Key Points

• Serial to Ethernet server
• RS-232 and TTL serial device support
• Up to 9 LVTTL digital I/O
• Up to four 12-bit A/D inputs
• 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
• DB15 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
• I²C support
Factory Application Specifications

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

Serial Interfaces
Up to two serial interfaces (one RS-232 and one 3.3V LVTTL level)

Multi-function I/O Connector Configurations
1) One RS-232 serial port with hardware or software flow control:
   • UART 0 with RX, TX, RTS, CTS
2) One LVTTL 3.3V serial port or two Digital I/O pins
   • UART 1 with RX, TX
3) Four Analog to Digital inputs or four Digital I/O pins
4) One digital timer or one Digital I/O pin
5) One I²C bus (requires development kit) or two digital I/O pins

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
• Up to 2 UARTs (one with hardware flow control)  • Up to 1 timer input
• Up to 9 digital I/O  • Up to four analog to digital inputs
• I²C periphery interface

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
Connector Interface Description and Pinouts

The SBL2e XA device has one DB15 connector, which enables you to quickly and easily connect to your devices. Table 1 provides descriptions of pin function for the Port 1 Interface Connector.

<table>
<thead>
<tr>
<th>Pin</th>
<th>CPU Pin</th>
<th>Function</th>
<th>General Purpose I/O</th>
<th>Description</th>
<th>Max Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>UART0_TX</td>
<td>-</td>
<td>UART 0 Transmit</td>
<td>RS-232</td>
</tr>
<tr>
<td>2</td>
<td>21</td>
<td>UART0_RX</td>
<td>-</td>
<td>UART 0 Receive</td>
<td>RS-232</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>UART0_CTS</td>
<td>-</td>
<td>UART 0 Clear to Send</td>
<td>RS-232</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
<td>UART0_RTS</td>
<td>-</td>
<td>UART 0 Request To Send</td>
<td>RS-232</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Vout²</td>
<td>-</td>
<td>3.3VDC Output 100mA Max</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>GND</td>
<td>-</td>
<td>Ground</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>68</td>
<td>ADC_IN0</td>
<td>Yes</td>
<td>Analog to Digital Converter Input 0</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>8</td>
<td>67</td>
<td>ADC_IN1</td>
<td>Yes</td>
<td>Analog to Digital Converter Input 1</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>9</td>
<td>66</td>
<td>ADC_IN2</td>
<td>Yes</td>
<td>Analog to Digital Converter Input 2</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>10</td>
<td>65</td>
<td>ADC_IN3</td>
<td>Yes</td>
<td>Analog to Digital Converter Input 3</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>11</td>
<td>8</td>
<td>DTIN0</td>
<td>Yes</td>
<td>Digital Timer Input 0</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>12</td>
<td>23</td>
<td>UART1_RX</td>
<td>Yes</td>
<td>UART 1 Receive</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>13</td>
<td>24</td>
<td>UART1_TX</td>
<td>Yes</td>
<td>UART 1 Transmit</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>14</td>
<td>79</td>
<td>I2C_SCL</td>
<td>Yes</td>
<td>PC Serial Clock</td>
<td>3.3VDC</td>
</tr>
<tr>
<td>15</td>
<td>80</td>
<td>I2C_SDA</td>
<td>Yes</td>
<td>PC Serial Data</td>
<td>3.3VDC</td>
</tr>
</tbody>
</table>

Note:
1. Active low signals are indicated with an overbar
2. The Vout is provided to power external devices.

Figure 1: Pin locations for Multi-function I/O Connector (Port 1)
Part Numbers

**SBL2e XA Multifunction I/O Server**
Part Number: SBL2eXA-100IR

**SBL2e XA Development Kit**
Part Number: NNDK-SBL2eXA-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