# CryptoAuthentication™ Crypto Elements with Hardware–Based Key Storage

Evaluation, Development, and Production Kit Selection Guide

## Kits for Every Stage

Atmel® provides kits to assist evaluators and developers through every stage of the design process—from evaluation all the way to small-run production. All Atmel crypto kits run ACES (Atmel CryptoAuthentication Evaluation System) software to configure the Atmel CryptoAuthentication devices. The combination of user-friendly hardware and software offers users exactly what they need throughout evaluation, development, and production.

USB Type-A    Atmel AT900USN1287 MCU

16 MHz Crystal

ATAES132A
ATSHA204A
ATECC508A
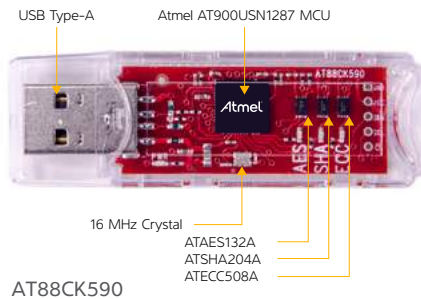
AT88CK590

## It All Starts with a Evaluation Kit

The Atmel AT88CK490 evaluation kit contains three devices: the ATSHA204A, ATECC108A, and ATAES132A. The ATECC508A replaces the ATECC108A on the AT88CK590 kit (red board). These kits allow users to run ACES software to configure and evaluate the operation of any of the three crypto devices on the kit boards. Once users get a feel for the operation and performance of the devices, they can easily use the next tool in the flow.

## The Next Step—the AT88CK101 or the CryptoAuth Xplained Pro Development Kit

The Atmel AT88CK101 is a socketed kit that allows the developer to program CryptoAuthentication devices and then install those devices in their system. Versions that support the various device package types are available. Another development kit option is the CryptoAuth Xplained Pro, which is a standard 20-pin daughterboard that instantly adds CryptoAuthentication devices to the Atmel Xplained and Xplained Pro development environment boards.

AT88CK101                    CryptoAuth Xplained Pro

## AT88CK90000 Secure Personalization Kit (Option)

The Atmel AT88CK9000 allows programming of small device batches of device quickly, easily, and cost-effectively. This option decreases the cycle times of prototype, pre-production, and lower-volume production, improving time to market. The AT88CK900 securely programs up to five devices at the same time.  Running production is literally as easy as pressing a button.

AT88CK9000
Just press the big yellow button to program five devices at the same time.

| Kit Type | Ordering Code | Devices |
|---|---|---|
| AT88CK490 Evaluation Kit | AT88CK490 | ATSHA204A, ATECC108A, and ATAES132A |
| CryptoAuth Xplained Pro Extension | ATCRYPTOAUTH–XPRO | ATSHA204A, ATECC508A, and ATAES132A |
| AT88CK590 Evaluation Kit | AT88CK590 | ATSHA204A, ATECC508A, and ATAES132A |
| AT88CK101 Development Kit (SOT23) | AT88CK101SK-TSU-XPRO | ATSHA204A |
| AT88CK101 Development Kit (8–SOIC) | AT88CK101SK-SSH-XPRO | ATSHA204A, ATECC108A, ATECC508A, and ATAES132A |
| AT88CK101 Development Kit (8–UDFN) | AT88CK101SK-MAH-XPRO | ATSHA204A, ATECC108A, ATECC508A, and ATAES132A |
| AT88CK101 Development Kit (3–lead RBH) | AT88CK101SK-RBH | ATSHA204A, ATECC508A and ATECC108A |
| AT88CK9000 Production Tool (UDFN8) | AT88CK9000-8MA | ATSHA204A |
| AT88CK9000 Production Tool (SOIC8) | AT88CK9000-8SH | ATSHA204A |
| AT88CK9000 Production Tool (8-Lead TSSOP)[1] | AT88CK9000-8TH | ATSHA204A |
| AT88CK9000 Production Tool (3-Contact RBH) | AT88CK9000-RBH | ATSHA204A |
| AT88CK9000 Production Tool (SOT23-3) | AT88CK9000-TSU | ATSHA204 |

[1] TSSOP package is not recommended for new designs

For more information visit www.atmel.com/cryptokits

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