

➢ Security with Atmel HARD TO CRACK

Security Through Experience

Atmel's secure microcontrollers use advanced process technologies combined with advanced security features and cryptographic processor options to meet the stringent needs of the security market backed by third-party certifications. Atmel has 25 years of expertise in secure microcontroller designs for smart cards with some of the highest security certifications for ICs in the industry.

Third-Party Certifications and Approvals

- Common Criteria EAL4+/EAL5+
- MasterCard® CAST
- Visa® International
- FIPS 140-2 Level 3 and Level 4
- ZKA Certification

Applications

- Banking
 EMV [Credit, Debit], e-Purse, Loyalty,
 Open Platform, Secure Access Module
- e-Commerce
- e-Government
 e-Passport, ID Card, Health Card,
 Driving License, Car Registration
- Hardware and Software System Protections
- Pay TV and Set-top Box
- Physical and Logical Access Control
- Secure Data Storage
- Secure Terminals





Secure Microcontroller Families

AT90SC...

secureAVR™ 8-/16-bit RISC

http://www.atmel.com/products/secureAVR

AT91SC...

ARM® SecurCore™ 32-bit RISC

http://www.atmel.com/products/secureARM

AT91SO...

 $\mathsf{ARM}^{\scriptscriptstyle{(\!g\!)}} \, \mathsf{SecurCore}^{\scriptscriptstyle{\mathsf{TM}}} \, \mathsf{32\text{-}bit} \, \mathsf{RISC}$

http://www.atmel.com/products/SecureTerm

AT98SC...

SecureAVRTM 8-/16-bit or ARM® SecurCoreTM 32-bit RISC

http://www.atmel.com/products/SecureASSP





Security by Design

- Host of Features for Physical and Logical Protection
- Includes but not Limited to:
 - High and Low Voltage Detectors
 - High and Low Frequency Detectors
 - Temperature Detectors
 - Illegal Access Code Detection
 - Illegal Opcode Detection
 - Tamper Monitor

- Non Invasive Attacks: Side Channel Attacks, Fault Injection Attacks
- Invasive Attacks: Reverse Engineering, Microprobing, Laser attacks
- Secure Memory Management, Access Protection
- Random Number Generator
- CRC Engine
- Hardware DES/Triple DES (AIS 31)
- Crypto-Processor and Elliptic Curve Options
- PP9806 and BSI Protection Profiles

Security of Environment

Security of the Environment is Reflected in all Atmel's Work Processes and Procedures

- Product Design
- Product Features
- Product Manufacturing
- Product Shipments

- Information Security
- Security Certification
- Security Maintenance
- Customer and Vendor Partnerships

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Literature request

www.atmel.com/literature

Web Site

www.atmel.com

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