Asterisk® T1/E1 Redundancy, High Availability and now carrier class
Echo Cancellation

REDFONE
communications

OVERVIEW

foneBRIDGE2-EC is a T1/E1 PRI-to-Ethernet Bridge. It is an integrated black-box "appliance" designed to streamline installation and enable re-dundant design of Asterisk based VoIP/PBX systems.

foneBRIDGE2-EC eliminates the need to install proprietary TDM hard-ware cards in approved/compatible server configurations. Instead, fone-BRIDGE2-EC terminates T1/E1 PRI lines on the trunk side and provides direct Ethernet communication to a network of Asterisk servers using na-tive Asterisk TDMoE formats and utilities.

Engineered around our unique high-speed SoC (System-on-Chip) TDMoE engine, foneBRIDGE2-EC provides low-latency delivery of your critical voice traffic.

KEY FEATURES

Failover & Asterisk HA Enabled

- High-Availability through rapid failover capabilities en-sures your critical telephony services are always on and available

Flexible Configuration

- Configurable on a per-port basis, foneBRIDGE2 allows you to mix multiple telephony standards on a single de-ployment. Field upgradeable.

Solid State Embedded Appliance

- No moving components

- Low heat and power consumption

- High MTBF (mean time before failure)

Carrier Class Echo Cancellation

- ITU G.168 Compliant

- 128ms of echo tail up to 120 concurrent channels

- Qualified as Toll Quality by AT&T

eXpressDSP® Compliant

DSP
TEXAS INSTRUMENTS

ADAPTIVE DIGITAL TECHNOLOGIES, INC.

T1/E1 foneBRIDGE2-EC

Target Applications

- T1/E1 PRI Trunk termination
- Legacy PBX-to-Asterisk integration
- High-Availability/Failover Asterisk clusters
- Channel Bank connectivity
- Mixed telephony environments (ex. E1 PRIs + T1 Channel Banks)
- Blade Servers where PCI slots are not available

Standards

Telephony
- PRI Switch Compatibility– EuroISDN, AT&T 4ESS, DMS 100, Lucent 5E, NI1/NI2; Network or CPE
- Line Interface– Dual or Quad T1/E1 (RJ45), per port configurable
- Line Encoding– AMI/B8ZS for T1, AMI/HDB3 for E1
- Super Frame (SF) and Extended Super Frame (ESF)
- Robbed Bit Signaling (RBS/CAS)
- Short and Long Haul line build out (LBO)
- Adaptive Equalizer for line attenuation conditioning

Echo Cancellation
- On-board high speed digital signal processing with TI's 6000™ DSP platform
- Adaptive Digital "carrier class" G.168.v8 patented echo canceller
- 128ms (1024 taps) of echo tail
- Comfort Noise Generator
- Automatic tail search, fast convergence, and no divergence due to double talk
- Tone disabler for clear fax and modem communication

Ethernet
- 10/100-BASE-TX Half/Full-duplex
- 2 x Dedicated RJ45

Specifications

- Electrical: DC 500mA Max @ 5V (2.5W)
- Environmental: 0 to 50 deg C operating
- Physical:
  Dimensions: 5.00" x 6.50" x 1.00"
  Weight: 1 pound
  Mounting: Flange Mount or Desktop

Model Numbers
- Quad Port T1/E1= 750-5000-EC
- Dual Port T1/E1= 750-5050-EC