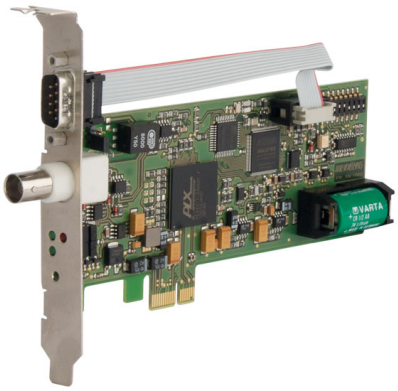

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TCR511PEX: IRIG Time Code Receiver for Computers (PCI Express)

Reception of IRIG-A/B or AFNOR time codes for synchronisation of computers and networks in PCI Express form factor, can be used in both low profile and regular PCIe slots.

Important Note

This product is no longer available and may have been replaced by a newer product. We will, of course, continue to provide support for units that have already been purchased and are still in use. Please contact our [1]Sales Department for further details.

This product has been discontinued and has been replaced with: [2]

Key Features

- PCI Express Interface
- Plug and play
- Pulses per second and per minute
- RS-232 interface
- Status LEDs
- Buffered hardware clock
- Reception of time code formats IRIG A/B or AFNOR
- Configurabel time zone
- Driver software for all popular operating systems

Description

The board TCR511PEX has been designed to receive different IRIG-A/B and AFNOR codes. The decoded date and time can be read via the PCI Express interface and is also transmitted via the board's RS-232 port. The receiver's automatic gain control (AGC) allows the reception of modulated IRIG signals within an amplitude range from 600mVpp to 8Vpp. In addition, the TCR511PEX provides an optocoupler input for decoding unmodulated codes with TTL- or RS485-level for example. A buffered real time clock keeps time and date after power down.

The module is designed as a x1-board (single lane) in "low profile" format. It is equipped with a standard height bracket with integrated D-Sub connector making the serial interface, the input for unmodulated IRIG codes, the pulses per second and the pulse per minute available. For installation in a "low profile" computer, an adequate bracket can be mounted that is included in delivery. The D-Sub connector is only available when using an additional bracket in this case.

The **Windows** driver package includes a time synchronization service which runs in the background and adjusts the Windows system time continuously and invisibly. This package also includes a monitor program to enable the user to check the status of the device and time adjustment service. If the monitor program is run with administrator rights, it can also be used to modify configurable parameters.

The **Linux** and **FreeBSD** driver packages include a kernel driver which allows the product to be used as a reference time source for the NTP daemon included in most Unix-like operating systems. This also allows the computer to be used as an NTP time server to provide accurate time to NTP clients on the network. Some command line tools can be used to modify configurable parameters and monitor the status of the clock in use.
Please contact Meinberg's Support Team for more information on using the card with other operating systems: techsupport@meinberg.de.

The device's serial port is not required for operation but can be used to update the card's firmware, or to provide another computer with the current time via a serial time string.

Characteristics

Status Indicators	3 status LEDs for indication of: detection of a correct code, synchronisation of the internal timing and holdover mode
Input signal	Modulated IRIG A/B or AFNOR signal, input insulated by transformer, input impedance selectable by jumper: 50, 600 or 5000 ohm unmodulated (DC level shift) IRIG A/B or AFNOR signal, input insulated by photocoupler (DC level shift only available with "standard height" bracket or with additional "low profile" bracket).
Accuracy free run	±1·10E-6 if the decoder was synchronous for at least 1 h
IRIG Time Code Input	IRIG - A132/A133, A002/A003, B122/B123, B002/B003, B126/B127, B006/B007, IEEE 1344, AFNOR NFS 87-500 and C37.118 (other codes on request)
Pulse Outputs	Pulses per second (RS232/TTL level) and per minute (TTL level), pulse duration: 200 msec, active high (only available with "standard height" bracket or with additional "low profile" bracket).
Precision of timebase	±5 µsec referred to IRIG-reference marker
Interface	One serial RS-232 interface (only available with "standard height" bracket or with additional "low profile" bracket).
Serial Time String Output	Baudrate: 300, 600, 1200, 2400, 4800, 9600, 19200, 38400 baud Framing: 7E2, 8N1, 8E1, 8N2 Output string: 32 ASCII characters with date, time and status information
Statusbyte	Information about holdover mode, synchronisation since last reset and the validity of the RTC data.
Electrical Connectors	BNC female connector 9 pin sub D male connector (only available with "standard height" bracket or with additional "low profile" bracket)
Computer interface	Single lane (x1) PCI Express (PCIe) Interface PCI Express r1.0a compatible
Backup Battery Type	When main power supply fails, hardware clock runs free on quartz basis, life time of lithium battery min. 10 years
Board type	Low profile board (68,90 x 150 mm)
Supported Temperature	Operational: 0 - 50 °C (32 - 122 °F) Storage: -20 - 70 °C (-4 - 158 °F)
Supported Humidity	Max. 85 % (non-condensing) at 40 °C
Warranty	Three-year warranty
RoHS Status of Product	This product is fully RoHS-compliant.

WEEE Status of Product	This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

Manual

The English manual is available as a PDF file: [3]Download (PDF)

Links:

[1] mailto:sales@meinberg.de
[2] https://www.meinbergglobal.com/english/products/tcr180pex-el.htm
[3] https://www.meinbergglobal.com/download/docs/manuals/english/tcr511pex.pdf