

PCI2010 CDMA2000-1X Digital Baseband Processor

PCI2010 GENERAL FEATURES

Complete IS-2000-A baseband solution (exceeding all IS-98-C specifications)

Supports Data Service (IS-707-A), SMS, and OTAPA

Low 1.8V operation

Internal digital FM subsystem for AMPS operation

Highly customizable, allowing product differentiation

Highly Efficient Software-controlled power management

Integrated Analog Features

Integrated Transmit DACs

Supports Internal 8k or 13k QCELP and 8k EVRC Vocoders with Noise suppression for all 3 Vocoders

PCI2010 MICROPROCESSOR SUBSYSTEM FEATURES

Powerful and efficient ARM 32-bit RISC microprocessor core

Two on-board UARTs, one with a fully compliant IS-707-A hardware flow control

On-board synchronous serial interface (SSI)

Flexible External Memory Interface supports 256 MB (8 and 16-bit) devices with programmable wait states

64 programmable general purpose I/Os

Universal Serial Bus (USB) Interface

Network assisted Global Positioning Satellite (GPS) Interface

Bluetooth $^{\scriptscriptstyle\mathsf{TM}}$ RF Hardware Interface and Protocol Engine

Support for On-Board MP3 Decoding

ANSI/IEEE 1149.1-1990 JTAG Interface

Hi-Fi DAC Interface (MP3)

PCI2010 CDMA PROCESSING FEATURES

Fast Initial Pilot Channel Acquisition

Support for Fast Forward Power Control

Support of voice, packet-switched data, and circuit-switched data

Supports 153.6 kbps on both Forward and Reverse Links

Programmable Search Processing, RAKE Processing, channel coding/decoding, and modulation

Supports Radio Configurations (RC) of one to five on the Forward Link, and one to four on the Reverse Link, with Turbo Encoding / Decoding

Supports the Forward Quick Paging Channel (F-QPCH) for double the standby time as compared with IS-95-B

Supports ultra-fast searcher speed for faster System acquisition and Neighbor List searchers

In a world where wireless technology and the Internet have come together, PrairieComm provides a solution that enables handsets to be designed with Internet access that exceeds today's Personal Computer Technology.

With PrairieComm's PCI2010
CDMA2000-1X Digital Baseband
Processor, you have the ability of incorporating GPS enabled location based services,
Internet access, Bluetooth™, WAP, and
USB technology. You also enable deviceto-device interoperability and get a cost
effective solution that accelerates you
ahead of the competition by incorporating
the latest technology.

The PCI2010 is built upon the same DSP platform and powerful Microprocessor

as all of PrairieComm's TDMA, GSM, and UMTS products. With the PCI2010, your time-to-market is significantly reduced.



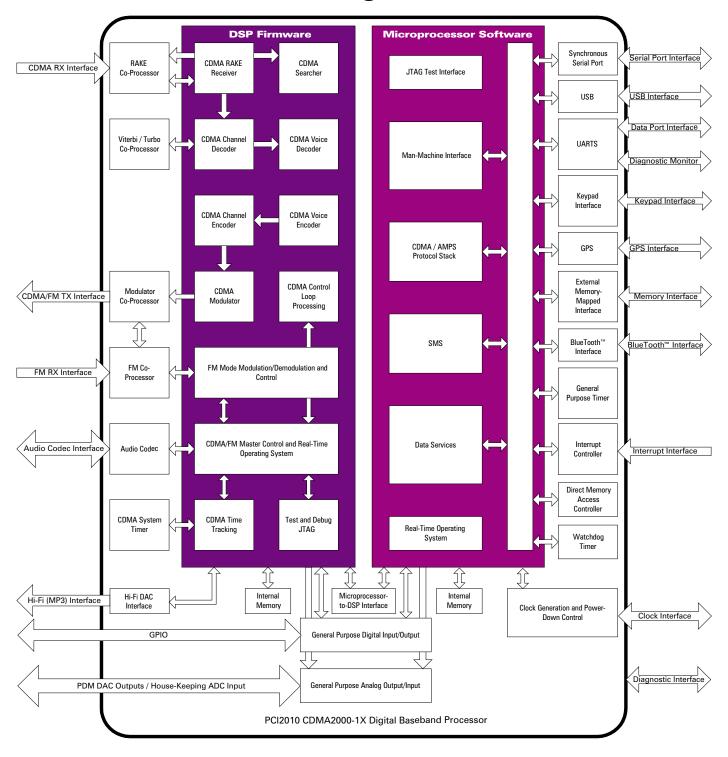
BENEFITS

Enables handset manufacturers to...

- provide wireless access to the Internet at data rates up to 153.6 kbps
- significantly increase talk and stand-by times
- provide a comprehensive roadmap of tiered products
- support features such as Bluetooth[™], WAP, and MP3
- minimize time-to-market and development costs, while optimizing the handset's capability
- enable interoperability between devices



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ELECTRICAL SPECIFICATIONS

Power Supply: 1.8V DC

Operating Temperature Range: -40 to +85°C

Storage Temperature Range: -55 to +150°C

Clock Frequency: 19.2, 19.68, 19.8 MHz and 32 kHz sleep mode

Chipset allows mobile up to 300 hours of standby time

PACKAGINO

15×15mm PBGA package with 0.8mm pitch

