Features

- 300 mA/1.9V/2.5V DC to DC for Co-processor Core
- 80 mA/2.8V Dual-mode LDO for Memories (LDO1)
- 130 mA/2.7V/2.8V LDO for Camera Module (LDO2)
- 130 mA/2.8V LDO for Analog Section Supply of Audio Stereo Codec (LDO6)
- 10 mA/1.8V/2.8V LDO for Digital Section Supply of Audio Stereo Codec (LDO7)
- 130 mA/2.8V LDO for Analog Section Supply of Bluetooth® Module (LDO4)
- 130 mA/2.8V LDO for Digital Section Supply of Bluetooth® Module (LDO5)
- 2 mA/2.4V/2.7V LDO for Low-power Device Control (LDO3)
- · Open Drain Switch
- Three-channel Level Shifters
- LED Driver
- 0.5 mA/1.5V Bufferized Voltage Reference
- Power Management Start-up Controller and Reset Generation
- Over- and Under-voltage Protections
- Over-temperature Protection
- Shutdown, Sleep and Enable Modes
- Straightforward and Easy Interfacing to any Baseband Controller
- Small 5 mm x 5 mm, 49-ball BGA Package

Description

The AT73C204 device provides an integrated power management solution for the addon multimedia features in new-generation mobile phones. These features include a camera module, sound system for polyphonic ringing tones, memory module for downloaded MP3 files, Bluetooth module for cordless headset, etc. The most common approach to the IC architecture of these new-generation mobile phones is a baseband processor for the basic telephony functions and a separate co-processor for the multimedia features. Atmel proposes the AT73C202 for power management of the baseband processor and RF elements, and the AT73C204 for power management of the multimedia features.

The AT73C204 is suitable for any telecommunications standard: GSM/GPRS, PDS, CDMA, CDMA2000, WCDMA or UMTS. It is packaged in a small form-factor 49-ball 5 mm x 5 mm BGA package.



Power Management for Mobiles (PM)

AT73C204

Summary



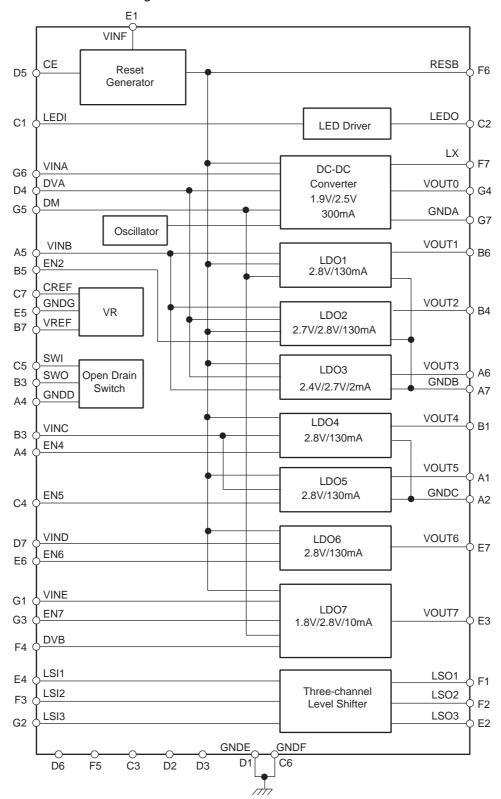
6014AS-PMGMT-12/03

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



Functional Block Diagram

Figure 1. AT73C204 Functional Block Diagram





Atmel Corporation

2325 Orchard Parkway San Jose, CA 95131, USA Tel: 1(408) 441-0311 Fax: 1(408) 487-2600

Regional Headquarters

Europe

Atmel Sarl Route des Arsenaux 41 Case Postale 80 CH-1705 Fribourg Switzerland Tel: (41) 26-426-5555

Fax: (41) 26-426-5500

Asia

Room 1219 Chinachem Golden Plaza 77 Mody Road Tsimshatsui East Kowloon Hong Kong Tel: (852) 2721-9778

Tel: (852) 2721-9778 Fax: (852) 2722-1369

Japan

9F, Tonetsu Shinkawa Bldg. 1-24-8 Shinkawa Chuo-ku, Tokyo 104-0033

as critical components in life support devices or systems.

Tel: (81) 3-3523-3551 Fax: (81) 3-3523-7581

Atmel Operations

Memory

2325 Orchard Parkway San Jose, CA 95131, USA Tel: 1(408) 441-0311 Fax: 1(408) 436-4314

Microcontrollers

2325 Orchard Parkway San Jose, CA 95131, USA Tel: 1(408) 441-0311 Fax: 1(408) 436-4314

La Chantrerie BP 70602 44306 Nantes Cedex 3, France Tel: (33) 2-40-18-18-18 Fax: (33) 2-40-18-19-60

ASIC/ASSP/Smart Cards

Zone Industrielle 13106 Rousset Cedex, France Tel: (33) 4-42-53-60-00 Fax: (33) 4-42-53-60-01

1150 East Cheyenne Mtn. Blvd. Colorado Springs, CO 80906, USA

Tel: 1(719) 576-3300 Fax: 1(719) 540-1759

Scottish Enterprise Technology Park Maxwell Building East Kilbride G75 0QR, Scotland

Tel: (44) 1355-803-000 Fax: (44) 1355-242-743

RF/Automotive

Theresienstrasse 2 Postfach 3535 74025 Heilbronn, Germany Tel: (49) 71-31-67-0 Fax: (49) 71-31-67-2340

1150 East Cheyenne Mtn. Blvd. Colorado Springs, CO 80906, USA

Tel: 1(719) 576-3300 Fax: 1(719) 540-1759

Biometrics/Imaging/Hi-Rel MPU/ High Speed Converters/RF Datacom

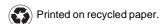
Avenue de Rochepleine BP 123 38521 Saint-Egreve Cedex, France

Tel: (33) 4-76-58-30-00 Fax: (33) 4-76-58-34-80

Literature Requests www.atmel.com/literature

Disclaimer: Atmel Corporation makes no warranty for the use of its products, other than those expressly contained in the Company's standard warranty which is detailed in Atmel's Terms and Conditions located on the Company's web site. The Company assumes no responsibility for any errors which may appear in this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No licenses to patents or other intellectual property of Atmel are granted by the Company in connection with the sale of Atmel products, expressly or by implication. Atmel's products are not authorized for use

© Atmel Corporation 2003. All rights reserved. Atmel[®] and combinations thereof are the registered trademarks of Atmel Corporation or its subsidiaries. Bluetooth[®] is a registered trademark owned by the Bluetooth SIG, Inc. Other terms and product names may be the trademarks of others.



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Atmel:

AT73C204J