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)
  - On Request: Second Smart Card Interface
- Host Interface
  - USB (Compliant with USB 1.1 and 2.0, CCID Supported)
  - Transmission Speed: 12 Mbps
  - Customer Specific USB Descriptors
- Keyboard Support
  - Customer Specific Keyboard-Matrix-Layout for up to 160 keys (Max. Size 20x8), e.g. Multimedia Keyboards
  - Slow Rise and Fall Time on Keyboard-matrix Ports to Ensure Low EMI
  - Ready-to-use Firmware for Keyboard Support included; Customer Specific Firmware Possible
- 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)
  - Supports 3 Keyboard LED's
  - Secure Pin Entry (SPE)
- PC/SC Driver support
  - Windows 98®
  - Windows ME®
  - Windows 2000®
  - Windows XP®
  - Windows CE 3.0 / CE.NET (Depending on Hardware)
  - Linux®
  - MAC OS X®
- Deliverables
  - 64-PIN VQFP Chip-set (Including Firmware and Drivers) on a Per-unit License Fee
- Development
  - Design-In Kit Containing
    - 3 CardMan® Smart@Key Chips
    - Ready-to-use sample PCB
    - CD with Drivers and Documentation

CardMan® Smart@Key

AT83C22OK

Summary

Preliminary

4306AS–SCR–05/04

This is a summary Document. A complete document is available on the Omnikey Web site. www.omnikey.com

Description

Smart Cards are increasingly being used for Payments, Home-Banking, Access Control, Internet Security, PKI-tokens, Healthcare, Loyalty, etc.

The CardMan Smart@Key chip set is a ready to use precertified smart card reader interface to be implemented into keyboards. Being a one-chip solution containing firmware functionality for both smartcard and keyboard support, it facilitates the hardware integrators in reducing time-to-market and offers a unique opportunity to quickly and easily implement smart card reader functionality into their systems. The already existing certifications and compliances guarantee a fast and easy certification process.

With its high performance Smart Card Interface CardMan Smart@Key supports Smart Card technology of the future.

The integration in any USB keyboard can be easily done without any firmware or software (driver) development, simply by embedding the CardMan Smart@Key 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 vendor specific drivers.

Keyboard Matrix and USB descriptors can be easily adapted to the customer's requests. CardMan Smart@Key is based on Atmel's AT83C5122 microcontroller. The above features make the CardMan® Smart@Key the perfect answer to the increasing demands of many applications.

Ordering information

Part Number	Temperature Range	Package	Packing
AT83C22OKxxx-RDTIM	Industrial	VQFP64	Tray
AT83C22OKxxx-RDRIM	Industrial	VQFP64	Tape & Reel

xxx: Firmware version

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Literature Requests
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