BRI Series Datasheet

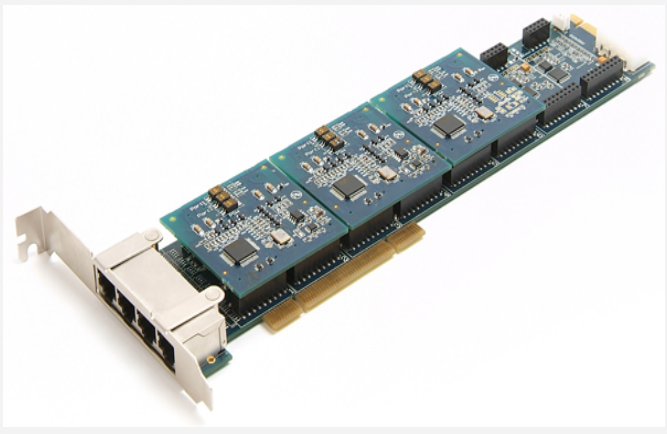
BRI Series

- Up to 16 ISDN BRI ports
- Mix TE and NT modes
- DSP-enabled echo cancellation of carrier-grade(32ms or 128ms optional)
- Six-years warranty, refundable two-month return, lifetime maintenance

Introduction

Compliant with ISDN BRI, Synway BRI series card leverages SuPerForm echo cancellation technology (DSP-based, 32ms and 128ms echo tail) to assure superior voice quality in any complex networking environments.

Adopting modular design and expandability architecture, this series helps developers deliver high-flexibility, highly robust and cost effective systems in the hypercompetitive IP-PBX market.



S/T modules optional, the BRI series also enables developers to build up TE/NT hybrid systems, up to 16 channels per PCI slot, or up to 256 ports in single system.

Key Features & Benefits

Configurable freely

Each baseboard or daughterboard can mount four S/T BRI modules (each module **supports two TE or NT lines**) for system capacity up to 16 ISDN BRI TE/NT lines per PCI slot

SuPerForm superior voice quality and echo cancellation

High-adjustability, original and complimentary SuPerForm, can be "automatic adaptability" optimized by site environments for the unmatched voice enhancements (up to 128ms echo tail), accurate DTMF/tone detection.

Carrier-grade reliability and performance in any situation

32-bit bus master DMA data exchange at 132 MB/s across PCI(e) interface for data reading and writing helps minimize intervention over host CPUs, optimizing per channel DMA streams and maximizing system's reliability.

Fax capability optimized by Synway hardware

Resource saving: With Fax synchronization cable, Synway FXM analog card and BRI card can connect to the fax machine;

Error Correction Mode (ECM): The BRI series digital card can synchronize with Synway analog card and PSTN clocking for error-free fax and modem pass through, and optimize your Fax capability and avoid missed lines, blank sheets or page missing;

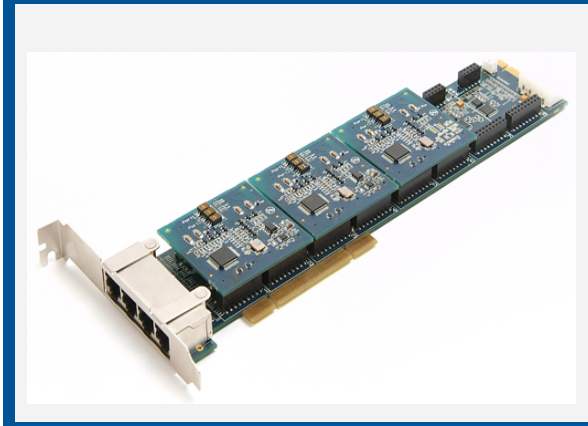
Field-upgradeable firmware

On-board DSP algorithm can be loaded through driver, and other firmware is conveniently upgradeable through server.

