

# Security Builder® ETS™

## embedded trust services module

**Create a trusted platform for embedded devices using Security Builder ETS**, an embedded trust services module which offers secure key storage, key management, and authentication services. The root of trust within a cryptographic system starts with a key, which needs to be accessed and stored securely. Security Builder ETS provides the basis for a variety of trust services including secure boot, code signing, authentication, and anti-cloning functionality. Together with other Certicom Security Architecture products, this allows developers to seamlessly access trusted platform modules, digital certificates, secure protocols and other hardware-based cryptography and key management for stronger, faster security.

Security Builder ETS is a crucial piece of the Certicom® Security Architecture™, a comprehensive, portable and modular solution designed to allow developers to quickly and cost-effectively embed security across multiple families and generations of devices.

### stronger security

Together with Security Builder BSP, Security Builder ETS provides enhanced security with hardware-based key management. Keys stored in hardware can be accessed through a handle and used in trust applications, but the key never leaves the secure, hardware-based store—resulting in stronger security than keys stored in software.

### faster time-to-market and reduced costs

In 2003, EMF\* reported that 24% of projects were cancelled due to unrecoverable schedule slips and 33% of projects did not meet delivery expectations. Security Builder ETS allows developers to focus on the core task of meeting deadlines. Using a common API across a variety of key management and trusted platform modules, Security Builder ETS eliminates the need to integrate multiple toolkits and decreases the developer learning curve, resulting in a faster time-to-market and increased ROI.

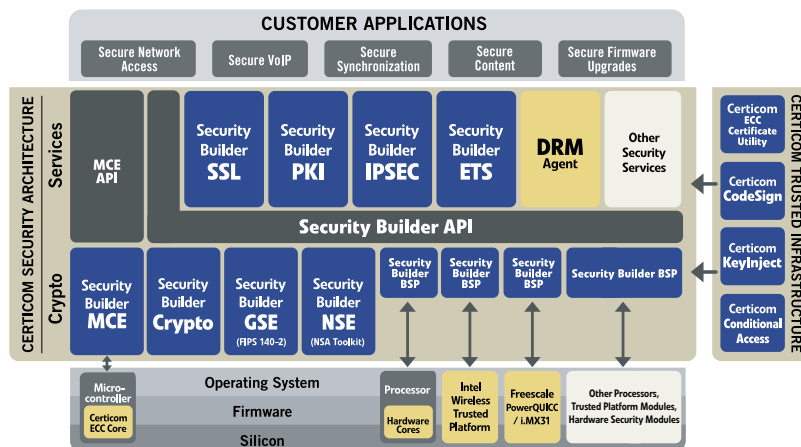
### simplified key management

Security Builder ETS provides a common API for key generation, key storage and key access needed for applications such as secure boot, code signing or anti-cloning. It expands on the functionality provided by Security Builder API to enable access to key management features found in smart cards, hardware security modules and other trusted platform modules. Security Builder ETS can flexibly handle key management in software if there is no hardware key management available.

### part of a comprehensive architecture

Security Builder ETS is a crucial component of the Certicom Security Architecture, a modular set of software cryptographic providers, security services and board support packages which expose cryptographic and key management functionality available in hardware. As a complete solution, the Certicom Security Architecture enables device manufacturers to quickly and cost-effectively embed security into devices and applications.

**Security Builder® ETS™** is part of the Certicom Security Architecture, a comprehensive, portable and modular security platform that includes: software cryptographic providers that offer FIPS 140-2 Validation and meet NSA guidelines for ECC; security services like SSL, IPSec, PKI, DRM and Embedded Trust Services (ETS); hardware security cores and board support packages (BSP) that expose cryptographic functionality available in hardware.



# Features

The following features are supported by Security Builder ETS for the chipsets and operating systems listed:

Security Builder ETS-C	
<b>Programming Language</b>	C
<b>Key Generation</b>	
Software-based	RSA, ECC
Intel Wireless Trusted Platform KeyRing Generation	✓ (Intel WTP only)
Hardware based	✓
<b>Key Access and Storage</b>	
Software based	✓
Hardware based	✓
Intel Wireless Trusted Platform Key Storage	✓ (Intel WTP only)
<b>Monotonic Counter</b>	
Software based	✓
Hardware based	✓
<b>Random Number Generation</b>	
Software based	✓
Hardware based	✓
<b>BLOB Handling</b>	✓
<b>Supported Security Builder BSPs</b>	
<b>Operating Systems</b>	Intel Wireless Trusted Platform Freescale PowerQUICC Texas Instruments OMAP  Green Hills INTEGRITY MontaVista Linux Wind River VxWorks

Contact Certicom for additional OS and BSP support.

Security Builder® PKI-C can be licensed separately to provide additional enrollment and certificate management functionality. Please refer to the Security Builder PKI datasheet for additional information.

If you are looking for hardware-optimized security across multiple operating systems, Security Builder® BSP™ is a board support package for optimized cryptography that can also be licensed from Certicom. Please refer to the Security Builder BSP datasheet for additional information.

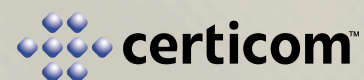
## Need to know how to use the Certicom Security Architecture?

Security Builder ETS is part of the suite of Security Builder modules that are used by more than 300 customers for thousands of applications, including BEA Systems, Motorola, Research in Motion, Sybase, Texas Instruments and Unisys.

For more information, visit [www.certicom.com/securitybuilder](http://www.certicom.com/securitybuilder).

## about certicom

Certicom protects the value of your content, applications and devices with security offerings based on Elliptic Curve Cryptography (ECC). Adopted by the National Security Agency (NSA) for classified and sensitive but unclassified government communications, ECC provides the most security per bit of any known public-key scheme. Visit [www.certicom.com](http://www.certicom.com).



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