SB700 EX

2-Port Serial to Ethernet Server

100 Version



DATASHEET

Key Points

- Serial to Ethernet server
- SSL and SSH data encryption to protect from unauthorized monitoring
- RS-232 and RS-422/485 serial device support
- Works out of the box no programming is required
- Metal enclosure
- Rebrand with your custom product label
- Customize with development kit

Features

- SSH, SSL/TLS 1.3, HTTPS, certificate support
- 10/100Mbps Ethernet
- TCP/UDP/Telnet modes
- DHCP/Static IP modes

- Web based configuration
- 32-bit performance
- Standard and custom baud rates with factory application

Optional

The following options are available with the optional development kit:

- · Customize any aspect of operation including web pages, data filtering, or custom network applications
- Real-time clock
- MicroSD/MMC Card interface with included flash file system



SB700 EX



Factory Application Specifications

Serial Port Baud Rate

Factory application supports up to 460,800 bps. Custom rates available with development kit.

Serial Protocols Supported

RS-232, RS-422, and RS-485

Serial Configurations

The two UARTs can be configured in the following ways:

- Two RS-232 ports
- One RS-232 port, one RS-485/422 port

Hardware Specifications

Processor & Memory

32-bit Freescale ColdFire 5270 running at 147.5MHz with 2Mbytes of on-chip flash, 8Mbytes SDRAM.

Storage

MicroSD/MMC Flash Card Interface (with SDHC support)

Network Interface

10/100 BaseT with RJ-45 connector

Data I/O Interface

- Two UARTs
- Real-time clock

LEDs

Link, speed/data, power

Physical Characteristics

Dimensions (inches): 4.20" x 3.25" x 1.00"

Power

DC Input Voltage: 7V-24V DC

12V @ 90mA

Environmental Operating Temperature

-40 $^{\circ}$ to 85 $^{\circ}$ C (SB700EX-100IR version) 0 $^{\circ}$ to 70 $^{\circ}$ C (SB700EX-100CR version)

RoHS Compliance

The Restriction of Hazardous Substances guidelines ensure that electronics are manufactured with fewer environment harming materials.

Agency Approvals

UL, C/UL, CE, FCC









Connector Interface Description and Pinouts

The back panel has two DB9 ports which enable you to connect to a serial device. Tables 1 and 2 provide descriptions of the function of each pin for Port 0 and Port 1.

Table 1: Serial Port Connector (Port 0) Pinout and Signal Description¹

| Pin | RS-232 Function | RS-485 Function | Description | Max Voltage |
|-----|--------------------|--------------------|--|----------------------|
| 1 | CD | - | Carrier Detect | RS-232 |
| 2 | RX | FD TX- / HD- | Receive or Full Duplex Transmit- / Half Duplex- | RS-232 or RS-422/485 |
| 3 | TX | FD TX+ / HD+ | Transmit or Full Duplex Transmit+ / Half Duplex+ | RS-232 or RS-422/485 |
| 4 | DTR | - | Data Terminal Ready | RS-232 |
| 5 | GND | GND | Ground | - |
| 6 | DSR | FD RX- | Data Set Ready or Full Duplex Receive- | RS-232 or RS-422/485 |
| 7 | RTS | FD RX+ | Ready to Send or Full Duplex Receive+ | RS-232 or RS-422/485 |
| 8 | CTS | - | Clear to Send | RS-232 |
| 9 | RI | - | Ring Indicator | RS-232 |
| | | | | |

Note:

1. Port 0 can be configured to as RS-232 or RS-485

Table 2: Serial Port Connector (Port 1) Pinout and Signal Description

| Pin | Port 1 RS-232 | Description | Max Voltage |
|-----|------------------|---------------------|-------------|
| 1 | CD | Carrier Detect | RS-232 |
| 2 | RX | Receive | RS-232 |
| 3 | TX | Transmit | RS-232 |
| 4 | DTR | Data Terminal Ready | RS-232 |
| 5 | GND | Ground | - |
| 6 | DSR | Data Set Ready | RS-232 |
| 7 | RTS | Ready to Send | RS-232 |
| 8 | CTS | Clear to Send | RS-232 |
| 9 | RI | Ring Indicator | RS-232 |
| | | | |

SB700 EX



Part Numbers

SB700 EX 2-Port Serial to Ethernet Server

Part Number: SB700EX-100IR

DIN Rail Mounting Kit (100 Version, double sided)

Part Number: DIN-100

DIN Rail Mounting Kit (200 Version, single sided)

Part Number: DIN-200

SB700 EX Development Kit

Part Number: NNDK-SB700EX-KIT

Kit includes all the hardware and software you need to customize the included platform hardware. See NetBurner

Store product page for package contents.

Ordering Information

E-mail: sales@netburner.com Online Store: www.NetBurner.com Telephone: 1-800-695-6828