

PCI3610

TIA/EIA-136

PCI3610 TIA/EIA-136 Integrated Baseband Processor

PCI3601 GENERAL FEATURES

Complete TIA/EIA-136 baseband solution, exceeding all TIA/EIA-136-270 specifications

Supports TIA/EIA-136-310, 136-350, 136-320 Data Services and SMS

Low voltage operation

Fully programmable software-controlled power management

Microprocessor-DSP interface allows additional Physical Layer features

PCI3610 MICROPROCESSOR SUBSYSTEM FEATURES

Powerful and efficient 32-Bit RISC ARM microprocessor core

Two onboard UARTs, one with hardware flow control

Keypad interface (matrix programmable)

48 general purpose I/Os

2 general purpose timers

PCI3610 PHYSICAL LAYER PROCESSING FEATURES

Internal 7.95 kbps TIA/EIA-136-420 VSELP and 7.4 kbps TIA/EIA-136-410 ACELP Vocoders

Discontinuous Transmission support (DTX) for TIA/EIA-136-410

Programmable modem acquisition, modulation/demodulation, and channel coding/decoding

Built-in acoustic signal processing

Complete baseband AMPS functionality

Internal Manchester decoder

Viterbi hardware coprocessor

PCI3610 MIXED SIGNAL FEATURES

Five input 10 bit ADC for auxiliary measurements of analog signals

Eight output Pulse Width Modulated Digital-to-Analog converters for user-defined analog control

$\pi/4$ DQPSK with pulse shaping

Two 10 Bit D/A converters for I/Q transmission

Programmable variable gain amplifiers

Four 10 Bit Aux. D/A converters

Two 10 Bit A/D converters for receive I and Q

10 bit D/A and A/D converters for AMPS mode

More features. Smaller footprint. That's what PrairieComm provides through the PCI3610 Integrated Baseband Processor. This TIA/EIA-136 product is the key to ultra portable, feature-rich handsets—handsets that outpace the competition's.

The PCI3610's highly integrated design allows you to cost effectively deliver the range of features demanded by today's marketplace. The next-generation single chip design combines the mixed signal D/A and A/D converters with the baseband processor to provide the ultimate TDMA solution. Low voltage operation and sophisticated software-controlled power management allow consumers to forget the tyranny of battery chargers.

With the PCI3610, consumers enjoy cutting-edge performance while you enjoy how swiftly and cost-effectively you bring your TDMA products to market. The PCI3610 is just one more way PrairieComm gives you The Power To Compete.



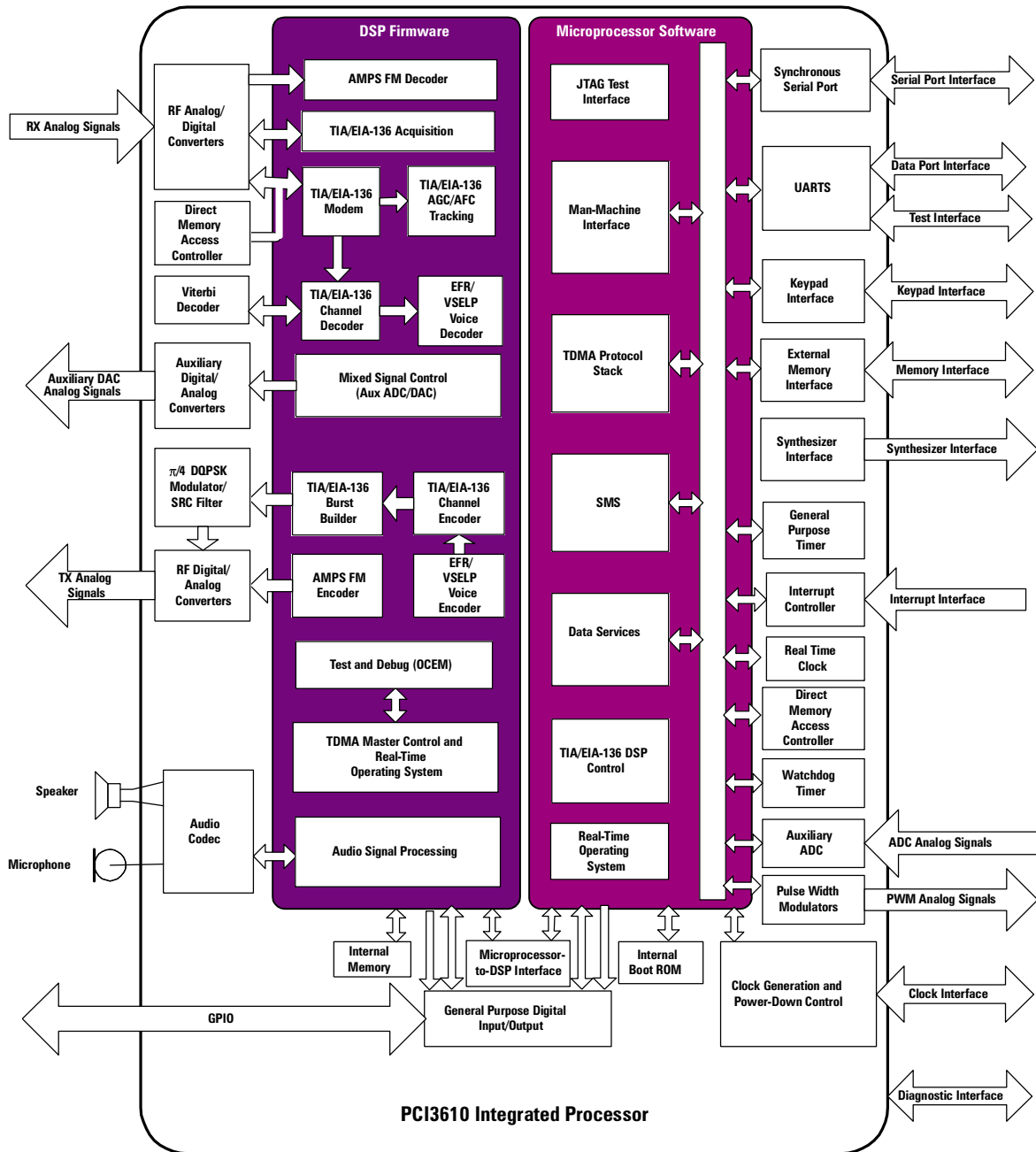
BENEFITS

By using the PCI3610, you will realize...

- superior product performance
- substantially longer talk and standby times
- a significant reduction in time-to-market
- dramatically lower production costs
- minimal development costs
- a comprehensive roadmap of tiered products


PRAIRIECOMM
 The Power To Compete™

PCI3610 TIA/EIA-136 Integrated Baseband Processor



ELECTRICAL SPECIFICATIONS

- Low 2.5 V DC operation for Digital Core and Mixed Signal blocks
- 2.7 to 3.6 V DC operation for I/O pads
- Operating Temperature Range: -40 to +85 °C
- Storage Temperature Range: -55 to +150 °C
- Clock Frequency: 19.44 MHz and 32 kHz sleep mode
- Chipset allows mobile up to 350 hours of standby time

PACKAGING

180-ball Flex PBGA package with 0.8mm pitch



1600 Golf Road ♦ Suite 600 ♦ Rolling Meadows, IL 60008 ♦ phone 847-871-1800 ♦ fax 847-871-1900 ♦ www.prairiecomm.com

©2001, PrairieComm, Inc. All rights reserved. PCI3610 and The Power To Compete are trademarks of PrairieComm, Inc. All other trademarks are properties of their respective companies. PrairieComm reserves the right to make changes to product information and specifications without notice.