

## **Features**

- Instantly allows any serial device to communicate over a network or the Internet
- Two serial ports
- Development kit available. The SB72-EX can be used as a single board computer for custom applications
- Includes TCP/IP, Telnet, SNMP\*, and Web Server (HTTP)
- Supports RS-232 and RS-422/ 485 serial devices
- Web page configuration
- 2MB Flash, 8MBytes SDRAM
- \* SNMP support through factory application

### SB72-EX

## NetBurner's Easy to Use High Performance Serial to Ethernet Device

#### Introduction

The SB72-EX is a low cost, high performance Serial-to-Ethernet device that network enables both existing and new product designs with 10/100BaseT Ethernet. Based on the Freescale ColdFire 5272 32-bit processor with an integrated 10/100 Ethernet, the SB72-EX has plenty of horsepower for the most demanding applications. The SB72-EX is also a fully customizable platform. With the SB72-EX development kit you can create additional dynamic web page content, filter serial and network data, or write completely new custom applications.

#### **Network Enable Existing Applications**

The SB72-EX network enables serial devices right out of the box. No programming or development is required. The SB72-EX is pre-programmed to convert RS-232, RS-422 and RS-485 data to Ethernet, enabling communication with the serial device over a network or the Internet. The onboard web server provides easy device configuration using a standard web browser.

#### **Customize to Suit Any Application**

The SB72-EX development kit enables you to quickly and easily create custom applications. NetBurner has a solid reputation for developing platforms facilitating rapid product development; The SB72-EX is no exception. The SB72-EX development kit includes the SB72-EX, TCP/IP Stack, uC/OS Real-time operating system, Web Server, GNU C/C++ compiler and linker, GDB graphical debugger, end user device configuration and flash update utilities, and much more. See the NetBurner Serial to Ethernet Datasheet for more information or visit www.NetBurner.com.

#### **Real 32-bit Performance**

The SB72-EX is the leader for low cost, high performance embedded networking. While other products in this price range are 8-bit processors with small amounts of paged-memory and limited performance, the Freescale ColdFire 5272 is a full 32-bit high performance processor. The SB72-EX has 8MBytes of SDRAM providing plenty of space for applications and buffering.



## **Specifications**

#### **Processor**

32-bit Freescale ColdFire 5272 running at 62MHz

#### Software Development

NetBurner Serial to Ethernet Development Kit includes: SB72-EX Device, TCP/IP stack, Web Server, real-time operating system (RTOS), ANSI C/C++ compiler and linker, assembler, graphical debugger, integrated development environment (IDE), code update, configuration, and deployment tools.

#### **Network Interface**

10/100 BaseT with RJ-45 connector

#### **Max Baud Rate**

Factory application supports up to 115,200 baud. Higher baud rates are avaliable with development kit, but require custom programming.

#### **Network Protocols Supported**

Complete protocol support included. Please reference NetBurner Software Datasheet (www.NetBurner.com)

#### **Serial Protocols Supported**

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

#### **Serial Configurations**

The 2 UARTS can be configured in the following ways:

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

#### **SNMP**

Supports MIB-II

Note: SNMP support through factory appli-

cation

#### **LEDs**

Link, Speed/Data, Power

#### Physical Characteristics Dimensions: 4.2" x 3.25" x 1"

Power Requirements DC Input Voltage: 7-24V

**Environmental** 

Operating Temperature: 0°C to 70°C

# SB72-EX DB-9 Serial Connector Descriptions

Pin	Port 0*	Port 0*	Port1	
	RS-232	RS-485	RS-232	
1	CD	-	CD	
2	RX	HD- / FD TX-	RX	
3	TX	HD+/FDTX+	TX	
4	DTR	-	DTR	
5	GND	GND	GND	
6	DSR	FD RX-	DSR	
7	RTS	FD RX+	RTS	
8	CTS	-	CTS	
9	RI	-	RI	

<sup>\*</sup>Port 1 can be configured as RS-232 or RS-485

## SB72-EX DB-9 Serial Connectors



# **Ordering Information**

#### Part Number and Description

SB72-EX-100CL SB Hardware
SB72-EX-100CR SB Hardware RoHS
NNDK-SB72EX-KIT Development Kit



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