

# SB70

## 2-Port Serial to Ethernet Server

100 Version



# DATASHEET

### Key Points

- Serial to Ethernet server
- TTL serial device support
- Works out of the box - no programming is required
- Board level product
- Customize with development kit
- Used with Basic Stamp

### Features

- 10/100Mbps Ethernet
- TCP/UDP/Telnet modes
- DHCP/Static IP modes
- Web based configuration
- 32-bit performance
- RS-232 and RS-422/485 ready (require external level shifter)

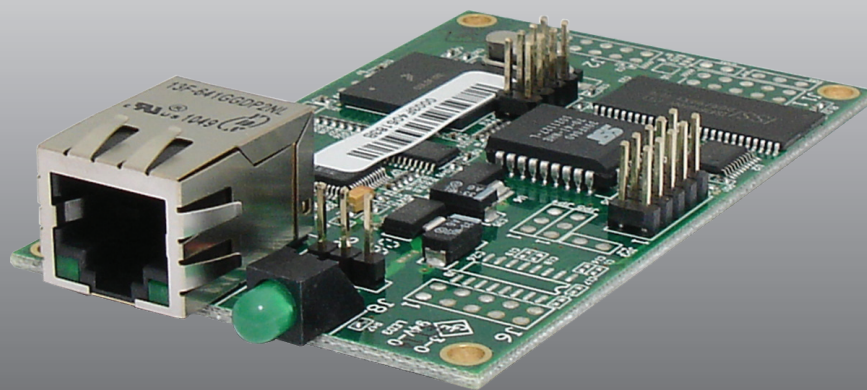
### Optional

*The following options are available with the optional development kit:*

- Customize any aspect of operation including web pages, data filtering, or custom network applications
- Additional baud rates

*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 115,200 baud. Custom rates available with development kit.

### Serial Interface

2 TTL

### Serial Configurations

The UARTs can be configured in the following way:

- Two TTL ports
- Add external level shifter for RS-232
- Add external level shifter for RS-422/485 (up to two ports)

Note: UART 0/1 also provides RTS/CTS hardware handshaking signals.

## Hardware Specifications

### Processor and Memory

32-bit Freescale ColdFire 5270 running at 147.5MHz with 512K of flash and 8MB of SDRAM.

### Network Interface

10/100 BaseT with RJ-45 connector

### Data I/O Interface

- Up to two TTL ports
- Up to 8 digital I/O

### LEDs

Link, speed/data, power

### Physical Characteristics

Dimensions (inches): 3.25" x 2.00"

Weight: 1.1 oz.

Mounting Holes: 4

### Power

DC Input Voltage: 5V @ 450mA max

### Environmental Operating Temperature

Industrial temperature: 0° to 70° C

### RoHS Compliance

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

## Connector Interface Description and Pinouts

Table 1: Connector Description

Connector	Description
J5	TTL Serial Port Connector; 10-pin dual row header
J7	Ethernet RJ-45 connector
J8	Power Connector; 5V Power, 3-pin single row header

Table 2: Serial Port Connector (J5) Pinout and Signal Description

Pin	CPU Pin	Function	General Purpose I/O	Description	Max Voltage
1		GND		Ground	-
2	B8	UART1_CTS	PUARTL7	UART 1 Clear to Send	5 VDC
3	D9	UART1_TX	PUARTL5	UART 1 Transmit	5 VDC
4	D8	UART1_RX	PUARTL4	UART 1 Receive	5 VDC
5	C8	UART1_RTS	PUARTL6	UART 1 Request to Send	5 VDC
6	G3	UART0_RTS	PUARTL2	UART 0 Request to Send	5 VDC
7	F3	UART0_CTS	PUARTL3	UART 0 Clear to Send	5 VDC
8	F1	UART0_TX	PUARTL1	UART 0 Transmit	5 VDC
9		VCC5V		Input voltage 5VDC <sup>1</sup>	5 VDC
10	F2	UART0_RX	PUARTL0	UART 0 Receive	5 VDC

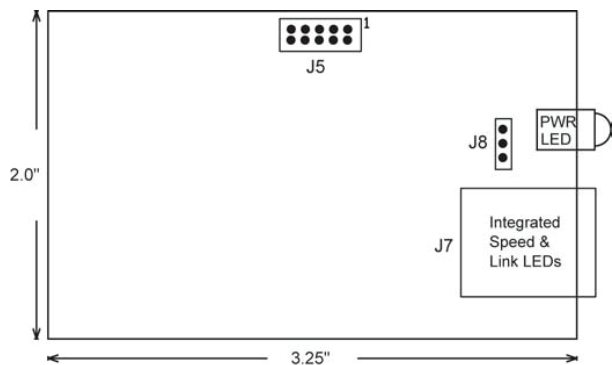
**Note:**

Pin 9 is a 5V DC input, which allows for a single connector interface with TTL serial and power to the board.

Table 3: Power Connector (J8) Pinout and Signal Description

Pin	Function	Description
1	VCC5V	Input voltage 5VDC
2	GND	Ground
3	VCC5V	Input voltage 5VDC

### SB70 Connector Diagram



## Part Numbers

### **SB70 2-Port Serial to Ethernet Server**

Part Number: SB70-100CR

### **SB70 Development Kit**

Part Number: NNDK-SB70-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.

### **SNMP V1 (Module License Version)**

Part Number: NBLIC-SNMP

Only required if you are using a development kit.

## Ordering Information

E-mail: [sales@netburner.com](mailto:sales@netburner.com)

Online Store: [www.NetBurner.com](http://www.NetBurner.com)

Telephone: 1-800-695-6828