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Atmel CryptoAuthentication Starter Kit

Atmel AT88CK109BK8 Hardware User Guide

Features

- Two 8-lead SOIC sockets
- Supports the Atmel ATSHA204 CryptoAuthentication IC
- Supports communication protocols
 - I²C
 - SWI (Single wire interface)
- Power LEDs

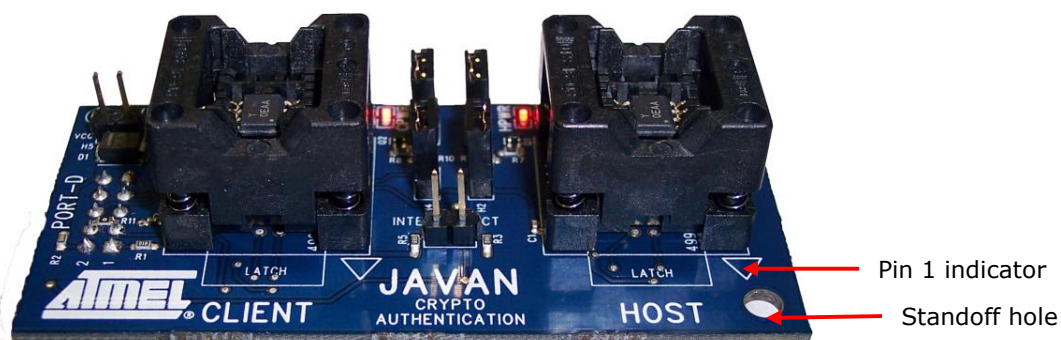
Contents

- Atmel AT88CK109BK8 daughterboard

1. Introduction

Atmel® AT88CK101BK8 is a daughterboard that interfaces with a mcu board via a 10-pin header. The daughterboard has two 8-pin SOIC sockets which can support HOST and CLIENT development with an Atmel ATSHA204 device. This kit uses a modular approach, enabling the daughterboard to connect directly to an STK series AVR development platform to easily add security to applications. An optional adapter kit is also available when the 10-pin header on the daughterboard requires a different pinout. The AT88CK109BK8 is sold with the Atmel AT88Microbase to form the Atmel AT88CK109STK8 starter kit. The AT88Microbase AVR base board comes with a USB interface that lets designers learn and experiment on their PCs.

Figure 1-1. Atmel AT88CK109BK8 daughterboard

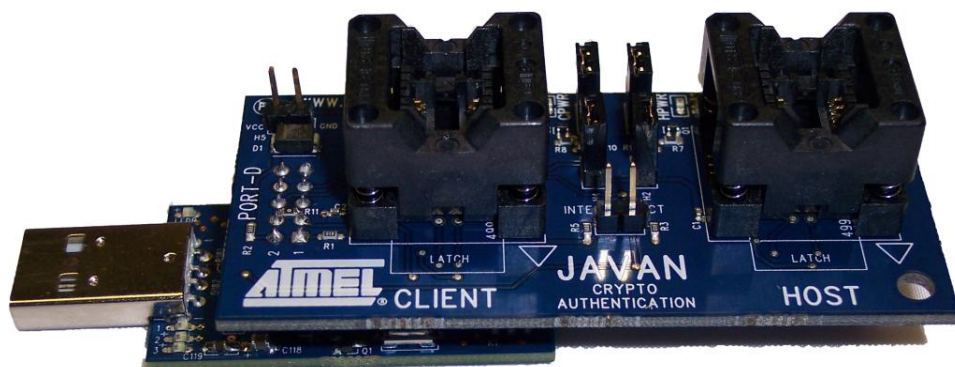




1.2. Atmel AT88CK109STK8 starter kit

The AT88CK109BK8 is sold with the AT88Microbase to form the AT88CK109STK8 starter kit. For additional information on the AT88Microbase, see Atmel doc8723A, [AT88Microbase Hardware User Guide](#).

Figure 1-2. The AT88CK109BK8 adaptor board with the Atmel AT88Microbase



2. Board configuration

2.1. 10-pin interface header

Table 2-1. 10-pin interface header

P10	P9	P8	P7	P6	P5	P4	P3	P2	P1
VCC	GND	NC	NC	NC	NC	NC	NC	SDA	SCL

Note: I²C Pins: SCL, SDA

2.2. Supports 8-lead SOIC interface with the following pinout

Figure 2-1. Pinout configuration

8-lead SOIC			
NC	1	8	V _{CC}
NC	2	7	NC
NC	3	6	SCL
GND	4	5	SDA

2.3. AT88CK301ADP adapter kit

An optional adapter kit is also available when the 10-pin header on the daughterboard requires a different pinout.

Figure 2-2. Atmel AT88CK301ADP adapter kit



Table 2-2. 10-pin squid cable

10-pin squid cable									
P10	P9	P8	P7	P6	P5	P4	P3	P2	P1
black	white	gray	purple	blue	green	yellow	orange	red	brown



3. References and further information

Schematics, Gerber files, bill of materials (BOM), development and demonstration software are conveniently downloadable from the Atmel website at www.atmel.com/cryptokits.

4. 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.

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