HX8 Series - Hybrid Analog/BRI

Digium

HA8

The HX8 Series is a family of versatile interface cards used to connect with the PSTN. HX8 cards support analog lines connected to trunk (FXO) interfaces, analog handsets connected to station (FXS) interfaces, and digital lines connected to ISDN BRI interfaces. The HX8 Series supports all three types of connectivity on a single card through the use of Digium's specialized telephony modules for FXO, FXS, and BRI. Used in conjunction with Asterisk® the HX8-series cards can deliver a wide range of voice applications including IP PBX, VoIP Gateway, IVR platform, Conference Bridge, Voicemail, and more.

Like Digium's analog and single-port PRI cards, the HX8 cards utilize Digium's VoiceBus™ technology. VoiceBus technology allows the HX8 cards to use an industry standard bus-mastering PCI interface, as found in millions of PCs worldwide, to maximize system compatibility and eliminate system conflicts. Additionally, the HX8 cards can improve voice quality in troublesome echo situations with their support for Digium's G.168-compliant 128ms canceling VPMADT032.

The HX8 Series are half-length, full-height cards supporting both Digium's single and quad port FXS modules (S110M, S400M) and Digium's single and quad-port FXO modules (X100M, X400M). New with the release of the HX8 cards is Digium's B400M four-port EuroISDN S/T module. The B400M sets a new standard for BRI connectivity in the Asterisk market with its support for software-selectable mode (NT or TE) and line termination. The B400M requires no jumpers for operation, regardless of mode or termination.

The HX8 is available in universal 3.3/5.0V PCI format as HA8 and in PCI-Express x1 format as HB8.

HX8 Series Features

Target Applications
VoIP Gateways
SMB Phone Systems
Analog / Digital Converters
PC-based PBX

Physical Specifications
165mm x 107mm for use in restricted chassis
Half-length, Full-height

Configurable Modes
EuroISDN TE PTP / PTMP
EuroISDN NT PTP
Loopstart FXS & FXO

PCI Interface
Single PCI or PCI-Express - Autosense compatibility with 5 V and 3.3 V PCI busses
Fully PCI 2.2 and PCI-Express compliant, compatible with all commercially available motherboards, proper sharing of PCI interrupts
Extended Bus Latency Mitigation

Hardware Echo Cancellation (optional)
128ms (1024 taps) of G.158 echo cancellation per B-channel

Hardware Requirements
500-MHz Pentium III or better with 64MB of RAM
Available 3.3V or 5.0V PCI Slot - HA8
Available PCI-Express x1 Slot - HB8

Other Technical Specifications
Temperature range: 0°-50° C
Up to 8 ports of BRI are supported. Mix TE and NT modes, as required. Change modes and termination in software.
Up to 8 ports of Analog FXS or FXO are supported.
High quality, tested 2.1m 4-pin RJ45 port to 4-pin RJ11 adapter cables included with BRI modules.
Intelligent hardware: Field downloadable and upgradeable FPGA programming
Power: HA8 base card 151mA peak
           HB8 base card 455mA peak
Optimized DMA stream and hardware-level HDLC handling unload the host CPU.

Warranty
5-year parts and labor and Exceptional Satisfaction Policy

Certification
FCC Part 15 Class B, FCC Part 68, CE, TBR3

Production Quality
ISO 9001

Digium, The Asterisk Company

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DIGIUM®

Digium® is the creator, sponsor, and innovative force behind Asterisk®, the industry's first and world's most popular open source telephony software. Additionally, Digium provides a variety of VoIP communication solutions that fit the needs of small, medium, and large businesses. Digium's product lines include commercial business phone systems, as well as software, hardware, and other components needed to create powerful custom telephony solutions.

BUSINESS PHONE SYSTEMS

Digium's line of award winning Switchvox IP PBX phone systems are built on a strong foundation of our open source Asterisk software. Switchvox solutions are designed to be extraordinarily easy to use and provide features that most small and medium businesses had previously considered out of their reach.

Switchvox's web-aware unified communications capabilities are unique in an industry cluttered with old technology. Integration with web and back office applications turns your phone system into a powerful platform for employees' productivity and efficiency. Its web-based Switchboard provides an intuitive control panel to assist with call management in real time while unifying phone calls, faxes, e-mails, instant messaging, Google Maps, CRM systems and other web tools from an easy-to-use, centralized control panel.

We're able to offer these PBX systems with superior capabilities for a fraction of the cost of traditional vendors' products because the shift to an open source software foundation represents a dramatic leap forward in telephony technology.

CUSTOM TELEPHONY SOLUTIONS

Digium empowers users, developers and integrators to build custom telephony solutions by offering a variety of software, hardware, and third-party components. From a simple phone system, to a sophisticated telephony application, Digium makes it possible for the world to communicate in an infinite number of ways at a fraction of the cost of proprietary solutions.

At the heart of these offerings is Asterisk, the powerful open source telephony development toolkit. Asterisk is free software that turns an ordinary computer into a feature-rich voice communications platform. Its flexible architecture lets you configure it as an IP PBX, a voicemail server, IVR server, VoIP gateway, call recorder, automatic call distributor and virtually any other voice-enabled application you can imagine.

To support Asterisk-based solutions, Digium offers a full line of high quality analog and digital interface cards to connect your solution to the public telephone network. In addition, Digium offers add-on software components like Skype® For Asterisk, Fax For Asterisk, G.729 codec, and high performance echo cancellation (HPEC) to enhance your solution.