

# 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 LVTTTL 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
- I<sup>2</sup>C 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 LVTTTL 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 LVTTTL 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
- I<sup>2</sup>C peripheral interface
- Up to 1 timer input
- Up to four analog to digital inputs

### LEDs

Links, Speed

### Physical Characteristics

Dimensions (inches): .925" x 3.1" x 2.15"

### 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 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.

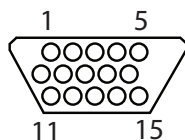
Table 1: Multi-function I/O Connector (Port 1) Pinout and Signal Description<sup>1</sup>

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	UART0_CTS	-	UART 0 Clear to Send	RS-232
4	17	UART0_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)



## 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](mailto:sales@netburner.com)

Online Store: [www.NetBurner.com](http://www.NetBurner.com)

Telephone: 1-800-695-6828