



Features

- Instantly allows any serial device to communicate over a network or the Internet
- Two serial ports
- Development kit available. The SB72 can be used as a single board computer for custom applications
- Includes TCP/IP, Telnet, SNMP¹, and Web Server (HTTP)
- Supports RS-232 and RS-422/485 serial devices, TTL, and QSPI² serial devices
- Web page configuration
- Powerful 32-bit Freescale ColdFire processor with integrated 10/100 Ethernet MAC
- 512K Flash, 8MBytes SDRAM

¹ SNMP support through factory application

² Development kit required

SB72

NetBurner's Low Cost High Performance Serial to Ethernet Board

Introduction

The SB72 is a low cost, high performance single board computer 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 MAC, the SB72 has plenty of horsepower for the most demanding applications (rated at 62MIPS with 66MHz clock).

Network Enable Existing Applications

The SB72 network enables serial devices right out of the box. No programming or development is required. The SB72 is pre-programmed to convert RS-232, RS-422, RS-485, and TTL 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.

Network Enable New Applications

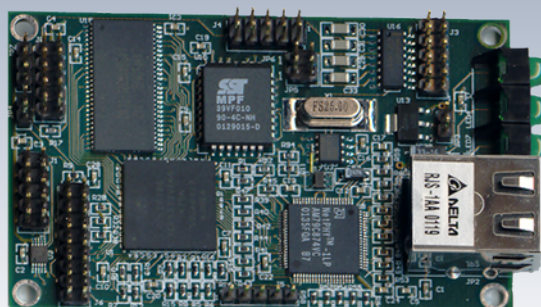
Mount the SB72 on an application-specific motherboard, and you have a powerful processing platform that can function as the control processor for the product, or as a serial to Ethernet converter.

Customize to Suit Any Application

The SB72 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 is no exception. The SB72 development kit includes the hardware platform, TCP/IP Stack, uC/OS Real-time operating system, Web Server, GNU C/C++ compiler and linker, GDB graphical debugger, end-user device configuration, 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 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 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, Adapter Board, 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 available 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, TTL

Note: QSPI requires development kit.

Serial Configurations

The 2 UARTS can be configured in the following ways:

- Two RS-232 ports, without hardware handshaking
- One RS-232 port with hardware handshaking and one RS-485/422 port
- Two TTL ports
- One TTL port and one RS-232 port
- One TTL port and one RS-485/422 port

SNMP

Supports MIB-II

Note: SNMP support through factory application

LEDs

Link, Speed/Data, Power

Physical Characteristics

Dimensions: 3.25" x 2"

Weight: 1.1 oz

Mounting Holes: 4

Power Requirements

DC Input Voltage: 5V @500mA

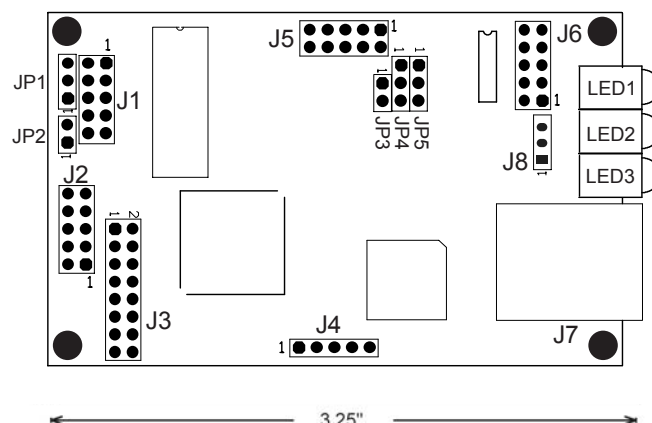
Environmental

Operating Temperature: 0°C to 70°C

SB72 Connector Descriptions

Connector	Description
J1	Factory test connector
J2	RS-485, 10-pin dual row header
J3	Factory test connector
J4	QSPI Interface, single row 5 pin header (QSPI required dev. kit)
J5	TTL, 10-pin dual row header
J6	RS-232, 10-pin dual row header
J7	Ethernet, RJ-45 connector
J8	5V Power, 3-pin single row header
JP1-JP5	Configuration jumpers

SB72 Connector Diagram



Ordering Information

Part Number and Description

SB72-300CR	Board Assembly RoHS
NNDK-SB72-KIT	Development Kit

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