



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Features

- DC to DC Step Down 1.2 A, 0.9V (Dynamically Adjustable to 0.87V/1.1V/1.2V)
- DC to DC step Down 1.2 A, 1.2V (Dynamically Adjustable to 1.0V/1.1V/1.3V) or 1.75V (Dynamically Adjustable 1.65V/1.70V/1.80V)
- DC to DC Step Down 1.2 A, 1.8V (Dynamically Adjustable to 1.70V/1.75V/1.85V) or 2.5V (Dynamically Adjustable 2.3V/2.4V/2.6V)
- DC to DC Step Up/Down 520 mA, 3.3V (Dynamically Adjustable to 3.0V/3.1V/3.4V)
- Dual Battery Chargers: Li+ Precharge, Fast Charge, Top-up Charge, 4.1V (or Adjustable), Processor Tuned Algorithms
 - USB Trickle Charge: Precharge Flat Battery from USB Pre-enumeration, then Auto-wake of Processor at 3.8V Battery Level
 - Battery Charge Select: 25 mA to 500 mA
 - Real-time Charge Inhibit: Allows Charge Suspend (e.g. During TX Slots)
- Supply Monitor of Four Power Sources: Thermistors, Temperature, DC/DC Rails, all Supplied with Out-of-regulation Threshold Detection
- SIM Interface: SIM / USIM, 1.8V / 3.0V Standards, Integrated TX and RX Data FIFO
- SPI Control Interface: Up to 13 MHz; Tuned for SA1110/PXA250/PXA255 1.2 MHz SPI, 128 8-bit Registers
- Power on Reset: For SA1110/PXA250/PXA255 Architectures plus Additional Sequenced System Level Resets
- Voltage and Temperature Supervision
- Calibrated Voltage Reference
- 8-bit ADC with 5-input Multiplexer
- Integrated Oscillator, Start-up and Self-protection Circuitry
- Off Power: 60 μ A with External "Button Select" for Restart
- Applications Include: PDAs, PCMCIA Cards, SMART Phones, Pocket PCs, 3G Applications, Intel® XScale™ Powered Applications

Description

The AT73C203 device provides an integrated solution to portable and handheld applications built around microprocessors requiring "smart" power management functions, such as PDAs, Palmtop computers, point-of-sales terminals, 3G modems, etc.

Its compact package outline and small size of external components make the AT73C203 suitable for PCMCIA card power management as well.

The AT73C203 integrates a power switch controller that, when connected to an external power switch, may be used for automatically selecting one of four possible power sources:

- Internal battery
- External battery
- Plugtop power supply unit 5V (PSU)
- PC Host USB supply

The power switch output (VDD-PSU line) is connected directly to external auxiliary components such as a radio or any other "current hungry" module.

The AT73C203 is also equipped with four digital rails from VDD-PSU to supply a baseband chip, a reset generator for the baseband chip, and a SPI interface to control the AT73C203 via an internal register set. The USIM interface allows the application processor to communicate with and control a USIM card. Charge control enables the application processor to charge the battery from the PSU or USB. A state machine can also determine whether to charge the internal battery through USB at start-up. Additionally, hardware monitoring gives information to the application processor when a voltage drop occurs (programmed via internal registers).



Power Management

AT73C203 Power Management IC for Datacom Platforms

Summary

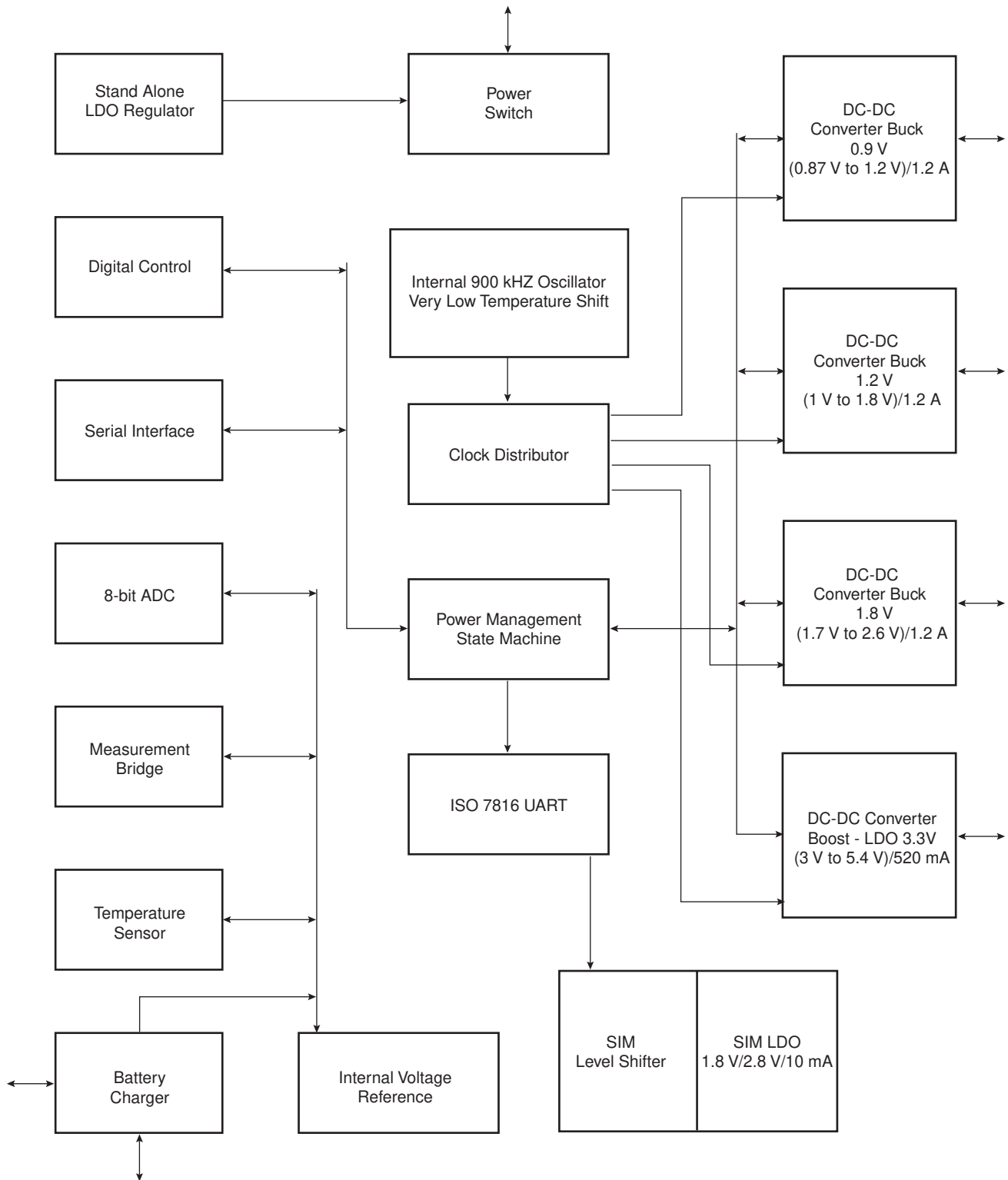
2742BS-PMGMT-03/04



Note: This is a summary document. A complete document is available on our Web site at www.atmel.com.

Functional Diagram

Figure 1. AT73C203 Functional Diagram





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