CryptoMemory® For Removable Storage Devices and Reprogrammable Keys

CRYPTOMEMORY KEYS FROM DATAKEY® ELECTRONICS

The CryptoMemory family of devices in a rugged key form provides a solution to ensure security for sensitive materials.



Key Features of Atmel's CryptoMemory Device

- Symmetrical Dynamic Mutual Authentication with 64-bit Cryptographic Keys
- Encrypted Passwords with Attempts Counters
- Stream Encryption Ensures Data Integrity
- 1.5 MHz Compatible 2-wire Serial Interface for Fast Operation
- Available in Standard 8-lead SOIC, PDIP and LAP Packages

Applications

- Data Transport
- Cashless Vending
- Access Control

Key Features of Datakey's CryptoMemory Keys

- Security of Data Exchanged;
 Authentication, Encryption, MAC
- Capable of Multi-applications Within the Same Key
- Fast Data Exchange During Use
- Large Memory Capacity for Data Transport
- High Security for Stored Data
- Easily Matched with AVR Processor
- Easily Programmed by the Customer, both Keyceptacle and Keys
- Secure Data Transfer
- Gaming Machines
- Metering



CRYPTOGRAPHIC SECURE ICS

Atmel Corporation

2325 Orchard Parkway San Jose, CA 95131 TEL 1(408) 441-0311 FAX 1(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

e-mail

literature@atmel.com

Web Site

http://www.atmel.com



Atmel Corporation 2003. All rights reserved. Atmel[®] and combinations thereof and CryptoMemory[®] are registered trademarks of Atmel Corporation or its subsidiaries. Datakey[®] is the registered trademark of Datakey Electronics. Other terms and product names may be the trademarks of others.

5042A-SMEM-04/03/10K

Secure, Portable, Rugged Data and Security Solutions now at your fingertips! Atmel's CryptoMemory chip has been integrated into Datakey's new series of tough, reliable keys, called CryptoMemory Keys. These reprogrammable keys, used with Datakey's Intelligent Keyceptacles, are ideal for access control problems in harsh environments. They can be used in an unlimited number of applications, including security, cashless vending, and portable secure data transfer. Unlike cards that can be lost or damaged, CryptoMemory Keys are designed to fit on your key ring. They have a durable, wear-resistant body that protects the embedded CryptoMemory chip. They can be sterilized, dropped in the mud, washed, exposed to electromagnetic fields or chemicals, and they will still work.

Security

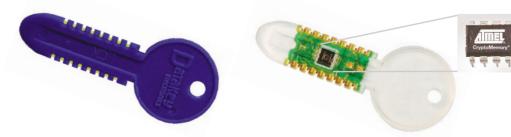
Secure access control is essential in today's world. CryptoMemory Keys will provide you with the solution to ensure only authorized users can gain access to sensitive information, locations, valuables and machinery. Datakey's unique form factors enhance security: no other commercially available devices will mate with the Keyceptacle. Atmel's CryptoMemory provides a dynamic symmetric mutual authentication protocol, with encrypted passwords, data and checksums for optimum security.

Communications

CryptoMemory utilizes a common 2-wire Serial Interface for easy implementation with any microcontroller. Running at up to 1.5 MHz, this synchronous communications interface ensures fast operation in any system. With its set of 15 commands, CryptoMemory offers the flexibility to use any or all of its security features to protect up to 256 Kbits of information.

Superior Development Support

Datakey Electronics has more than 25 years of product development experience in robust non-volatile memory packaging. They can provide unique products to solve security and data transport problems in government, industry and commerce. When combined with the unlimited imagination of design engineers, the uses for Datakey Electronics' CryptoMemory Key products are also unlimited. Their product offerings include secure and rugged keys, tokens, intelligent Keyceptacles and receptacles, reader/writers and system solutions. Datakey's custom solutions are well known and respected throughout the world. Many of the world's largest manufacturers integrate Datakey Electronics' products into their own applications to enhance security, data collection, parameter control and setups. In addition, Atmel's application and engineering support is unparalleled. From the conception of the idea to product delivery, Atmel and its product partners will be there to assist you in the quick and efficient implementation of your application.



Development Tools

Atmel's CryptoMemory Software Development Toolkit, AT88SC25616C-SDT

Datakey: 1-800-328-8828

Atmel contact: cryptomemory@atmel.com

www.cryptomemorykey.com: a Datakey and Atmel joint Web site