

# **Cerf IO 250**

A low cost serial and general purpose I/O daughter card used in developing CE .NET or Linux based solutions on the CerfBoard 250

### OVERVIEW

Cerf $^{\text{TM}}$ IO 250 is a flexible expansion option for Intrinsyc's XScale Cerf $^{\text{TM}}$ Board. It provides an ideal method of adding serial port and general purpose I/O functionality, making it easy to do application development and integration on the CerfBoard 250 platform.

#### **FEATURES**

Cerf IO 250 is a feature-rich, general purpose I/O board compatible with the CerfBoard 250 running under both WIndows CE .NET and Linux operating systems. It comes equipped with one 3-wire RS232 serial debug port, CPU exposed, two full 9-wire RS232 serial ports and one switchable RS422/485 serial port. It also offers sixteen dedicated digital inputs and sixteen dedicated digital outputs. The Cerf IO 250 can be easily stacked either directly on the CerfBoard 250, or used in combination with the CerfBoard 250 and the Cerf<sup>TM</sup>Comm 250 daughter card. This modular design and flexibility makes it simple to use the combination of cards and functions most needed.

## APPLICATIONS

Cerf IO 250 is the perfect platform for low level development (especially with headless projects) such as interfacing to multi-line LCD systems and supporting interrupts from external systems. Extensive serial connectivity makes it an ideal way to interface to a variety of peripherals (or multiple peripherals) and other devices such as modem hardware.

#### CUSTOMIZABLE?

Cerf IO 250 and the CerfBoard 250 can be coupled together and used in applications off-the-shelf, or they can be customized and integrated for the needs of your specific application. Intrinsyc provides vertical solutions and product development, including concept design, prototyping, preproduction and production. We have worked with hundreds of companies to make their intelligent devices a reality.



Cerf IO 250 Daughter Card

#### BENEFITS

- » Provides faster time to market for applications requiring serial and GPIO connectivity
- » Makes application integration and development easier, and improves ROI
- » Modular, stackable design enables new functionality without a main board redesign
- » Can be easily enclosed and designed for off-the-shelf use, minimizing project costs
- » Leverages the latest CerfBoard technology, working under both CE .NET and Linux environments
- » Backed by Intrinsyc's years of product development expertise in getting customers' solutions to market quickly

#### SPECIFICATIONS\*

- » Cerf™Board Hardware Support compatible with Intrinsyc's CerfBoard 250 400 MHz platform
- » CerfBoard Operating System Compatibility supported by CerfBoard 250 running either Windows CE .NET or Linux operating systems
- » Serial Connectivity
  - » One RS232 (3-wire) serial debug port (exposed from
  - » Two RS232 (9-wire) full serial ports
  - » One RS422/485 switchable serial port

## » General Purpose IO

- » Sixteen digital inputs 3.3V or 5V tolerant, four with programmable interrupt capability
- » Sixteen digital outputs 5V (population option for 3.3V digital outputs)
- » GPIO headers are 2 x 10 pin headers with 0.1" spacing
- **» Board Size** 5.22" x 2.73" (132.3mm x 69.3mm)
- » Hardware Reset allows user to perform a system wide reset
- **» Expansion Headers** interfaces to the CerfBoard 250 100-pin expansion connector for mounting
- **» Other Connectors** CPU and CPLD standard 7-pin JTAG connectors provided
- **» Power** +5V power to the Cerf IO 250 is supplied by the CerfBoard 250. An on-board regulator supplies +3.3V to the Cerf IO 250

#### SOFTWARE

Cerf IO 250 ships with support for Intrinsyc's latest I-Linux Distribution and I-BSP (Intrinsyc Board Support Package) for Windows CE .NET

#### EACH CERF IO 250 COMES WITH THE FOLLOWING:

(Note: Cerf IO 250 requires the use of the 400MHz CerfBoard 250)

- » Cerf IO 250 daughter card
- » Desktop mounting stands
- » Software CD
- » Getting Started Guide
- » HTML based documentation

#### OTHER PRODUCTS AVAILABLE FROM INTRINSYC

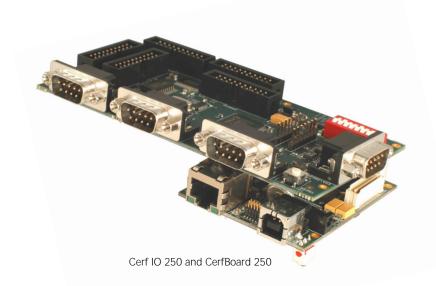
- » Cerf™ Devices CerfCube, CerfCruiser, CerfBoard, CerfPod, Cerf IO, CerfComm.
- » μDevices μPDA, μNET, μPCI, μEBX, μEngine.

#### OTHER CERF DAUGHTER CARDS AVAILABLE

- » Cerf™Comm 250
- » Cerf™ IrDA

For more information visit Intrinsyc's web site at www.intrinsyc.com.

\*All specifications subject to change without notice.















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