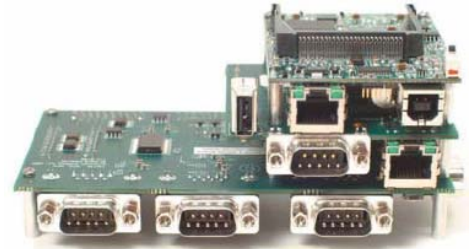




## CerfBoard 255

### Overview

Intrinsyc Software's CerfBoard 255 is flexible, high-performance hardware and software platform needed to make embedded and handheld applications a reality. Begin your development right out of the box with a pre-installed Board Support Package for Windows® Embedded CE. The board also has optional expansion boards (CerfComm250 and CerfIO 250) allowing for more flexibility in development. The CerfBoard 255 is RoHS (Restriction of Hazardous Materials) Compliant.



CerfBoard 255, CerfComm 250, and Cerf IO 250 (Top to Bottom).

### Features

#### CerfBoard 255:

The CerfBoard 255 embedded design is based on the Marvell (formerly Intel) PXA255 applications processor, and can be used standalone or in conjunction with one or both of the optional expansion boards. CerfBoard 255 comes with 32 MB Intel StrataFlash and 64 MB SDRAM. Peripheral support includes a CompactFlash slot for adding Bluetooth or wireless WAN support, 10/100 Ethernet, USB client, three serial ports and RS232 flexible digital I/O. JTAG is supported for board testing and Flash programming.

#### Cerf IO 250 expansion card:

The Cerf IO 250 expansion card is a general purpose I/O board. It comes equipped with one 3-wire RS232 serial debug port, 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.

#### CerfComm 250 expansion card:

The CerfComm 250 expansion card is a feature-rich communications board, equipped with one USB Host controller, one 10/100 Ethernet port, and a 3-wire RS232 serial port debug port.

The small footprint of the CerfBoard 255, Cerf IO 250 and CerfComm 250 allows them to be easily stacked and enclosed for off-the-shelf use.

### Applications

The CerfBoard 255, Cerf IO 250 and CerfComm 250 are ideal as the heart of industrial automation, point-of-sale, telemedicine, wireless computing, telematics and remote monitoring devices. Its possible applications are virtually infinite.

### Benefits

- **Customized Solutions**

Intrinsyc Software's team delivers customized solutions and provides award winning system integration and product development services ranging from concept design and prototyping to production

- **Reduce risks, costs and time to market**

Intrinsyc helps you reduce risk, costs and time-to-market through designs created and implemented by an experienced engineering team that understands embedded processor design and software.

Intrinsyc designs are based on the flexible Intel® XScale® reference platform and provides the ideal environment for creating high-end low power wireless or embedded solutions

Deliver successful solutions to market by leveraging Intrinsyc Software's years of product development expertise

## Locations

### Head Office

700 West Pender Street  
10th Floor  
Vancouver BC  
Canada V6C 1G8  
Toll Free: 1 800 474 7644  
Telephone: 604 801 6461  
Facsimile: 604 801 6417

### European Office

Fountain House  
Great Cornbow  
Halesowen  
West Midlands  
UK B63 3BL  
Telephone: + 44 121 501 6000  
Facsimile: + 44 121 501 6035

[www.intrinsyc.com](http://www.intrinsyc.com)  
[sales@intrinsyc.com](mailto:sales@intrinsyc.com)

Copyright© 2007 by Intrinsyc Software International, Inc. All rights reserved. Intrinsyc®, Cerf™, Cerf™Board, Cerf™Cube, Cerf™Pod, and J-Integra™ are registered trademarks of Intrinsyc Software. Microsoft, Windows CE, and Windows Mobile are registered trademarks of Microsoft Corporation in the United States, in other countries, or both. All other product names are trademarks or registered trademarks of their respective owners and are hereby acknowledged.

**All specifications are subject to change without notice.**

## Specifications

### CerfBoard 255

- Processor – Intel XScale PXA255 microprocessor @ 400 MHz
- Memory – 16MB or 32 MB Flash (3.3 V or 5 V); 32MB or 64 MB SDRAM (100 MHz) (custom configurations also available); two EEPROMS (one write protected, one unlimited read/write)
- Flash Programming – JTAG support through expansion card, download through Ethernet
- Data Connectivity – 10/100 Ethernet; USB 1.1 - Type B Client port, three 3-wire RS232 serial ports
- CompactFlash + Header – supports Type I and Type II cards including IBM Microdrive, CompactFlash memory cards, barcode readers and wireless modems and Bluetooth cards
- Two Expansion Headers – to allow additional hardware to be developed and added without a main board redesign
- I/O – up to 45 digital lines (most GPIOs have secondary functions)
- Size – 2.25" x 2.75" x 1" (57.2mm x 69.9mm x 25.4mm)
- Power – 5V DC regulated, 400mA with no CompactFlash device; peak of 1.1A with CompactFlash (preliminary)
- Battery Backed Real-Time Clock

### CerfIO 250 Expansion Card

- Serial Connectivity
  - One RS232 (3-wire) serial debug port
  - Two RS232 (9-wire) full serial ports
  - One RS422/485 switchable serial port
- General Purpose I/O
  - 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
- Size – 5.22" x 2.73" (132.2mm x 69.3mm)

## Board Support Packages

CerfBoard 255 comes with flexible Board Support Packages that are pre-installed on delivery.

- Board Support Package for Windows® Embedded CE are available – a binary release of Intrinsyc drivers and components that provides the ability to install new applications and create images for various applications

## Configurations

- CerfBoard 255 hardware unit
- CerfComm 250 expansion card (optional)
- Hardware and software documentation
- CerfBoard run-time license
- Mounting stands
- Support – Bronze Level
- Cerf IO 250 expansion card (optional)
- Development software CD that supports creating new images and adding applications
- Power supply, cabling and ESD wrist wrap



INTRINSYC