

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

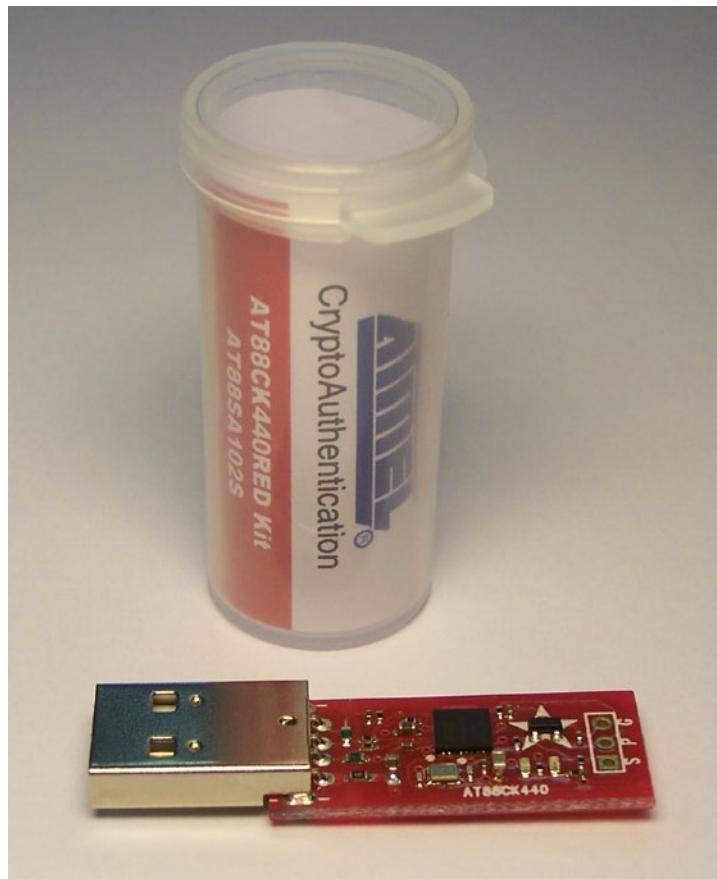
Features

- Installing Atmel CryptoAuthentication Utilities
- Powering the board
- Reading the Device Configuration Information
Atmel AT88SA102S device

Introduction

Atmel® AT88CK440RED is an Atmel CryptoAuthentication™ Evaluation Kit, which can be used as a reference design for an USB application requiring the Atmel CryptoAuthentication product family.

Figure 0-1. Atmel AT88CK440RED Evaluation Kit



Contents

- Atmel AT88CK440RED USB Dongle
- Quick Start Guide

1. Install the Atmel CryptoAuthentication Utilities

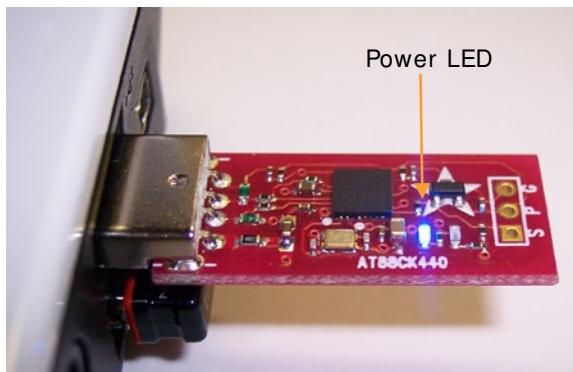
- Visit www.atmel.com/cryptokits to download and install the latest Atmel® CryptoAuthentication™ Utilities
- Scroll down the webpage to Software Files and select the software icon for:
CryptoAuthentication Firmware AT88CK440RED Version x.x

2. Powering up the board

The Atmel AT88CK440RED is a USB powered Device.

- Simply insert the board into an open USB port

Figure 2-1. Atmel AT88CK440RED USB device



3. Reading the Device Configuration Information

- Insert the Atmel AT88CK440RED into a USB port
- Launch the Atmel CryptoAuthentication Utilities
- Click *Start, All Programs, Atmel Crypto Solutions, CryptoAuthentication Utilities*

Figure 3-1. Atmel CryptoAuthentication Utilities



The Atmel® CryptoAuthentication™ Utilities will open to the *AT88SA102S / Hardware Operation* tab.

