

## 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)
- **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®  
Smart@Link**

**AT83C230K**

**Summary**

**Preliminary**

4307BS-SCR-01/07



This is a summary Document. A complete document is available on the Omnikey Web site. [www.omnikey.com](http://www.omnikey.com)

## **Description**

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

The CardMan Smart@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 CardMan Smart@Link supports smart-card 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.

CardMan Smart@Link is based on Atmel's AT83C5123 microcontroller. The above features make the CardMan Smart@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



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### High Speed Converters/RF Datacom

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### Literature Requests

[www.atmel.com/literature](http://www.atmel.com/literature)

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