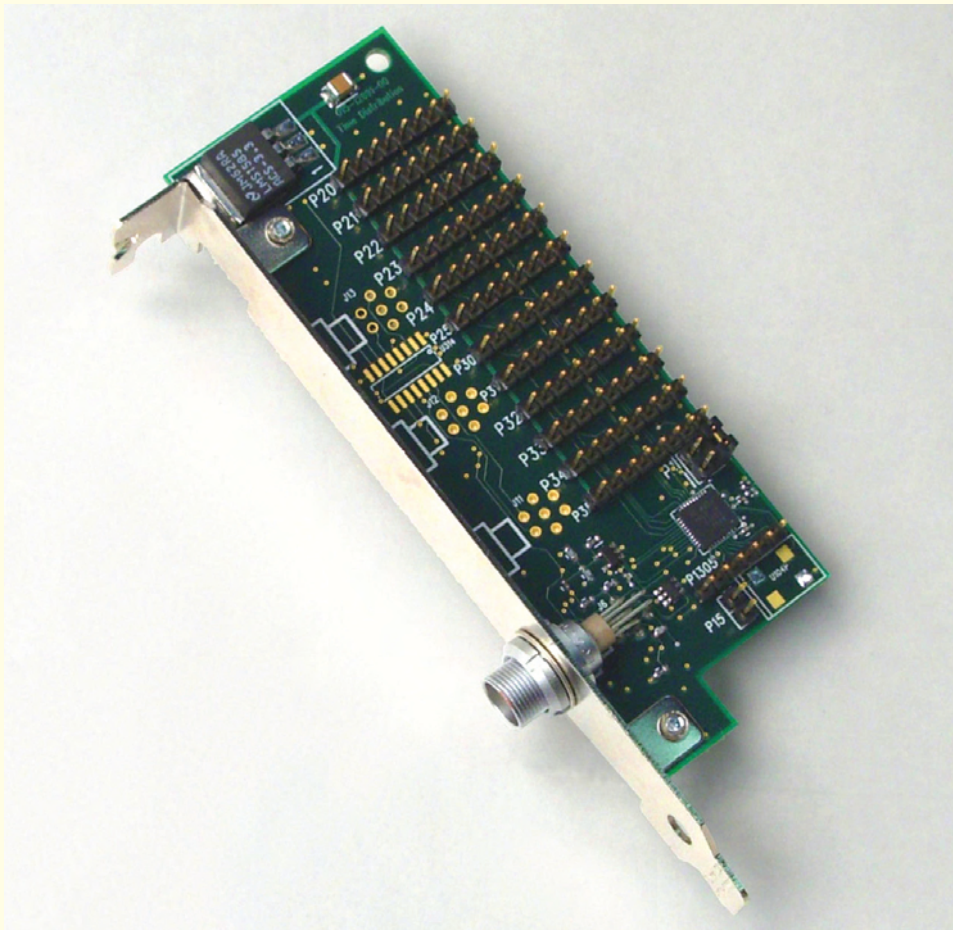# Time Distribution
Time acquisition and distribution to multiple interfaces

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 as many as twelve EDT main boards to timestamp data.

Each of the headers on the Time Distribution board provides a connection, via ribbon cable, to an EDT main board to receive the time signal and to control the signal source.

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 bus

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	One 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	Via one DB9 (for 1 pps or IRIG-B) or BNC (for IRIG-B only)
	To/from main board	Via twelve 8-position Bergs (up to twelve ribbon cables, with two included)
Physical	Weight	1.5 oz. typical
	Dimensions	4.2 x 1.5 x 0.5 in. (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	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

Ordering Options

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

Bold is default. For more options, see mezzanine board datasheet. **Ask about custom options.**