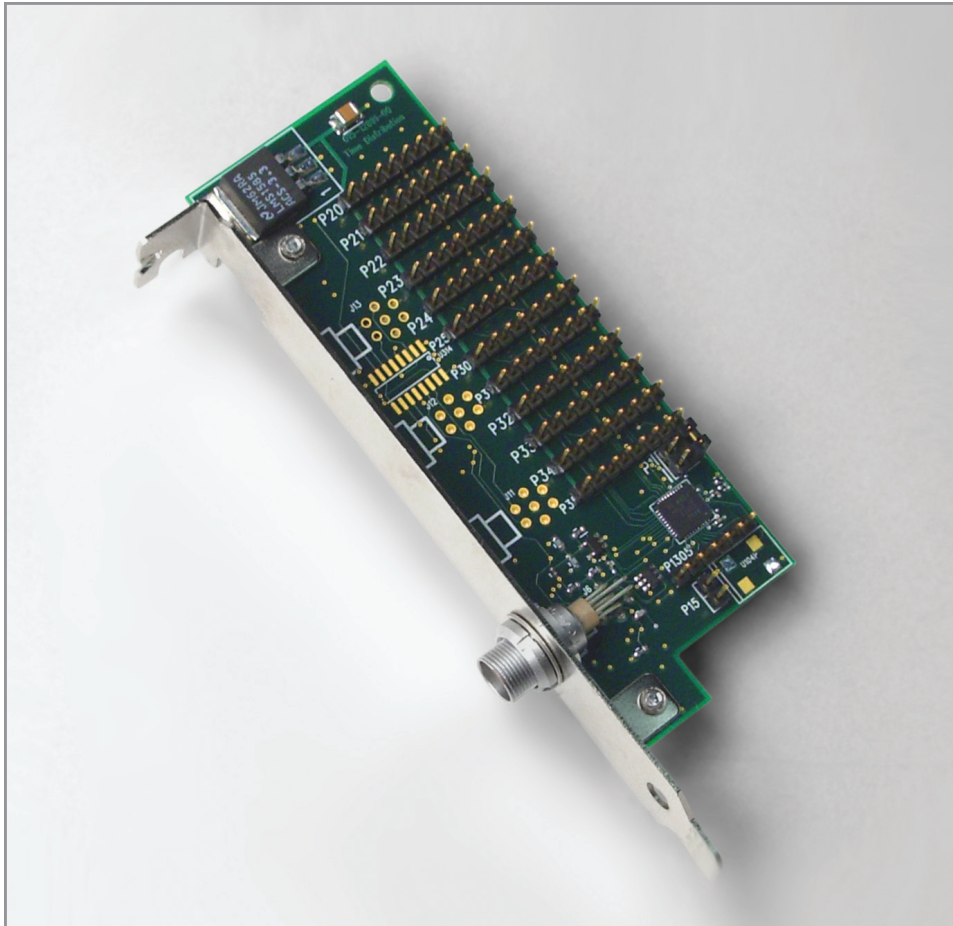


# Time Distribution

Time acquisition and distribution to multiple interfaces



## Description

The Time Distribution board 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 the 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.

## Ordering Options

- Main board: PCI GS or PCIe8 LX / FX / SX
- Mezzanine board: Any
- Connector: DB9 (EDT part #016-03005-00) or BNC (EDT part #016-02894-00)
- Cabling: Up to 12 ribbon cables

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

## Specifications

|                                  |   |   |
|----------------------------------|---|---|
| <b>Product Type</b>              | Auxiliary board that acquires and distributes time code data; it requires a main board.   |   |
| <b>Microcontroller Resources</b> | One microcontroller (TI MSP430F2272 ultra-low power – see details at <a href="http://www.msp430.com">www.msp430.com</a> ) with these resources:<br>RAM 1 KB<br>Flash 32 KB<br>Clock 16 MHz, programmable to 1, 8, or 12 MHz |   |
| <b>Data Rates</b>                | Dependent on such factors as data format, main and mezzanine boards, and system variables:<br>SPI serial bus 10,000 B/s, full duplex, programmable  |   |
| <b>Data Format (I/O)</b>         | Time code (from external receiver)  | 1 pps, IRIG-B, or other input, with user-configurable output  |
| <b>Connectors and Cabling</b>    | Consult EDT for purchase options:<br>To 7-pin Lemo on board, from time code source<br><br>To/from main board  | Via one DB9 (for 1 pps or IRIG-B), EDT part #016-03005-00 or one BNC (for IRIG-B only), EDT part #016-02894-00<br>Via twelve 8-position Bergs (up to twelve ribbon cables, with two included) |
| <b>Physical</b>                  | Weight<br>Dimensions  | 1.5 oz. typical<br>4.2 x 1.5 x 0.75 in. (6.6 x 4.2 x 0.75 in. with a main board)  |
| <b>Environmental</b>             | Temperature (operating / non-operating)<br>Humidity (operating / non-operating)   | 0° to 40° C / -40° to 70° C<br>1% to 90%, non-condensing at 40° C / 95%, non-condensing at 45° C  |
| <b>System and Software</b>       | System requirements and EDT-provided software driver packages are discussed in the specifications for your EDT main board.  |   |