



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. Leading this product line for mobile applications are the Thor-2-PCMCIA (EX, CST and PRO) adapter cards.

With their ability to interface laptop and hand-held computers to T1/E1/J1 links, the Thor-2-PCMCIA series provide remarkably portable solutions. Whether you need reliable network testing and simulation capabilities or superior monitoring and maintenance, the Thor-2-PCMCIA cards deliver exceptional results in a completely mobile package.

All the cards offer software switchable convenience between T1, E1 and J1 modes. The Thor-2-PCMCIA is offered in different variants: EX, CST and the PRO versions. Each of these variants differ mainly upon DSP power and available memory resources. The PRO and EX version packs a total of 320 MIPS of DSP processing power while the CST version offers a host of telephony algorithms packed in ROM.

The Thor PCMCIA series delivers economy, value, and performance for mobile telephony applications.

Thor-2-PCMCIA (EX, CST and PRO)



Thor-2-PCMCIA Adapter Cards for Mobile Applications

Feature Highlights

- 2 T1/E1/J1 interfaces. Software switchable between all modes.
- High-impedance mode for monitor applications.
- Software-switchable 20dB signal amplifier for monitor applications.
- PCMCIA host bus interface.
- Two onboard DSPs with 120 MIPS processing power each (Thor-2-PCMCIA-CST).
- Two onboard DSPs with 160 MIPS processing power each (Thor-2-PCMCIA-EX and PRO).
- Thor-2-PCMCIA-CST contains the most popular telephony algorithms like G.726 ADPCM, G.168 line echo canceller, DTMF, VAD, CNG, AGC etc.

Thor-2-PCMCIA Series of Products

Software Support

<i>Includes the OTX software driver, the OTX and DSP software development kits (SDKs), as well as a variety of host and DSP demo applications.</i>	The Thor-2-PCMCIA driver is available for Windows 98, Windows NT, Windows 2000, Windows XP, Pocket PC 2002 and Linux. 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"> • PCMCIA Type II card
<i>Host Bus Interface</i>	<ul style="list-style-type: none"> • PCMCIA electrical interface • I/O mapped, SW configurable IRQ
<i>Network Interfaces</i>	<ul style="list-style-type: none"> • 2 T1, E1, or J1 (software configurable)
<i>Line Termination</i>	<ul style="list-style-type: none"> • 75 Ohm and 100/120 Ohm or high impedance
<i>DSP</i>	<ul style="list-style-type: none"> • Thor-2-PCMCIA-CST: 2 x TI TMS320C54CST with 120 MIPS processing power each • Thor-2-PCMCIA-EX: 2 x TI TMS320C5410A with 160 MIPS processing power each • Thor-2-PCMCIA-PRO: 2 x TI TMS320VC5416 with 160 MIPS processing power each
<i>DSP Programming Interface</i>	<ul style="list-style-type: none"> • Software development kit in ANSI C and C++ • Open interface with standard third-party tools
<i>DSP Applications</i>	<ul style="list-style-type: none"> • DTMF, MF, FSK, and generic tone (e.g., dial-tone and call progress tone) generation and detection • Speech compression, encoding and decoding • HDLC processing • G.726 ADPCM, G.168 line echo canceller, VAD, AGC, CNG, CPTD etc. (as part of the CST DSP ROM)
<i>T1/E1/J1 Frame Formats</i>	<ul style="list-style-type: none"> • Doubleframe, CRC Multiframe (E1 mode) • F4, SF (or D4), ESF (or F24), SLC96 (T1/J1 mode)
<i>T1/E1/J1 Line Codes</i>	<ul style="list-style-type: none"> • HDB3, B8ZS, AMI, AMI with ZCS
<i>T1/E1/J1 Signaling Types</i>	<ul style="list-style-type: none"> • Channel associated (robbed bit) • Common channel
<i>Clocking sources</i>	<ul style="list-style-type: none"> • Onboard oscillator • Incoming T1/E1/J1 span
<i>Connector</i>	<ul style="list-style-type: none"> • RJ45/RJ48C in dongle (two dongles per board)
<i>Testing Features</i>	<ul style="list-style-type: none"> • Full access to F, Y, S_i, and S_o 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
<i>EMC and Safety Testing/Certification</i>	<ul style="list-style-type: none"> • FCC Part 15 (CFR47, Part 15, Subpart B) • CE EMC (EN61326-1 Class B Equipment, AS/NZS 2064 Class B Limits) • Safety EN60950 and UL60950 (dongle only)
<i>Power Requirements/Environmental Data</i>	<ul style="list-style-type: none"> • Power consumption: 3.0W • Temperature: <u>operating</u>, 0° C to +50° C; <u>non-operating</u>, -40° C to +60° C • 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 • Altitude: <u>operating</u>, up to 4,600 meters (15,333 feet); <u>non-operating</u>, up to 12,192 meters (50,000 feet)

Contact Information

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

Odin, the Odin logo, OTX, Thor-2-PCMCIA-CST, Thor-2-PCMCIA-EX, and Thor-2-PCMCIA-PRO are trademarks of Odin TeleSystems Inc. Windows 98, Windows NT, Windows 2000, and Windows XP are trademarks of Microsoft Corporation. Other trademarks are the property of their respective companies. Information and specifications are subject to change without notice.