CB34 EX

2-Port CAN to Ethernet Server

100 Version

NetBurner

DATASHEET

Key Points

- Serial to Ethernet server
- CAN device support (programming required)
- DeviceNet compliant
- RS-232 and RS-422/485 serial device support
- Works out of the box - no programming is required
- Metal enclosure
- Rebrand with your custom product label
- Customize with development kit

Note: Programming required for products which use CAN

Features

- Power via two position terminal block, TSTRIP5, serial port, or barrel connector
- 10/100Mbps Ethernet
- TCP/UDP/Telnet modes
- DHCP/Static IP modes
- Web Based Configuration
- 32-bit performance
- Industrial Temperature Range (-40°C to 85°C)

Optional

The following options are available with the optional development kit:

- Customize any aspect of operation including web pages, data filtering, or custom network applications
- Additional baud rates
- CAN device support
- eTPU coprocessor
- Two bi-color programmable LEDs

The following optional software modules are not included with kit and are sold separately:

- Embedded SSL & SSH Security Suite (Module License Version)
- SNMP

Factory Application Specifications

Serial Port Baud Rate
Factory application supports up to 115,200 baud. Custom rates available with development kit.

Serial Protocols Supported
RS-232, RS-422, RS-485, DeviceNet compliant and CAN (programming required)

Serial Configurations
The two UARTs can be configured in the following ways:

- One RS-232 port, one RS-485 port
- One RS-485 port (full or half duplex on TSTRIP5), one RS-485 port (half-duplex on DB9)
- One RS-232 port, one CAN port (programming required)
- One RS-485 or RS-232 port, one CAN port (programing required)

Hardware Specifications

Processor & Memory
32-bit Freescale ColdFire 5234 running at 147.5MHz with 8MB SDRAM, and 2MB Flash.

Network Interface
10/100 BaseT with RJ-45 connector

Data I/O Interface

- Two UARTs
- CAN Interface

Storage
MicroSD/MMC Flash Card Interface (with SDHC support)

LEDs
Link, speed/data, power, and two bi-color general purpose programmable LEDs

Physical Characteristics
Dimensions (inches): 4.20” x 3.25” x 1.00”

Power
DC Input Voltage: 7V-24V

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

Front Panel

Back Panel

Connector Interface Description and Pinouts

The hardware has support for three serial interfaces: UART0 (RS-232), UART1 (RS-485/422) and CAN. Each serial interface can be configured via internal jumpers to appear on either the Terminal Strip 5 or DB9 connector.

Table 1: **Connector Description**

Connector	Description	Default Setting
Port 0	Terminal Strip 5 (TSTRIP5)	UART 1 RS-485 Half Duplex
Port 1	DB9 Connector	UART 0 RS-232
Power Input 1	Barrel connector	Default power source

Table 2: **Serial Port Connector (Port 0 TSTRIP5) Pinout and Signal Description[1]**

Pin	UART 0 RS-232	UART 1 RS-485	CAN	Description
1	GND	GND	GND	Ground
2	RX	HD/FD TX-	CANL	Receive or Half Duplex or Full Duplex Transmit Negative or CAN Low
3	TX	HD/FD TX+	GND	Transmit or Half Duplex or Full Duplex Transmit Positive or Ground
4	RTS	FD RX-	CANH	Request To Send or Full Duplex Receive Negative or CAN High
5	CTS or PWRIN[1]	FD RX+ or PWRIN[1]	PWRIN[1]	Clear To Send or Full Duplex Receive Positive or Raw DC Power Input

Note:

1. Optional power input

Table 3: **Serial Port Connector (Port 1 DB9 Connector) Pinout and Signal Description[1]**

Pin	UART 0 RS-232	UART 1 RS-485	CAN	Description
1	CD	-	-	Carrier Detect
2	RX	HD/FD TX-	CANL	Receive or Half Duplex or Full Duplex Transmit Negative or CAN Low
3	TX	FD RX+	GND	Transmit or Full Duplex Receive Positive or Ground
4	DTR	-	-	Data Terminal Ready
5	GND	GND	GND	Ground
6	DSR	FD RX-	GND	Data Set Ready or Full Duplex Receive Negative or Ground
7	RTS	HD/FD TX+	CANH	Request To Send or Half Duplex or Full Duplex Transmit Positive or CAN High
8	CTS	-	-	Clear To Send
9	RI or PWRIN[1]	PWRIN[1]	PWRIN[1]	Ring Indicator or Raw DC Power Input

Note:

1. Optional power input

Table 4: **Power Connector (Power Input 1 Barrel Connector) Pinout and Signal Description[1]**

Pin	Signal	Description
Outer Shell	Negative	Ground
Cetner Pin	Positive	Raw DC Power Input

Note:

1. Optional power input