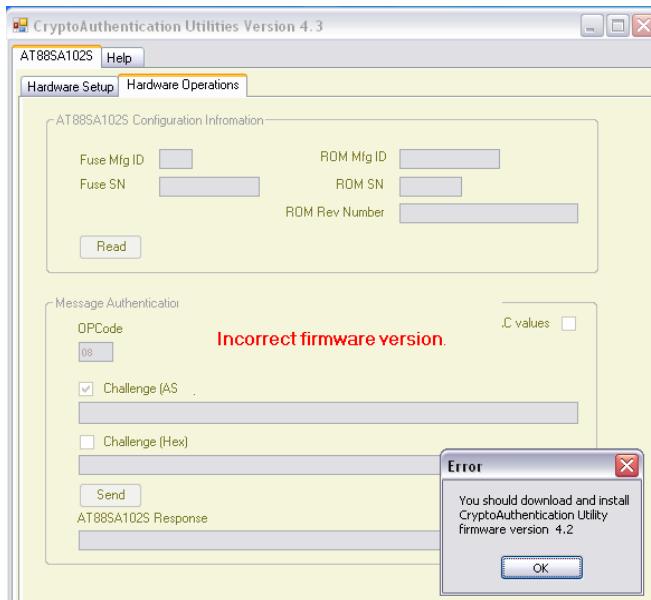
Figure 3-2. Hardware Operations Tab



If the following screen appears, then one of two problems exists.

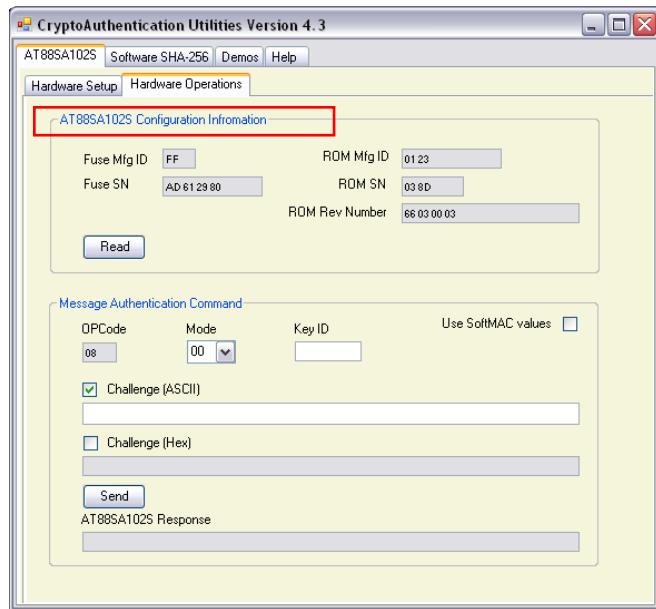
1. Atmel AT88CK440RED has not been inserted into a USB port
 - The enumeration process must be completed prior to launching the utility
2. The firmware is outdated
 - See Section 4, “Firmware Upgrade”

Figure 3-3. Incorrect Firmware Version Error Message



- Click the *Read* button in the *AT88SA102S Configuration Information* section
The section will populate

Figure 3-4. Atmel AT88SA102S Configuration Information populated



Congratulations, your Atmel AT88CK440RED is up and running.

See the *CryptoAuthentication Help* shortcut on your desktop for additional information.

For additional samples, go to: http://www.atmel.com/forms/Samples.asp?family_id=699

