

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, 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 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