

PCI5110 UMTS (WCDMA)/GSM/GPRS Digital Baseband Processor

PCI5110 GENERAL FEATURES

Supports 3GPP/UMTS (WCDMA) Frequency Division Duplex (FDD) operating mode

Supports Circuit Switched Voice, Packet-Switched Data, and Circuit-Switched Data.

Core Digital Voltage 1.8V, Core Analog Voltage 2.5V, I/O Voltage 3.0V

Supports MPEG4, MP3, Bluetooth™, USB, and WAP

Software-controlled power management

Supports inter-frequency handoffs between UMTS (WCDMA)/FDD cells and hard handoffs between UMTS (WCDMA)/FDD and GSM

Enables simultaneous streaming voice and video, and data

Enables worldwide high-speed Internet access and roaming

Supports UMTS (WCDMA), and GSM/GPRS

PCI5110 MICROPROCESSOR SUBSYSTEM FEATURES

Powerful and efficient ARM 32-bit RISC microprocessor core with internal cache

Two on-board UARTs, one which fully supports hardware flow control

On-board synchronous serial interface (SSI)

Flexible External Memory Interface with burst mode capabilities that support 16 MB (8 and 16-bit) devices

64 programmable digital GPIOs

Supports SIM card interface

Universal Serial Bus (USB) Interface that supports up to 12 Mbps

Bluetooth™ RF Hardware Interface and Protocol Engine

Keypad interface with key debounce

WCDMA PROCESSING FEATURES

Supports AMR Vocoder for UMTS and GSM

Maximum data rate is 384 kbps

Integrated Turbo Coding for efficient high data rate transmission

INTEGRATED ANALOG FEATURES

House keeping ADC & analog switch supporting six selectable analog inputs

Contains integrated PLLs for internal clock generation purposes

Contains 10 PDMs that can be used as general purpose DACs

Imagine connecting to the Internet, downloading large files, or receiving simple SMS messages or real-time streaming voice and video. The PCI5110 chip offers multi-functional technology that allows the user to access the Internet from wherever they are around the world!

A handset using the PCI5110 chip will be able to support live multimedia applications, allowing the mobile user to view movie clips or entire movies in real time, or listen to music files, or play games from their phone while connected to the Internet.

The PCI5110 chip enables handsets to provide steaming voice and video, as well as high speed access to the Internet. PCI5110 incorporates integrated Bluetooth and MP3 functionality while supporting features such

as MPEG4 and WAP. The PCI5110 is a highly integrated chip which incorporates UMTS (WCDMA), and GSM/GPRS technology.



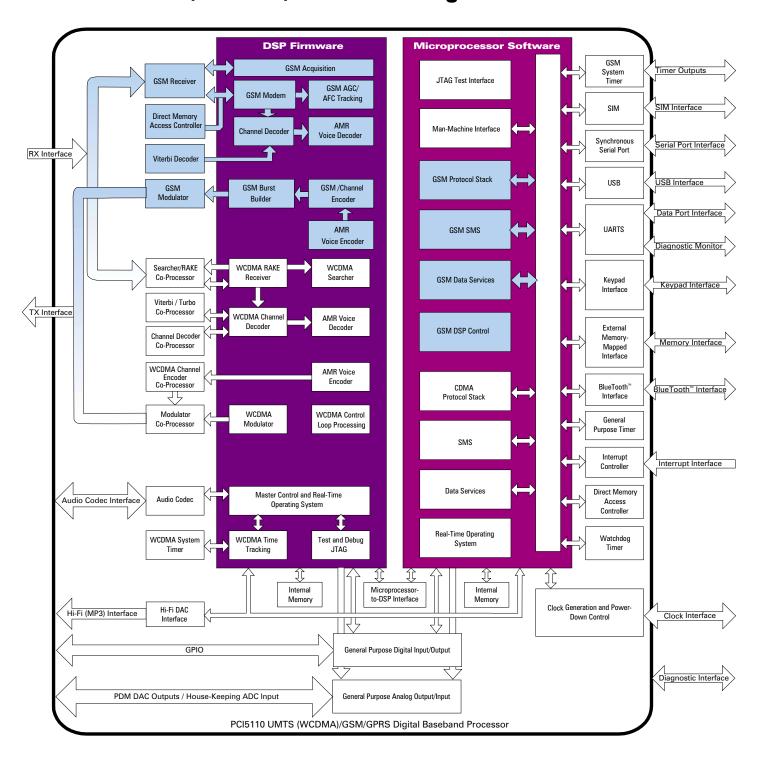
BENEFITS

Enables handset manufacturers to:

- Provide global, high-speed Internet access and roaming
- Provide the capability to view a video or Internet movie in real time, and play games over the Internet
- Supports features such as MP3, Bluetooth™, MPEG4, and WAP
- Provide more features at low cost
- Increase time-to-market and provide a broader spectrum of products



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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: 13 MHz and 32 kHz sleep mode

Chipset allows mobile up to 300 hours of standby time

PACKAGING

280-ball Flex PBGA package with 0.8mm pitch