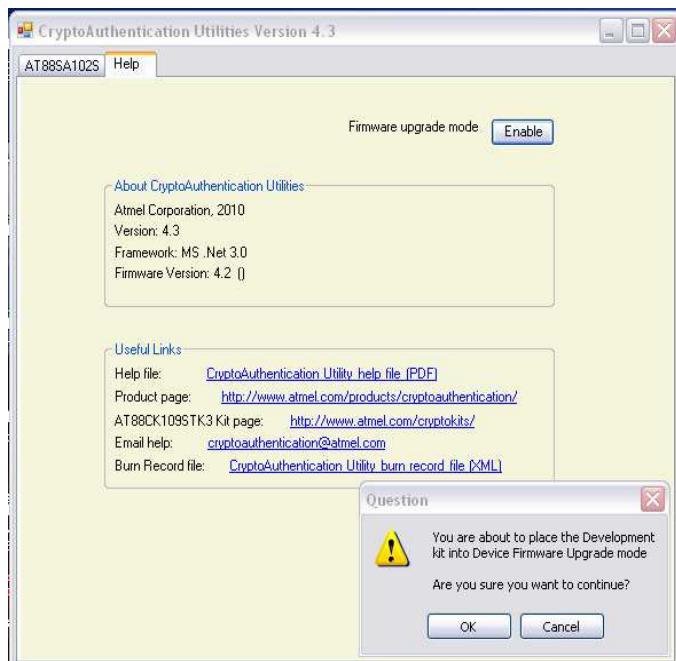
4. Firmware Upgrade

To upgrade the firmware, click the *Help* tab and complete steps one through six.

The following steps enable the DFU mode:

1. Load the Atmel FLIP (FFlexible In-System) Programming utility
2. http://www.atmel.com/dyn/products/tools_card_v2.asp?tool_id=3886
3. Click the Firmware upgrade mode *Enable* button
4. Click *OK* in the popup box
5. Both LEDs will light indicating the board is in DFU mode
6. Launch FLIP to load the new firmware

Figure 4-1. Device Firmware Upgrade Mode





5. References and further information

A complete reference design including schematics, Gerber files, bill of materials (BOM), Hardware User Guide and development and demonstration software is conveniently downloadable from the Atmel® website at www.atmel.com/cryptokits.

6. EVALUATION BOARD/KIT IMPORTANT NOTICE

This evaluation board/kit is intended for **ENGINEERING, DEVELOPMENT, DEMONSTRATION** or **EVALUATION PURPOSE ONLY**. It is not a finished product and may not (yet) comply with some or any technical or legal requirements that are applicable to finished products, including, without limitations, directives regarding electromagnetic compatibility, recycling (WEEE), FCC, CE or UL (except as may be otherwise noted on the board/kit). Atmel® supplied this board/kit "AS IS," without any warranties, with all faults, at the buyer's and further users' sole risk. The user assumes all responsibility and liability for proper and safe handling of goods. Further, the user indemnifies Atmel from claims arising from the handling or use of goods. Due to open construction of the product, it is the user's responsibility to take any and all appropriate precautions with regard to electrostatic discharge and any other technical or legal concerns.

EXCEPT TO THE EXTENT OF INDEMNITY SET FORTH ABOVE, NEITHER USER NOR ATMEL SHALL BE LIABLE TO EACH OTHER FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.

No license is granted under any patent right or other intellectual property right of Atmel covering or relating to any machine, process, or combination in which such Atmel product or services might be or are used.

Mailing Address: Atmel Corporation
2325 Orchard Parkway
San Jose, CA 95131



Product Contact

Product Line

securememories@atmel.com

Sales Contact

www.atmel.com/contacts

Atmel Corporation

2325 Orchard Parkway
San Jose, CA 95131
USA
Tel: (+1)(408) 441-0311
Fax: (+1)(408) 487-2600
www.atmel.com

Atmel Asia Limited

Unit 01-5 & 16, 19F
BEA Tower, Millennium City 5
418 Kwun Tong Road
Kwun Tong, Kowloon
HONG KONG
Tel: (+852) 2245-6100
Fax: (+852) 2722-1369

Atmel Munich GmbH

Business Campus
Parkring 4
D-85748 Garching b. Munich
GERMANY
Tel: (+49) 89-31970-0
Fax: (+49) 89-3194621

Atmel 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

© 2010 Atmel Corporation. All rights reserved. / Rev.: 8725A-SMEM-09/ 10

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

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 THE ATTEL TERMS AND CONDITIONS OF SALES LOCATED ON THE ATTEL WEBSITE, ATTEL 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 ATTEL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS AND PROFITS, BUSINESS INTERRUPTION, OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF ATTEL 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 products are not intended, authorized, or warranted for use as components in applications intended to support or sustain life.