INTRINSYC

The Intel 2700G Multimedia Accelerator Reference System by Intrinsyc Software

PXA270/2700G Wireless Handheld Reference System

❖ Overview

Intrinsyc's latest PDA Reference Design, The Intel® 2700G Multimedia Accelerator Reference System, was designed in collaboration with Intel®, and is a full-featured, flexible platform that is an ideal starting point for your next generation wireless handheld device. Its compact case design, superb multimedia capability (full VGA support with video and 3D graphics acceleration) and connection options make it a comprehensive solution to test your proof-of-concept design, or use it as a development platform for your next generation handheld device or software. Target verticals are gaming, multi-media, enterprise, medical and measurement devices. The schematics are available free of charge by contacting Intrinsyc.

❖ Features

The heart of the Intel 2700G Multimedia Accelerator Reference System is Intel's newest XScale® technology, PXA270, coupled to Intel's new 2700G multimedia accelerator. Microsoft® PocketPC 2003 and Windows® CE .NET are supported out of the box. Support for other operating systems are on the development road-map.

The four-inch display, driven by the Intel 2700G Multimedia Accelerator Reference System uses a high-contrast 64K color 480x640 VGA TFT LCD with CCFL backlighting and a resistive touch screen. Depending on the choice of operating system, the display can be operated in landscape or portrait mode. User input can be made through the touch screen, a soft on-screen keypad, or external keyboard and mouse attached through Bluetooth, or USB interfaces. Dual display capability is standard (i.e. VGA+ out to a Monitor or Projector). Full VGA video decoding support for MPEG, WMV and other formats is provided via the Intel 2700G graphics accelerator.

Greater battery life is achieved via superior power management – CPU voltage and frequency scaling, passive LCD refresh, and intelligent power mode switching.

Optionally the Intel 2700G Multimedia Accelerator Reference System includes a tri-band GSM/GPRS phone that supports voice calls, Internet browsing, email, and SMS/MMS messaging. Telephony is supported via Intrinsyc's telephony software stack.

Audio features include a voice recorder, microphone, speaker and stereo output.

For high speed development and debugging, the Intel 2700G Multimedia Accelerator Reference System has an Ethernet interface, serial port and supports Intel's VTUNE™. It is expandable through its two Compact Flash slots (one internal), with support for MultiMedia Card (MMC).

Customizable

If the Intel 2700G Multimedia Accelerator Reference System doesn't meet your exact needs, Intrinsyc can help you customize it to your needs. Intrinsyc provides product development services ranging from requirements analysis, conceptual design and prototyping, to pre-production and production. We've worked with many companies to make their Internet-ready devices a reality and have manufacturing partners around the world to suit your production volumes.

Benefits

- Flexible, feature-rich multi-OS platform allows for faster development with the latest wireless handheld features
- Optional voice, WWAN access
- Multi-media capabilities offer an ideal development environment
- A great game developers platform

Specifications

- Processor –Intel® PXA270 application processor
- Graphics - Intel® 2700G multi-media accelerator with 16/32 MB of graphics memory (Mobile SDRAM and integrated dual display support
- Memory – 128MB Mobile SDRAM (100 MHz), 64MB Intel® Wireless® Strata Flash.
- Power –on-board 3.6V lithium-ion batteries, external A/C adaptor
- Display – High-contrast, 4" (diagonal), 64K color, 640X480 resolution, VGA TFT LCD with CCFL backlighting and a resistive touch screen. Landscape and portrait modes.
- Data connectivity –USB OTG, 10BaseT Ethernet and RS232 serial debug support, Bluetooth, IrDA.
- Audio – Stereo headphone/headset jack, speaker, mono microphone, voice recorder, earpiece
- Expansion slots – Compact Flash, MultiMedia Card (MMC) and Secure Digital (SD) optionally supported
- Size – 25.7 mm x 148.7 mm x 82.8 mm. (1.0" x 5.9" x 3.3")
- Navigation – Four application launcher hot keys, thumb wheel and five-way navigation pad. Soft on-screen keyboard
- Telephony – optional support for Tri-band GSM/GPRS modem with external antenna.
- VGA out – Connect to a VGA Monitor or Projector
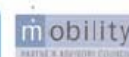
Software development environment

- Microsoft® Pocket PC 2003 and Microsoft® CE.NET
- Microsoft® Pocket PC 2003
- Intel® VTUNE™ Performance Analyzer for Microsoft Pocket PC 2003

Board Support licensing

Microsoft® Pocket PC 2003 and Microsoft® CE.NET board support package and source code are available under license from Intrinsyc complete with integrated power management, boot loader, and dual headed display support

Each PDA development kit contains:

- PDA platform
- External A/C adaptor and USB cable
- Expansion Board for Ethernet and serial debug support
- Schematics (available free of charge)

General Member of the Intel® Communications Alliance

For more information, visit Intrinsyc Software's website at www.intrinsyc.com
All specifications are subject to change without notice.