



# 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<sup>®</sup> XScale<sup>®</sup> 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

# mobile and embedded solutions Product data sheet

# **CerfBoard 270 with Display for Windows**

A low-cost high performance reference design for developing internetbased devices

# Overview

Intrinsyc Software's Cerf™Board 270 is designed to meet RoHS Compliances (Restriction of Hazardous Materials) The Cerfboard 270 is a high-performance, low power design that is a perfect starting point for developing Internet or kiosk devices. Begin your development right out of the box with a pre-installed I-BSP (Intrinsyc Board Support Package) for Windows CE 5.0



# Features

The CerfBoard 270 is based on the Intel<sup>®</sup> XScale<sup>®</sup> PXA270 application processor which provides peak performance. The CerfBoard 270 incorporates 2 CompactFlash<sup>®</sup> connectors that can be used to add Bluetooth, Wireless WAN support or additional memory. The CerfBoard 270 also includes 10/100 Ethernet, 2 Serial Ports (COM1 – full serial RS232 support, COM2 – 3wire RS232 for debug), flexible digital I/O, a JTAG connector, dual stacked USB 2.0 host, USB 1.1 client & host support, a VGA LCD, a 4 wire resistive touch screen, and audio in & out connectors.

# Applications

The applications of the CerfBoard 270 are virtually limitless. The CerfBoard 270 provides an ideal starting point for developing embedded solutions for wireless computing, telematics, industrial automation and remote monitoring.

Examples of such embedded solutions include:

- Create a custom remote monitoring solution using a GSM/GPRS CompactFlash<sup>®</sup> card to transmit collected data or images from a USB camera. A solar cell can be used to re-charge an external battery, and the Real Time Clock can be used to periodically wake-up the CerfBoard and transmit the data.
- General and industrial control applications the GPIO port or serial port can be used to interface and control equipment
- Create a custom wireless bridging solution using the two CompactFlash<sup>®</sup> slots (e.g.: 802.11 to GSM/GPRS)



## Locations

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

### Specifications

- Processor PXA270 CPU, with scalable core voltage, and up to 524 MHz core speed (416 MHz standard)
- Memory 64MB SDRAM, with low-power sleep mode (128MB option available), 32 MB Intel StrataFlash™
- Optrex LCD display
- LCD backlight inverter
- 2 CompactFlash slots supports Type I and II cards, including IBM microdrive, memory cards, barcode readers, wireless modems, WiFi connectivity and Bluetooth cards.
- Data Connectivity
  - Dual USB Host 2.0 with high-speed capability (driver to be added to BSP in later release)
  - USB 1.1 Client and Host
  - 10/100 Ethernet
  - Serial ports debug and full-function, with DB9 connectors
  - Digital I/O connector on 2x10x100 connector
- Expansion connector 16 bit data bus, address bus, camera interface, 4-wire UART, I2C
- Stereo out, mic in audio connectors •
- Touch panel
- Battery-backed RTC on I2C
- EEPROM and FRAM on I2C
- CPU and CPLD JTAG connectors
- Ability to run from 5V to 12V input
- All peripherals have power control built-in, or have an external power switch with appropriate protection devices. (power control driver to be added to BSP in later release)
- Dimensions:
  - PCB without connectors 108mm x 95mm
  - PCB with connectors 114mm x 106mm (approximate)

## Each CerfBoard 270 kit includes:

- CerfBoard 270 (approximately 4.5" x 4.20")
- 6v Power Supply, cabling, ESD wrist strap •
- Windows CE 5.0
- Development software CD that includes
  - 0 Hardware and software documentation
  - Board Support Package a binary release of Intrinsyc drivers and 0 components. Provides the ability to install new applications and create images for various applications
- Intrinsyc Software license agreement & hardware warranty card.
- Microsoft CE 5.0 Pro License Decal

We also sell the CerfBoard 270 CPU board alone for you to incorporate into your product designs





For more information, visit Intrinsyc Software's website at www.intrinsyc.com

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