



# Odin TeleSystems Inc.

*Open Telecom for  
Open Minds*

The Odin Telecom Frameworks (OTX) family of industry award-winning products represents outstanding cost/performance value for today's service providers and telecom equipment manufacturers. At the heart of this product line are the Thor-2-PCI and Thor-8-PCI computer telephony adapters.

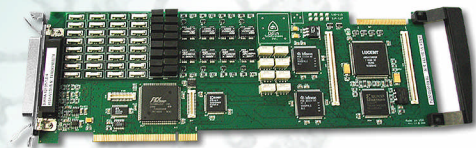
Whether you need reliable testing and measurement capabilities or superior passive monitoring, the Thor PCI series delivers exceptional results. With its half-size footprint, the Thor-2 PCI is *the* choice where space is at a premium. And the Thor-8 provides the highest integration solution where high port density of T1/E1/J1 interfaces is required.

Where adding DSP resources and keeping PCI slots free is critical, Thor-2 and Thor-8 allow for connectivity to daughterboards. And both Thor-2 and Thor-8 provide software-switchable features that result in highly configurable systems, ones recognized for their convenience and flexibility.

Both versions of Thor 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 CTI and Internet telephony applications, the Thor PCI series — with its multiple DSP and HDLC resources — delivers economy, value, and performance.

## *Thor-2-PCI and Thor-8-PCI*



*Thor-2-PCI and Thor-8-PCI Adapters for Data and Voice Communications*

### Feature Highlights

- 2 T1/E1/J1 interfaces (Thor-2-PCI);  
8 T1/E1/J1 interfaces (Thor-8-PCI).  
Software switchable between T1, E1, and J1.
- PCI host bus interface
- H.100 Computer Telephony bus interface.
- Odin ASM daughterboard socket.  
Can be used with the following:
  - ⇒ Vidar-5x4-ASM: 4 x TI TMS320C548/549 DSP with 80 MIPS each.
  - ⇒ Vidar-55x4-ASM: TI TMS320VC5510 DSP with 1600 MIPS.

# Thor-2-PCI and Thor-8-PCI 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, and Linux operating systems. Customized DSP applications can be developed using ANSI C and C++ language and standard third-party development tools.

## Technical Specifications

<i>Board Specification</i>	<ul style="list-style-type: none"> <li>Thor-2-PCI: Half-size PCI board</li> <li>Thor-8-PCI: Full-size PCI board</li> </ul>
<i>Host Bus Interface</i>	<ul style="list-style-type: none"> <li>PCI Rev. 2.1 electrical interface</li> <li>Memory mapped interface</li> </ul>
<i>Network Interfaces</i>	<ul style="list-style-type: none"> <li>Thor-2-PCI: 2 T1/J1 or E1 interfaces (SW switchable); high-z line termination</li> <li>Thor-8-PCI: 8 T1/J1 or E1 interfaces (SW switchable)</li> <li>Both: 75 Ohm, 100/120 Ohm</li> </ul>
<i>H.100 Interface</i>	<ul style="list-style-type: none"> <li>32 x 2, 4, or 8 Mbit/s board-to-board highways</li> <li>256 simplex channels switchable between adapters</li> <li>1024 channels switchable locally</li> <li>Backwards compatible with MVIP and SC-Bus</li> </ul>
<i>DSP Resources (with optional ASM daughterboard)</i>	<ul style="list-style-type: none"> <li>Vidar-55x4-ASM: 4 x TI TMS320VC5510 (400 MIPS) with 16MB SDRAM each</li> <li>Vidar-5x4-ASM: 4 x TI TMS320C548/549 (80 MIPS) with up to 512KB SRAM each</li> </ul>
<i>HDLC Resources</i>	<ul style="list-style-type: none"> <li>Support for 1 (Thor-2-PCI) and 3 (Thor-8-PCI) HDLC channel(s) per access port</li> <li>ASM modules offer additional HDLC channels with support for super- and sub-channels</li> </ul>
<i>T1/E1/J1 Frame Formats</i>	<ul style="list-style-type: none"> <li>Doubleframe, CRC Multiframe (E1 mode)</li> <li>F4, SF (or D4), ESF (or F24), SLC96 (T1/J1 mode)</li> </ul>
<i>T1/E1/J1 Line Codes</i>	<ul style="list-style-type: none"> <li>HDB3, B8ZS, AMI, AMI with ZCS</li> </ul>
<i>T1/E1/J1 Signaling Types</i>	<ul style="list-style-type: none"> <li>Channel associated (robbed bit)</li> <li>Common channel</li> </ul>
<i>Clocking Sources</i>	<ul style="list-style-type: none"> <li>On-board oscillator (high-stability oven-controlled oscillator option available)</li> <li>Incoming T1/E1/J1</li> <li>H.100 Clock</li> <li>External clock</li> </ul>
<i>Connector</i>	<ul style="list-style-type: none"> <li>50-pin Centronix, 3-foot cable to harmonica with RJ45/RJ48C connectors for E1/T1/J1, and RJ6 connectors for handsets</li> </ul>
<i>Testing Features</i>	<ul style="list-style-type: none"> <li>Full access to F, Y, S<sub>i</sub>, and S<sub>a</sub> bits in E1 mode</li> <li>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&amp;T TR54016 specification), and programmable line build-out in T1/J1 mode</li> <li>Transparent mode and programmable transmit pulse shape and input threshold</li> <li>Alarm insertion and detection</li> <li>Loop codes, channel loopback and PRBS</li> </ul>
<i>Phone Features</i>	<ul style="list-style-type: none"> <li>4 analog interfaces (Codecs) for handset connections</li> </ul>
<i>Power Requirements/Environmental Data</i>	<ul style="list-style-type: none"> <li>Power consumption: 4.6W for Thor-2-PCI; 7.4W for Thor-8-PCI</li> <li>Temperature: <u>operating</u>, 0° C to +50° C; <u>non-operating</u>, -40° C to +60° C</li> <li>Humidity: <u>operating</u>, 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; <u>non-operating</u>, 5% to 80% RH at up to +30° C, and 5% to 30% RH above +30° C up to +50° C non-condensing</li> <li>Altitude: <u>operating</u>, up to 4,600 meters (15,333 feet); <u>non-operating</u>, up to 12,192 meters</li> </ul>

## Ordering Information

<i>Product Name/Product Category</i>	Thor-2-PCI/HAA-1022-1-1.0 Thor-8-PCI/HAA-1019-1-1.0	
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## Contact Information

<i>For more information on the Thor-2-PCI and Thor-8-PCI products, please contact:</i>	Odin TeleSystems Inc. 800 E. Campbell Road, Suite 334 Richardson, TX 75081-1873 USA	Tel: +1-972-664-0100 Tel: 1-888-ODINTSM Fax: +1-972-664-0855 Email: info@odinTS.com Web: www.odinTS.com
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