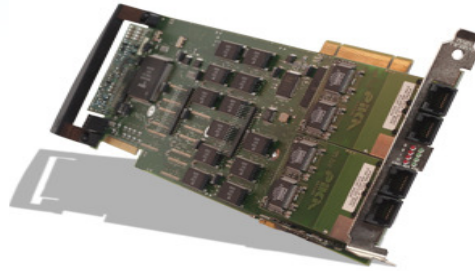


Datasheet: **Digital T1/E1 PCI Boards (DSP)**

PIKA Digital T1/E1 PCI (DSP) high performance boards feature market leading port densities. These digital boards combine up to four highly flexible T1/E1 digital network interfaces with integrated DSP



resources. A wide-range of feature-rich services make these boards the reliable choice for the most demanding voice and fax applications.

Audio tapping is available on PIKA Digital T1/E1 PCI Boards. This feature enables passive tapping on T1 or E1 line interfaces using ISDN (CCS) or RBS/MFR2 (CAS) protocols. The digital logging variant is available in single and dual span configurations with half- or full-duplex recording. Recording features include voice activity detection (VAD), time stamping and audio compression.

Our digital T1/E1 series of boards enable voice and fax services by way of connectivity to TDM and IP networks. Digital board densities are available in single, dual and quad span versions.

Key features

- Connects to TDM and IP networks
- Single, dual and quad span T1/E1 connectivity to deliver superior densities
- Audio logging variant - single and dual span with half- or full-duplex recording to enable passive tapping on T1 or E1 line interfaces; features VAD, time stamping and audio compression
- Integrated support of PIKA Technologies' DSP based architecture to dynamically access DSP resources
- Integrated support of the low-level PIKA API delivers maximum design control and application performance
- H.100 compatible - up to 512 simultaneous half duplex connections can be made between any of the 4096 CT bus timeslots and any of the local timeslots
- CSU and DSU options are supported

Key benefits

- Windows or Linux development environments
- Shared DSP host processing architecture enables you to benefit from market improvements in PCI and processor architectures
- One board support for 120 channels (to a maximum of 720) of voice processing or conferencing parties
- Support for current and future applications such as speech/voice recognition, fax, audio logging, and more

Technical Specifications

T1/ E1 Spans		1, 2, 3 or 4
Switching		PIKA DSP based media processing provides realtime audio switching between TDM or IP interfaces
Data Bus Type		PCI (universal signaling)
Media processing		Media processing is performed using PIKA DSP based media software resources. 2 or 4 DSP's are available depending on the number of spans.
Supported OS		Windows 2000/XP/2003 , Red Hat 7.3/ Enterprise 4 SuSE 9.3 distributions of Linux
PCI Interface		PCI 32 bit target/initiator V2.2 compliant 33 MHz bus speed H.100 compatible telephony bus
Network Interface Physical Connection		Rear panel RJ48 Impedance matched for T1/E1 connections CSU/DSU mode software selectable DSX-1 or DS-1 interface
Network Types		Proprietary National ISDN-1, ISDN-2, ISDN-3 Japan/NTT , France, Germany, ETSI EuroISDN United Kingdom , Australia
Framing		T1 ESF, SF/DC4 E1 CRC4, Basic
Encoding		T1: AMI, B8Z E1: AMI, HDB3
Protocols		T1/E1 ISDN PRI T1/E1 CAS (RBS,MFR1, MFR2, DTMF/Pulse)
Compliance and Capabilities		FCC Part 15 and FCC Part 68 , Industry Canada CS-03 , TBR4 , CSA C22.2 no. 950 NRTL/C , EN55022, EN55024 , EN60950 Safety
Switch Interoperability: Standard switches including		AT&T 4ESS and 5ESS , NTT (Japan) INSnet 1500, Nortel DMS-100 , US National ISDN-2 , AUS (E1 only) , NET5 (E1 only)
Physical Properties	Slot Requirements Rear Card (Imperial) inches Front Card (Imperial) inches	Single cPCI slot 9.32 L x 3.44 H x 0.8 D 9.32 L x 6.64 H x 0.8 D Note: Measurements are approximate and do not include card faceplate and Amphenol connectors
MTBF		Baseboard, 4 DSPs : 59 years Baseboard, 2 DSPs: 68 years 2 span NIM: 399 years 1 span NIM: 657 years v-engine 6/3.3 volt: 156 yeards v-engine 2/3.3 volt: 239 years
DSP		Motorola 56303 DSP
Power Requirements: Typical values for a worst-case operating scenario	Single Span T1 Dual Span T1 Quad Span T1 M-series v-engine	820 mA @ +5 volts 920 mA @ +5 volts 1.4A @ +5 volts 725mA max @ +3.3 volts (6 DSP Variant)
Environmental Requirements	Operating Temperature Storage Temperature Humidity	0 °C to +60 °C -20 °C to +85 °C 5 to 95%, non-condensing

RoHS

All PIKA boards are RoHS compliant.

Warranty

PIKA provides 3 warranty on all boards.

About PIKA Technologies Inc.

For over 2 decades, PIKA Technologies has been providing developers with the tools they need to build advanced voice and fax applications like IP PBX, fax broadcast and self-service IVR. As the technology landscape has changed, so too has PIKA, building out its product offering so its customers can choose the right tool set for their applications. Whether building applications using DSP board-based media processing, host-based or VoIP only solutions, whether your application requires telephony boards or appliances, application developers of all kinds turn to PIKA for their development tools.

Visit www.pikatechnologies.com or call +1-613-591-1555 for more information.