SB700 EX
2-Port Serial to Ethernet Server
100 Version

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, 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

The following optional software modules are not included with kit and are sold separately:

- Embedded SSL & SSH Security Suite (Module License Version)
- SNMP
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° to 85° C (SB700EX-100IR version)
0° to 70° 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
Front and Back Panel

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 Description

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

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

<table>
<thead>
<tr>
<th>Pin</th>
<th>Port 1 RS-232</th>
<th>Description</th>
<th>Max Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CD</td>
<td>Carrier Detect</td>
<td>RS-232</td>
</tr>
<tr>
<td>2</td>
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<td>RS-232</td>
</tr>
<tr>
<td>3</td>
<td>TX</td>
<td>Transmit</td>
<td>RS-232</td>
</tr>
<tr>
<td>4</td>
<td>DTR</td>
<td>Data Terminal Ready</td>
<td>RS-232</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>Ground</td>
<td>-</td>
</tr>
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<td>6</td>
<td>DSR</td>
<td>Data Set Ready</td>
<td>RS-232</td>
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<td>7</td>
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<td>Ready to Send</td>
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<td>Ring Indicator</td>
<td>RS-232</td>
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</tbody>
</table>
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.

Embedded SSL & SSH Security Suite (Module License Version)
Part Number: NBLIC-SSL-MODULE
Only required if you are using a development kit (SSH/SSL functionality is included in the pre-programmed application).

SNMP V1 (Module License Version)
Part Number: NBLIC-SNMP
Available as an option if you are using a development kit.

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