Odin TeleSystems Inc.

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Thor-8-PCI-Plus-2.0

The Thor-8-PCI-Plus-2.0 computer telephony adapters are members 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/performance value for today's service providers and telecom equipment manufacturers.

Whether you need reliable testing and measurement capabilities or superior passive monitoring, the Thor PCI series delivers exceptional results. The Thor-8-PCI-Plus-2.0 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, the Thor-8-PCI-Plus-2.0 allow for connectivity to daughter-boards and software-switchable features that result in highly configurable systems, ones recognized for their convenience and flexibility.

The Thor-8-PCI-Plus-2.0 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 CTI and Internet telephony applications, the Thor PCI Plus series delivers economy, value, and performance.

Feature Highlights

- 8 T1/E1/J1 interfaces (Thor-8-PCI-PLUS). Software switchable between T1, E1, and J1.
- PCI 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-ASM: Up to 4 x TI TMS320DM6443 dual core processors with 4752 MIPS DSP and 400 MIPS ARM. 10/100/1000 Ethernet connection.

⇒ Vidar-5x4-ASM-PRO: 4 x TI TMS320C5416 DSP with 160 MIPS each.

⇒ Vidar-5x4-ASM-CST: 4 x TI TMS320C54CST DSP with 120 MIPS each.

⇒ Vidar-5x4-ASM-EX: 4 x TI TMS320C5410A DSP with 160

Thor-8-PCI-Plus-2.0 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	• Thor-8-PCI-Plus-2.0: Full-size PCI board
Host Bus Interface	• Supports PCI rev 2.1, rev 2.2, rev 2.3 (3.3volt signaling) and rev 3.0 • 32-bit burst DMA
Network Interfaces	• Thor-8-PCI-Plus-2.0: 8 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-ASM: Up to 4 x TI TMS320DM6443 dual core processors with 4752 MIPS DSP and 400 MIPS ARM. 10/100/1000 Ethernet, 256 MB DDR2 memory and 128 MB NAND flash
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 RJ11 connectors for handsets or ethernet
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.
Phone Features	• 4 analog interfaces (Codecs) for speaker, microphone, handset, or modem connections
Power Requirements/Environmental Data	• Power consumption: 4.1W (Thor-8-PCI-Plus-2.0) • 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-8-PCI-Plus-2.0/HAA-1049-2

Contact Information

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