

Odin TeleSystems Inc.

Open Telecom for Open Minds

The Thor-2-PCIe computer telephony adapter is a member of the Odin Telecom Frameworks Plus (OTX-Plus) product family. OTX-Plus is an enhanced version of the industry award-winning OTX platform with products that represents outstanding cost and performance value for today's service providers and telecom equipment manufacturers.

Whether you need reliable VoIP trunking gateway capabilities, testing and measurement capabilities or superior passive monitoring, the Thor-2-PCIe series delivers exceptional results.

When adding DSP resources for VoIP and TDM processing and keeping PCI slots free is critical, Thor-2-PCIe allow for connectivity to various OTX daughter-boards. Thor-2-PCIe also provides software-switchable features that result in highly configurable systems, ones recognized for their convenience and flexibility.

The Thor-2-PCIe boards offer the maximum levels of frequency stability through their optional on-board stratum oscillators – the levels you expect in the most demanding applications and testing environments.

So for the best in VoIP, CTI, and Internet telephony applications, the Thor-2-PCIe series delivers economy, value, and performance.

Thor-2-PCle



Thor-2-PCIe Adapter for demanding VoIP, Data, and Voice communication applications

Feature Highlights

- 2 T1/E1/J1 interfaces. Software switchable between T1, E1, and J1.
- PCI-Express host bus interface, master capable.
- H.100 Computer Telephony bus interface.
- 32-bit data DMA burst feature significantly reduces host CPU load.
- Voltage and Frequency measurements of the T1/E1/J1 span.
- Signal amplifiers for attenuated T1/E1/J1 monitor conditions.

- Odin ASM daughterboard socket. Can be used with the following:
 - ⇒ Alvis-6x4-ASM: VoIP. 4 x TI TMS320DM6443 DSPs with 4752 MIPS each.
 - ⇒ Vidar-5x4-ASM-PRO: 4 x TI TMS320C5416 DSP with 160 MIPS each.
 - ⇒ Vidar-5x4-ASM-EX: 4 x TI TMS320C5410A DSP with 160 MIPS each.
 - ⇒ Vidar-55x4-ASM: 4 x TI TMS320VC5510 DSP with 400 MIPS each.

Thor-2-PCIe Product Brief

Software Support	
Includes the OTX software driver, the OTX and DSP software development kits (SDKs), as well as a variety of host and DSP demo applications	The OTX driver is available for Windows 98, Windows NT 4.0, Windows 2000, Windows XP, Windows 2003 Server, and Linux operating systems. Customized DSP applications can be developed using ANSI C and C++ language and standard third-party development tools.
Technical Specifications	
Board Specification	Half-size PCI-Express board
Host Bus Interface	 Supports PCI Express r1.0a (single channel) 32-bit burst DMA
Network Interfaces	 2 T1/J1 or E1 interfaces (software switchable); 75 Ohm, 100/120 Ohm, high-z termination, monitor amplifier
H.100 Interface	 32 x 2, 4, or 8 Mbit/s board-to-board highways 256 duplex channels switchable between adapters, 1024 channels switchable locally
DSP Resources (with optional ASM daughterboard)	 Vidar-55x4-ASM: 4 x TI TMS320VC5510 (400 MIPS) with 16MB SDRAM each Vidar-5x4-ASM-PRO: 4 x TI TMS320C5416 (160 MIPS) with up to 512KB SRAM each Alvis-6x4-ASM: VoIP 4 x TI TMS32DM6443 (4752 DSP MIPS and 1200 ARM MIPS)
HDLC Resources	Support for 1 HDLC channel per access port ASM modules offer additional HDLC channels with support for super- and sub-channels
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) and Common Channel
Clocking Sources	 On-board oscillator (50ppm), and high-stability (0.5ppm) oscillator available as an option Incoming T1/E1/J1 H.100 Clock External clock
Connector	50-pin Centronix, 3-foot cable to harmonica with RJ45/RJ48C connectors for E1/T1/J1 and Ethernet (VoIP), and RJ11 connectors for handsets
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 T1/E1 span frequency measurement. T1/E1 signal voltage measurement.
Phone Features	4 analog interfaces (Codecs) for speaker, microphone, handset, or modem connections (2 channels if the Alvis-6x4-ASM is populated)
Power Requirements/Environmental Data	 Power consumption: 2.3W Temperature: operating, 0° C to +50° C; non-operating, -40° C to +60° C Humidity: operating, 5% to 80% RH (%relative humidity) at up to +30° C, and 5% to 30% RH above +30° C up to +50° C non-condensing; non-operating, 5% to 80% RH at up to +30° C, and 5% to 30% RH above +30° C up to +50° 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-2-PCIe/HAA-1072-1-1.0-1
Contact Information	
For more information on the Thor-2-PCI-Express products, please contact:	Odin TeleSystems Inc. Tel: +1-972-664-0100 800 E. Campbell Road, Suite 334 Tel: 1-888-ODINTSM Richardson, TX 75081-1873 Fax: +1-972-664-0855 USA Email: info@odinTS.com Web: www.odinTS.com

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