SBL2e X
1-Port Serial to Ethernet Server
100 Version

Key Points
• Serial to Ethernet server
• RS-232 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
• 10/100Mbps Ethernet
• TCP/UDP/Telnet modes
• DHCP/Static IP modes
• Web or AT command based configuration
• 32-bit performance

• Industrial temperature range (-40°C to 85°C)
• Standard and custom baud rates with factory application
• Custom serial packetization options
• DB9 connector interface

Optional
The following features are available with the optional development kit:
• Customize any aspect of operation including web pages, data filtering, or custom network applications
• Up to three serial ports
Factory Application Specifications

Serial Port Baud Rate
Standard or custom baud rates with factory application

Serial Configurations
This device has a single DB9 interface with support for RS-232 serial devices. The interface connector can be configured in one of the following ways:

1) One full featured serial port with hardware or software flow control:
   • UART 1 with RX, TX, RTS, CTS, RI, CD, DTR, DSR

2) Two serial ports - one with software flow control, the other with hardware or software flow control (development kit required):
   • UART 0 with TX and RX
   • UART 1 with TX, RX, RTS, CTS

3) Three serial ports - all with software flow control (development kit required):
   • UART 0 with TX and RX
   • UART 1 with TX and RX
   • UART 2 with TX and RX

Hardware Specifications

Processor
32-bit Freescale ColdFire 52236 running at 50 MHz

Network Interface
10/100 BaseT with RJ-45 connector

Data I/O Interface
• One UART is supported with the factory application
• Up to three UARTs (development kit required)

LEDs
Links, Speed

Physical Characteristics
Dimensions (inches): 3.10” x 2.15” x .925”

Power
DC Input Voltage: 5-24V @ 2W max

Environmental Operating Temperature
-40° to 85° C

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 SBL2e X device has one DB9 connector which enables you to quickly and easily connect to your serial devices. Table 1 provides descriptions of pin function for the Serial Port Connector (Port 1).

Table 1: Serial Port Connector (Port 1) Pinout and Signal Description

<table>
<thead>
<tr>
<th>Pin</th>
<th>CPU Pin</th>
<th>Function</th>
<th>Secondary Function</th>
<th>Description</th>
<th>Max Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>UART1_CD</td>
<td></td>
<td>UART 1 Carrier Detect</td>
<td>RS-232</td>
</tr>
<tr>
<td>2</td>
<td>23</td>
<td>UART1_RX</td>
<td></td>
<td>UART 1 Receive</td>
<td>RS-232</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td>UART1_TX</td>
<td></td>
<td>UART 1 Transmit</td>
<td>RS-232</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>UART1_DTR</td>
<td>UART0_TX^2</td>
<td>UART 1 Data Terminal Ready or UART 0 Transmit^2</td>
<td>RS-232</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>GND</td>
<td></td>
<td>Ground</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>UART1_DSR</td>
<td></td>
<td>UART 1 Data Set Ready</td>
<td>RS-232</td>
</tr>
<tr>
<td>7</td>
<td>15</td>
<td>UART1_RTS</td>
<td>UART2_TX^2</td>
<td>UART 1 Request To Send^1 or UART 2 Transmit^2</td>
<td>RS-232</td>
</tr>
<tr>
<td>8</td>
<td>16</td>
<td>UART1_CTS</td>
<td>UART2_RX^2</td>
<td>UART 1 Clear To Send^1 or UART 2 Receive^2</td>
<td>RS-232</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>UART1_RX</td>
<td>UART0_RX^2</td>
<td>UART 1 Ring Indicator or UART 0 Receive^2</td>
<td>RS-232</td>
</tr>
</tbody>
</table>

Note:
1. Active low signals are indicated with an overbar
2. UART0 and UART2 are only available with the development kit

Figure 1: Pin locations for Serial Port Connector (Port 1)
Part Numbers

**SBL2e X 1-Port Serial to Ethernet Device**
Part Number: SBL2eX-100IR

**SBL2e X Development Kit**
Part Number: NNDK-SBL2eX-KIT
Kit includes all the hardware and software you need to customize the included platform hardware.

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