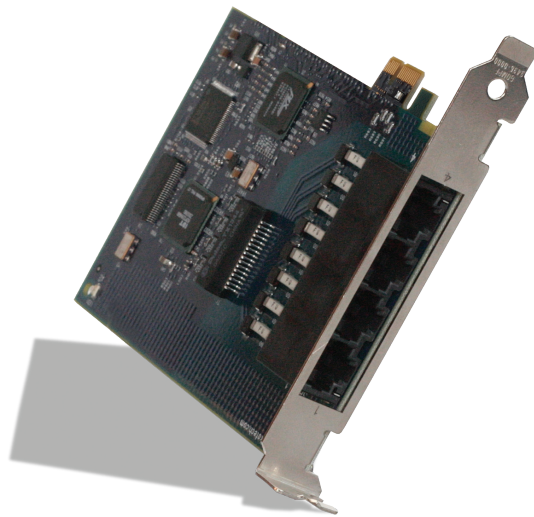# PIKA For Asterisk T1/E1 Gateway Board
Datasheet

PIKA for Asterisk T1/E1 Gateway Boards with echo cancellation feature market leading flexible port densities. Currently available in a PCI variant with PCIe coming later this year. Up to four T1/E1 network interfaces can be enabled with in field license upgrades.

With 20 proven years experience in the board market, PIKA has evolved its TDM interface cards to fully integrate into an Asterisk Open Source PBX application and provides the most reliable choice for your Asterisk application.

Unparalleled Flexibility

Every T1/E1 gateway card ships from Pika with hardware capacity for up to 4 spans. At initial order,1, 2, 3 or 4 T1/E1 spans are enabled. However, should your Asterisk system grow over time, you can expand the port capacity by installing a cost effective span upgrade license (shipped to you by email). How simple can it get!

Features & Benefits

- Provides low cost Primary Rate ISDN (NA and Euro) network access for Asterisk environments

- All on Host (AoH) echo cancellation provides DSP quality, software based Echo cancellation using a superior, low processing power algorithm. Because it is done on the host, expensive echo cancelling hardware is not required

- All on Host (AoH) technology removes expensive DSP resources to provide an economical board solution

- A single board supports cost effective growth for up to120 channels

- Additional T1/E1 spans can be added with software licensing eliminating the need for additional PCI slots

- Support for future applications such as fax can be done with simple software upgrades

- Installation is as simple as downloading and installing the Pika channel driver for Asterisk and plugging in the boards!

- Native switching between voice channels (B channels) on the same card or across multiple cards provides a lower latency connection improving voice conversation quality

- Pika provides no charge technical support to help you get your Asterisk application up and running

Technical Specifications

Network Connection	Rear panel RJ48 connectors (DSX-1 or DS-1 interface)
Protocol	Primary Rate ISDN
LineBuildOut	Software Selectable (CSU/DSU)
Impedance	T1: 100 ohm E1: 120 ohm
Switch Types	4ESS, DMS 100, 5ESS, NI-2, NET5
Country	North America, European Union
Framing	T1: ESF, SF/D4 E1: CRC4, Basic
Encoding	T1: B8ZS, AMI (NONE, GTE, BELL, JB8) E1: HDB3, AMI

Host Interface

PCI Bus Interface	PCI 32 bit target/initiator V2.2 compliant
PCI Bus Speed	33 MHz or 66 MHz bus speed
Memory Address Allocation	Automatically assigned by Plug and Play cycle
Interrupts Allocation	Automatically assigned by Plug and Play cycle

Physical Properties

Slot Requirements	PCI: Standard x86 PCI Half-size Slot (Compatible with PCI-X slot)
Dimensions (Metric)	PCI: 241 mm L x 98 mm H x 18.5 mm D
Dimensions (Imperial)	PCI: 5.3″ L x 3.9″ H x 0.6″ D

Power Requirements

Power consumption from 3.3V rail	1.32 W max

Environment Requirements

Operating Temperature	0 °C to +60 °C
Storage Temperature	-20 °C to +85 °C
Humidity, Non-condensing	5% to 95%
Mean Time Between Failure (MTBF)	Mean Time Between Failure (MTBF)

ROHS
All Pika boards are ROHS compliant.

Warranty
Pika provides 3 warranty on all boards

Product Support
Pika provides no charge support all all products. Visit http://www.pikatechnologies.com/contact/index.htm

About PIKA Technologies Inc.

PIKA Technologies' reliable media processing building blocks connect computer systems to TDM and IP networks. Brand name companies design groundbreaking IVR, call center, custom PC/IP PBX, fax and logging solutions using PIKA Technologies' components.

With two decades of experience in this industry, PIKA was one of the first media processing vendors to move voice processing onto the host, developing reliable algorithms for voice applications in shared environments. PIKA offers a single SDK across its entire product portfolio, and has earned a reputation for market-leading customer and technical support. Headquartered in Ottawa, ON, Canada, PIKA has ranked in The Branham300, an authoritative ranking of successful Canadian high tech firms, for five consecutive years.