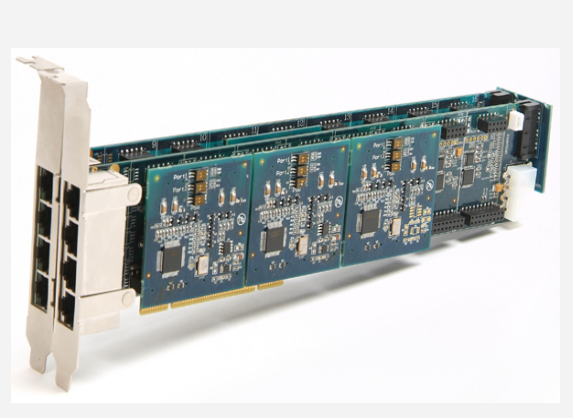
OS and open sources IP-PBX supported

Support Unix, Linux and Solaris; compatible with Zaptel, and support a broad range of open source PBX systems, including Asterisk, Trixbox, Yate, Freeswitch, CallWeaver, Elastix and more .

BRI Architecture



To configure any density (2~16 channels), the BRI baseboard can be mounted on a backplane, which has dual-bus-connectors to mount additional daughterboard for higher density. For that, a BRI baseboard and its daughterboard share the synchronous clocking of the BRI baseboard's PCI/PCIe interface. This add-ons architecture(BRI series) is powered internally.



Each BRI baseboard or its daughterboard has four sockets to mount four S/T BRI modules. One S/T BRI module has two S/T four-wire interfaces, which supports TE or NT mode. 1~8 S/T BRI modules can be installed in BRI's baseboard/ daughterboard(connected by a backplane) for a total 16 ISDN BRI lines.

Technical Specifications

Product models

BRI1610P, PCI, full length, 2 to 16ports configurable, SuPerForm 32ms echo cancellation

BRI1611P, PCI, full length, 2 to 16ports configurable, SuPerForm 128ms echo cancellation

BRI1610E, PCIe, full length, 2 to 16ports configurable, SuPerForm 32ms echo cancellation

BRI1611E, PCIe, full length, 2 to 16ports configurable, SuPerForm 128ms echo cancellation

Environment

Operating temperature: 0℃—55℃

Storage temperature: -20℃—85℃

Humidity: 8%—90% non-condensing

Storage humidity: 8%—90% non-condensing

Input/output Interface

Single motherboard/daughterboard: four RJ45 can be converted into eight S/T interface

Interface Type: S / T ITU-T I.430

Transmission code: AMI code

Terminal resistance: 100Ω optional

Output power: 38V ± 2V (NT only, optional)

Audio Specifications

CODEC: CCITT A/μ-Law 64kbps

Distortion: ≤3%

Frequency response: 300-3400Hz (±3dB)

Signal-to-noise ratio: ≥38dB

Echo suppression: ≥40dB

Physical characteristics

Dimensions: 270 x 64 mm^2 (excluding L-bracket)

Weight: approx. 120g (Excluding modules)

Includes compatible mounting clips for installation in 2U rack-mount servers.

Maximum System Capacity

Up to 8 boards concurrently per system; up to 16 channels per board

Power Requirements

Total Power Consumption includes the electricity use of all motherboards and daughterboards.

A single motherboard (with modules fully inserted)

+3.3V DC: 1100mA (power consumption: 3.63W)

+12V DC: 1000mA (power consumption: 12W, supplied by power socket, NT modules only)

+5V DC: 1000mA (power consumption: 5W, supplied by power socket)

A single daughterboard (with modules fully inserted)

+12V DC: 1000mA (power consumption: 12W, supplied by power socket, NT modules only)

+5V DC: 1000mA (power consumption: 5W, supplied by power socket)

Audio Encoding & Decoding

A-Law 64kbps

μ-Law 64kbps

Sampling Rate

8kHz

Safety

Lightning resistance: Level 4

VALUE MAXIMUM BEYOND TOMORROW

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