Odin TeleSystems Inc.

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You do not have to look far to find a USB port on any computer system these days. Therefore Odin TeleSystems presents Thor-8M-USB, a member of the Odin Telecom Frameworks (OTX) family of industry award-winning products. Thor-8M-USB provides multiple T1/E1/J1 interfaces over a single USB 2.0 interface. Thor-8M-USB provides a compact, yet high performance solution for today's netbooks, laptops, and PCs.

With four standard RJ45/RJ48C connectors routed to 8 T1/E1/J1 receivers and status LEDs integrated directly into the elegant metal case of the Thor-8M-USB, USB data transfer of all timeslots of all 8 spans, and built-in front-end circuitry to handle attenuated T1/E1/J1 signal levels and measure power levels, the Thor-8M-USB product is ideal for both portable and stationary monitoring applications like SS7/ISDN analyzers, call tapping, call logging, surveillance, and digital recording and playback..

Thor-8M-USB can also terminate 4 T1/E1/J1 spans (TX and RX), which makes Thor-8-USB equally suitable for low latency terminating applications such as network testing, remote maintenance, and telecom device simulators.

Thor-8M-USB delivers exceptional results for a vast range of modern portable and stationary telephony applications in a completely portable package.

Thor-8M-USB

Thor-8M-USB T1/E1/J1 Adapter
for both Portable and Stationary Applications

Feature Highlights

- 4/8 E1/T1/J1 (4 TX + 8 RX) interfaces.
- Software switchable between E1, T1 and J1 modes.
- High-impedance mode for non-intrusive monitoring applications.
- Signal amplifiers for attenuated T1/E1/J1 monitoring conditions (–20dB or –30dB).
- T1/E1/J1 Power level measurement.
- USB 2.0 interface.
- DMA burst data transfer for efficient data transfer of T1/E1/J1 bit-data.
- Host-based support for HDLC encoding/decoding.
- Host-based support for tone generation and tone detection (e.g. DTMF, MF, and custom tones).

Thor-8M-USB Product Brief

Software Support

Includes the OTX software driver, as well as a variety of host demo applications.	The Thor-8M-USB driver is available for Windows XP, Windows 2003-2010 Server, Windows Vista, Windows 7, and Linux operating systems.

Technical Specifications

Physical Size	• Black aluminum case (3.1" width, 1.6" height, 5.25" length)
Host Bus Interface	• USB 2.0
Network Interfaces	• 4/8 T1, E1, or J1 (4 TX + 8 RX) Monitoring of 4 duplex spans or terminating 4 spans
Line Termination	• 75ohm, 100/120 Ohm, high-Z termination, monitor amplifier (-20dB and –30dB modes)
Host Based Libraries	• DTMF, MF, and generic tone (e.g., dial-tone and call progress tone) generation and detection • G.711 Speech compression, encoding and decoding • HDLC processing
T1/E1/J1 Frame Formats	• Doubleframe, CRC Multiframe (E1 mode) • F4, SF (or D4), ESF (or F24), SLC96 (T1/J1 mode)
T1/E1/J1 Line Codes	• HDB3, B8ZS, AMI, AMI with ZCS
T1/E1/J1 Signaling Types	• Channel associated (robbed bit) • Common channel
Clocking sources	• Onboard oscillator • Incoming T1/E1/J1 span (any span)
Connectors	• 4 RJ45/RJ48C connectors • 1 USB connector (Type B) • 1 5V DC Power connector (used if the USB host can not provide enough power to Thor-8-USB)
Indicators	• 8 T1/E1/J1 status dual-color (Red/Green) LEDs • 1 Power :LED • 1 General Status LED
Testing Features	• Full access to F, Y, S_i, and S_a bits in E1 mode • Full access to FS/DL-bits in T1 mode (including support for the DL-channel protocol according to T1.403-1989 ANSI or to AT&T TR54016 specification), and programmable line build-out in T1/J1 mode • Transparent mode and programmable transmit pulse shape and input threshold • Alarm insertion and detection • Loop codes, channel loopback and PRBS
Power Requirements/Environmental Data	• Power consumption: TBD • Temperature: operating, 0^{o} C to $+50^{o}$ C; non-operating, -40^{o} C to $+60^{o}$ C • Humidity: operating, 5% to 80% RH (%relative humidity) at up to $+30^{o}$ C, and 5% to 30% RH above $+30^{o}$ C up to $+50^{o}$ C non-condensing; non-operating, 5% to 80% RH at up to $+30^{o}$ C, and 5% to 30% RH above $+30^{o}$ C up to $+50^{o}$ C non-condensing • Altitude: operating, up to 4,600 meters (15,333 feet); non-operating, up to 12,192 meters (50,000 feet)

Ordering Information

Product Name/Product Category	Thor-8M-USB HAA-1093-1 (4 TX/RX or 8 RX/RX) Thor-4M-USB HAA-1093-2 (2 TX/RX or 4 RX/RX) Thor-8-USB HAA-1095-1 (8 TX/RX) Thor-2-USB HAA-1095-3 (2 TX/RX)

Contact Information

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