C51

PRE-CERTIFIED SMART CARD READER SOLUTIONS FOR **USB Link**

AT83C22OK and AT83C23OK are based on Atmel C51 MCUs and include OMNIKEY® firmware. These single-chip turnkey solutions can be quickly and easily integrated into any USB smart card keyboard or peripheral.



Key Features & Benefits

- Single-Chip Solution
- Quick Time-to-Market
- Fast & Easy EMVCo Certification
- Supports all Smart Cards
- USB 2.0 Full-speed: 12 Mbits/sec
- CCID Compliant Interface

Compliance with:









Applications

- Smart Card Reader Keyboard
- Dongle
- Smart Card Reader





AT83C22OK/23OK USB SMART CARD READER SOLUTIONS

Atmel Corporation

2325 Orchard Parkway San Jose, CA 95131 LISA

TEL.: (1)(408) 441-0311 FAX.: (1)(408) 487-2600

Regional Headquaters 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

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

TEL.: (81) 3-3523-3551 FAX.: (81) 3-3523-7581

Products Contact

La Chantrerie BP 70602 44306 Nantes Cedex 3

TEL.: (33) 2 40 18 18 18 FAX.: (33) 2 40 18 19 60

literature@atmel.com

Web Site

http://www.atmel.com

© Atmel Corporation 2003. All rights reserved. Atmel® and combinations there-of are registered trademarks of Atmel Corporation or its subsidiaries.

OMNIKEY® is a registered trademark of OMNIKEY AG, Linux® is a registered trademark of Linux Torvalds, Microsoft® is a registered trademark of Microsoft Corporation. Other terms and product names may be the trademarks of others

4029A-8051-05/03/10M

AT83C22OK and AT83C23OK are two highly integrated solutions, including OMNIKEY firmware and associated drivers, for any smart card reader using a USB link.

The USB Smart Card Reader Solutions allow customers to reduce time-to-market as they are compliant with ISO 7816, USB CCID standards, and EMV 2000 and WHQL certified.

They combine Atmel and OMNIKEY's expertise in smart card reader development and in-system integration.



To implement these turnkey solutions, customers only have to include the appropriate drivers in their host software (PC/SC, Microsoft® CCID, Linux®).

Product Features

- Host Interface
 - USB 2.0 Full-speed: 12 Mbits/sec
 - PC/SC Compliant
- Supported Smart Cards
 - Asynchronous & Synchronous
- Smart Card Power Supply
 - 1.8V (20 mA), 3 or 5V (60 mA)
 - Short Circuit Current Limitation
 - Power Up/Power Down Management

- Smart Card Management
 - Presence and Insertion/Extraction Detection
- 4 kV ESD Protection on Card Pins
- Up to 5 LEDs Management
- AT83C22OK/23OK Power Supply
 - 3.6 to 5.5 Volts
 - 100 µA Standby Mode (USB-compatible)
- Temperature Range
 - -40 to +85°C

AT83C22OK/23OK Reference Design (AT89RFD-02)



Technical Package Available on CD-ROM

- Specifications
- Schematics & Bill of Material
- Software Drivers
- Test Utilities



AT83C22OK/23OK Reference Design

Contact Information

Technical Support: mcu@atmel.com

Ordering Information

Part Numbers	Description
Development Tools	
AT89RFD-02	AT83C22OK/23OK Reference Design with Samples
Devices	
AT83C22OK100-RDTIL	VQFP64 in Tray
AT83C22OK100-RDRIL	VQFP64 in Reel
AT83C23OK100-SISIL	PLCC28 in Stick
AT83C23OK100-SIRIL	PLCC28 in Reel
AT83C23OK100-RATIL	VQFP32 in Tray
AT83C23OK100-RARIL	VQFP32 in Reel