

## ➔ AT98SC FAMILY SECURE EMBEDDED SYSTEMS

### Security Modules

Atmel® has developed a new family of hardware security modules to prevent high-tech goods counterfeiting, multimedia contents copying and identity theft. The proven cryptographic protocols implemented in Atmel's AT98SC products protect people privacy and prevent IPs cloning thanks to multi-factor authentication and data secure storage.

### Turnkey Solution

The AT98SC family is a complete and easy-to-use solution offering low-cost, ease of integration, higher security and proven technology.

### Key Features

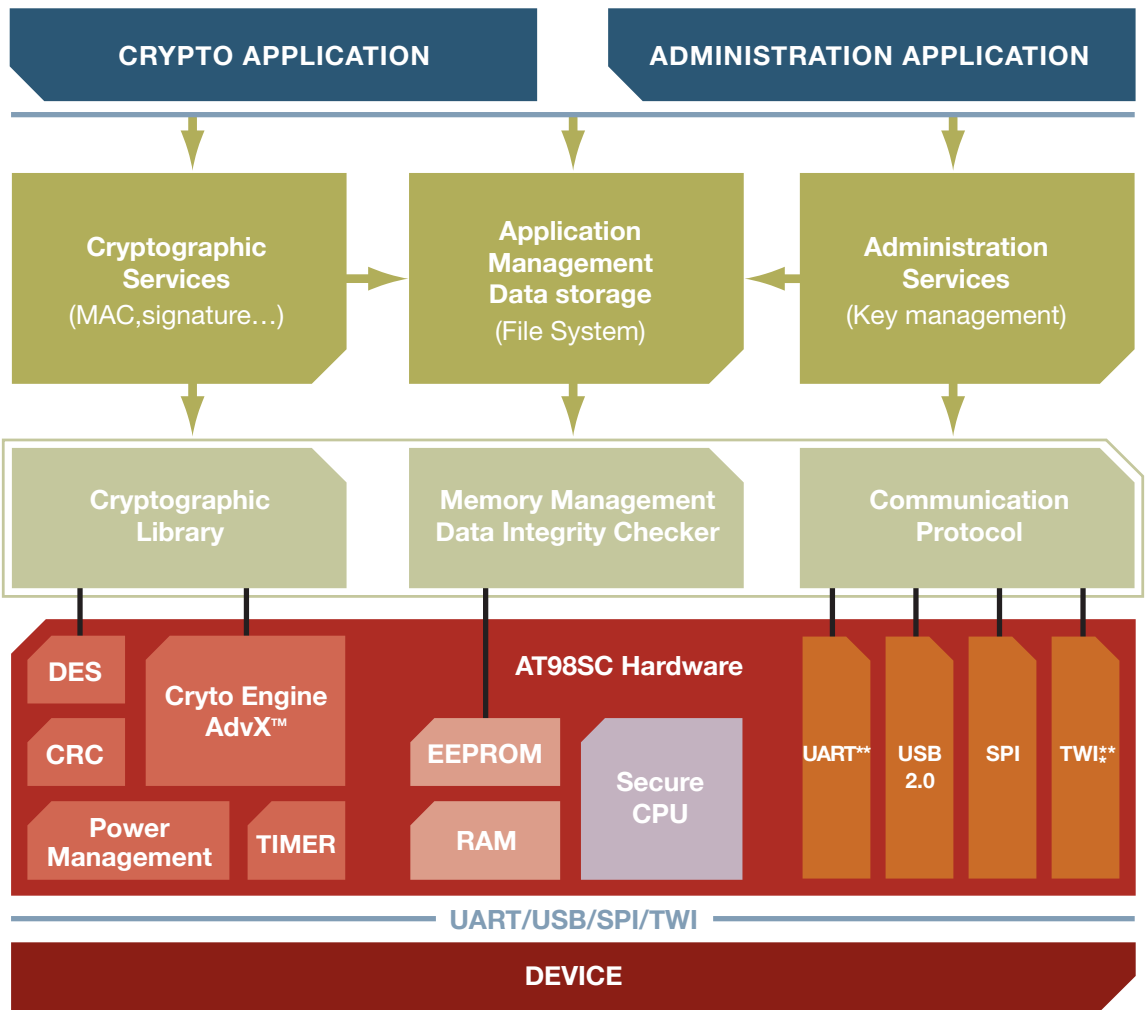
- 8-/16-bit or 32 bit RISC Core
- On-chip Secure Storage on EEPROM for User Data
- Hardware Cryptographic Accelerator
- USB 2.0 Full Speed Interface, USB CCID Compliant
- SPI, UARTs, TWI Interfaces
- Designed to Meet C.C. EAL4+ and FIPS 140-2 Certification

### Applications

- Set Top Boxes
- Gaming Platforms
- Vending machines
- Multimedia Centers
- Routers, Servers
- Ink Cartridges, Peripherals, Batteries
- USB e-Tokens
- Security Dongles
- Secure Flash Drives
- PKCS#11



Based on Atmel smart card design expertise and leadership, the AT98SC family embeds a cryptographic application allowing strong challenge-response authentication, one time password generation, digital signature (RSA PKCS#1, ECDSA), data encryption (3DES, RSA PKCS#1 v2.1), message digest (SHA1,SHA256), public key generation (RSA, ECC) and random number generation. It also includes an administration application to manage contents and configuration of the chip. Data are permanently stored in a file system (EEPROM located) which is fully customizable according to customer application requirements. Folders can be password protected and file access rights can be defined to protect user sensitive data and restrict access to cryptographic features.



(\*) Two Wire Interface (\*\*) Future products

Part Number	EEPROM	I/O Interface	Voltage	Package
AT98SC008CT	8K	SPI	1.62-5.5V	44QFN
AT98SC032CT-USB	32K	USB 2.0	1.62-5.5V	44QFN, 44LQFP, SOIC-8

**Atmel Corporation**  
 2325 Orchard Parkway  
 San Jose, CA 95131 USA  
 Tel.: (408) 441-0311  
 Fax: (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

**Product Contact:**  
 Smart Cards  
 Zone Industrielle  
 13106 Rousset Cedex  
 France  
 Tel.: (33) 4-42-53-60-00  
 Fax: (33) 4-42-53-72-77

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

**Web Site**  
[www.atmel.com](http://www.atmel.com)

© 2006 Atmel Corporation.  
 All rights reserved.

Atmel®, logo and combinations thereof, Everywhere You Are® and others are registered trademarks, AdvX™ and others are trademarks of Atmel Corporation or its subsidiaries. Other terms and product names may be trademarks of others.

6535A-SCIC-10/06 2K



More information on:  
<http://www.atmel.com/products/SecureASSP>

**Disclaimer:** The information in this document is provided in connection with Atmel products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Atmel products. EXCEPT AS SET FORTH IN ATMEL'S TERMS AND CONDITIONS OF SALES LOCATED ON ATMEL'S WEB SITE, ATMEL ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL ATMEL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION, OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF ATMEL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Atmel makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and products descriptions at any time without notice. Atmel does not make any commitment to update the information contained herein. Unless specifically provided otherwise, Atmel products are not suitable for, and shall not be used in, automotive applications. Atmel's products are not intended, authorized, or warranted for use as components in applications intended to support or sustain life.