# **SBL2e XA**

# Multifunction I/O Server

100 Version



# **DATASHEET**

## **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

#### **Features**

- 10/100Mbps Ethernet
- TCP/UDP/Telnet modes
- DHCP/Static IP modes
- Web or AT command based configuration
- 32-bit performance

- Works out of the box no programming is required
- Metal enclosure
- Rebrand with your custom product label
- Customize with development kit
- 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
- I<sup>2</sup>C support



# **SBL2e XA**



## **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 I<sup>2</sup>C 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 9 digital I/O
- I2C peripheal interface

- Up to 1 timer input
- Up to four analog to digital inputs

#### **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.

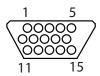
Table 1: Multi-function I/O Connector (Port 1) Pinout and Signal Description<sup>1</sup>

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

#### 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)



# **SBL2e XA**



## **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