Quick Start Guide



A Complete Security Demonstration Featuring Atmel® & SkyeTek® Technologies

System Requirements:

» Windows XP

» 10mb of Available Hard Disk Space

» Available USB Port

Demonstration Kit Contents:

» 1 SkyeModule M2-MH (compact flash style)

» 1 External HF Antenna

» 1 Antenna cable

» 1 USB Board

» 1 USB Cable (note: power over USB)

» 1 Sample Atmel Crypto and CryptoRF tag kit

» 1 SkyeWare CD Containing: Demo Software, Drivers, Software Libraries and Documentation (including; M2 Reference guide, CryptoRF Tag Reference Guide, SkyeWare User Guide)

Product Overview

The CryptoRF Demonstration Kit is a complete RFID solution that allows for quick demonstration and proof-of-concept development when integrating secure RFID into applications or products. The CryptoRF Demonstration Kit features SkyeTek's M2 reader module and Atmel's cryptographic RF tag assortment based on the CryptoRF® product family. One of the most secure HF reader/tag platforms on the market, this solution targets the following applications and industries:

- Contactless Payment
- Government
- Patient Safety
- Pharmaceuticals & ePedigree
- Product Authentication & Anti-counterfeiting
- Retail and Luxury Items

M2 SkyeModule & SkyeWare

SkyeTek's SkyeModule™ M2 combines the rich HF tag/protocol support and performance typical of SkyeTek reader modules with standards based security. Paired with the robust development environment of SkyeWare, this solution delivers the following benefits:

- Industry Leading security - Support for industry standard security, such as TDEA and AES encryption, and support for proprietary security such as CryptoRF
- Easy Integration – Smallest reader module footprint and intelligent software with intuitive API
- Greatest Tag compatibility – Tagnostic™ support for more ISO 15693 and 14443 A/B tags than any other comparable reader on the market
- Unprecedented price performance – Optimized reader/tag performance coupled with low cost software licensing model

CryptoRF

Atmel's CryptoRF™ tags delivers world-class security capabilities to various industries where privacy and data protection are critical. The CryptoRF family of tags consists of 7 models with user memory densities from 1k to 64 Kbits. Key proprietary security features include:

- Hardware embedded cryptography to provide mutual authentication, data encryption, encrypted Message Authentication Codes (MACs) and encrypted passwords
- Customizable security levels
- Special options that include Write Lock Modes, One Time Programmable features and multiple zones each with individually definable access rights

CRYPTORF

Atmel Headquarters
Atmel Corporation
2325 Orchard Parkway
San Jose, CA 95131, USA
Tel: (408) 441-0311
Fax: (408) 487-2600

www.atmel.com

SkyeTek Headquarters
SkyeTek, Inc.
11030 Circle Point Road, Ste 300
Westminster, Colorado 80020, USA
Tel: (720) 565-0441
Fax: (720) 565-8989

www.skyetek.com

Setup and Installation

The following items are needed for installation and setup:
SkyeModule M2 (MH)
USB Host Interface Board and USB Cable
External HF antenna and cable
Atmel CryptoRF tag kit
SkyeWare CD

Software Installation:
1. Insert the CD on a Microsoft Windows XP PC
2. Follow the Install wizard prompts to complete the installation procedure (note: this installs all necessary applications and documentation in the user specified folder)
3. If the CD doesn't Autorun, open the CD directory and click the "SkyeSetup.exe" file

Hardware Setup:
1. Connect the SkyeModule M2 (MH) to the USB board
2. Connect USB cable to the USB Host Interface Board and connect opposite end of USB cable to the host (PC or SBC). The reader is powered over USB
3. Optional – To use the External Antenna, connect the Antenna Cable to both the Antenna and SkyeModule

Getting Started

1. Select the SkyeDemo icon from the Start menu.
2. SkyeDemo will appear if everything is properly connected
3. With one CryptoRF tag parallel to the reader select the Timed Select command to discover the tag in the field.
4. The Crypto RF tag in the vicinity of the antenna will be seen in the Tag IDs field with the TID and tag type listed.
5. The user can also continuously search for tags by selecting the Loop Select command where the reader will start recognizing the tag in the field continuously.
6. To explore more on the functionality of the reader and CryptoRF tag, select the SkyeWare icon from the Start menu and follow prompts.

Troubleshooting

For more information on the products and troubleshooting, please review the product reference guides and accompanying documents. If you have any additional questions regarding the CryptoRF Demonstration Kit please contact Atmel at:

Atmel
1150 E. Cheyenne Mountain Boulevard
Colorado Springs, CO 80906
email: easanghanwa@cso.atmel.com
www.atmel.com

About Atmel Corporation:
Atmel is a worldwide leader in the design and manufacture of microcontrollers, advanced logic, mixed-signal, nonvolatile memory and radio frequency (RF) components. Leveraging one of the industry's broadest intellectual property (IP) technology portfolios, Atmel is able to provide the electronics industry with complete system solutions focused on consumer, industrial, security, communications, computing and automotive markets.

About SkyeTek, Inc:
SkyeTek, Inc. develops reader hardware and software that enables the pervasive adoption of RFID as intelligent networking technology. Numerous Fortune 500 and mid-market customers use SkyeTek's products in applications such as item-level inventory, product authentication, access control, and patron management. In addition to selling SkyeModule readers, SkyeTek licenses ReaderWare software which allows customers to save 40 – 70% compared to the price of common reader modules available in the market today.

© 2007 Atmel Corporation. All rights reserved.
Atmel® and combinations thereof are the registered trademarks of Atmel Corporation. Other terms and product names may be the trademarks of others.

© 2007 SkyeTek, Inc. All rights reserved.
Tagnostic®, ReaderWare™, and SkyeModule™, the SkyeTek swoosh logo, SkyeTek® and Skyeware™ are trademarks or registered trademarks of SkyeTek, Inc. All other trademarks or brand names are the properties of their respective holders. Features and specifications are subject to change without notice.