# imall

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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Features

- Smart Card Interface
  - Smart Card Interface Compliant with ISO 7816 and EMV 2000
  - Support of T=0, T=1, TWI (S=8), 2-wire: SLE 4432/42 (S=10), 3-wire: SLE4418/28 (S=9), others on request
  - High Performance Smart Card Interface
  - Supports 5V, 3V and 1,8V Smart Cards
  - Supply Current 60 mA to Power the Smart Card
  - Smart Card Movement Detection with Auto Power-off
  - Automatic Detection of Smart Card Type
  - Short Circuit and Thermal Protection
    8-pin Handling (C4/C8 Supported)
- B-pin Handling
  Host Interface
  - USB (Compliant with USB 1.1 and 2.0, CCID Supported)
  - Transmission Speed: USB: 12 MBit/sec
  - Customer Specific USB-descriptors
- Compliance
  - WHQL (Microsoft) Certified
  - EMV 2000 (Europay, Mastercard, Visa) Certified
  - USB 1.1 and 2.0
  - USB CCID
  - ISO 7816
  - HBCI
- Other Features
  - Fast and Easy Certification Process
  - Supports LED Status Indicator (Green: ready; Red: busy)
  - Secure Pin Entry (SPE)
- PC/SC Driver support
  - Windows 98/ME®
    - Windows 2000®
    - Windows XP®
    - Windows CE 3.0®/CE.NET (Depending on Hardware)
    - Windows NT® 4.0 (On Request)
    - Linux®
    - MacOS X®
- Deliverables
  - 32-pin VQFP (or 28-pin PLCC) Chip (Including Firmware and Drivers) on a Per-unit License Fee
- Development
  - Design-In Kit Containing:
    - 3 CardMan® Smart@Link Chips
    - Ready-to-use sample PCB
    - CD with Drivers and Documentation



CardMan<sup>®</sup> Smart@Link

## AT83C23OK

Summary

## Preliminary

4307BS-SCR-01/07



### Description

Smart Cards are increasingly being used for Payments, Home-Banking, Access Control, Internet Security, PKItokens, Health Care, Loyalty, etc.

The CardManSmart@Link chip set is a ready to use precertified smart card reader interface to be implemented into USB hosts. It facilitates the hardware integrators in reducing time-to-market and offers a unique opportunity to quickly and easily include smart card reader functionality in systems like PCs, Notebooks, Keyboards, Smart Card based Dongles, Monitors, Mice, PDAs, Thin Clients, Biometric devices etc. The already existing certifications and compliances guarantee a fast and easy certification process.

With its high performance Smart Card Interface CardManSmart@Link supports smartcard technology of the future.

The integration in any USB system can be easily done without any firmware or software (driver) development, simply by embedding the CardMan Smart@Link design and chipset into the target system. The USB CCID support makes this process the easiest ever by connecting host and Smart Card Reader systems without the need of additional drivers.

CardManSmart@Link is based on Atmel's AT83C5123 microcontroller. The above features make the CardManSmart@Link the perfect answer to the increasing demands of many applications.





## Ordering information

Part Number	Voltage Range (V)	Temperature Range	Package	Packing
AT83C23OKxxx-SISIM	3.0 - 5.5	Industrial	PLCC28	Stick
AT83C23OKxxx-SIRIM	3.0 - 5.5	Industrial	PLCC28	Tape & Reel
AT83C23OKxxx-RATIM	3.0 - 5.5	Industrial	VQFP32	Tray
AT83C23OKxxx-RARIM	3.0 - 5.5	Industrial	VQFP32	Tape & Reel
AT83C23OKxxx-RATUM	3.0 - 5.5	Industrial & Green	VQFP32	Tray
AT83C23OKxxx-RARUM	3.0 - 5.5	Industrial & Green	VQFP32	Tape & Reel
AT83C23OKxxx-PUTUM	3.0 - 5.5	Industrial & Green	QFN32	Tray
AT83C23OKxxx-PURUM	3.0 - 5.5	Industrial & Green	QFN32	Tape & Reel

xxx: Firmware version



#### **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 Fax: (852) 2722-1369

#### Japan

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

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