



SILEX
INSIGHT

CRYPTO COPROCESSORS

Several versions to serve the different market needs



The SoC/FPGA market is

rapidly evolving

by embedding crypto processor IP

into its products as it offers

several clear advantages:

Hardware implementation of crypto algorithm

gives **better performance,**
lower power consumption
and **higher security**

(side-channel attacks protection, key protection)

than in software layers.

All 3 Crypto Coprocessors

accommodate the different

market needs; all of them offer

full security features,

and **the same** crypto engines

can be included:

Compact

Specifically designed for devices with strict power and area constraints

Standard

Integrates desired cryptographic IP cores additional interfacing, DMA and software layers

Premium

Builds on top of standard features to support isolated hardware key

Crypto Coprocessors



Offloads the intensive tasks from the main processor, increasing the system performance.

Configurable for perfect application fit

100% CPU offload with low latency and high throughput

Full software/driver support

FIPS 140-2 validated: CAVP #C742

Secure Communication (TLS, IPsec, BLE, Zigbee, others...)

Secure boot support

Secure storage support

Optional DPA countermeasures for AES, PK and SM4
Can use keys (from PUF or others) hidden from CPU

Power/area

Interfaces

Flexible Public Key engine Configuration

Hidden asymmetric keys (attestation)

Hardware key generation (hidden from CPU)

Protection against fault-injections

COMPACT

Specifically designed for devices with strict power & area constraints



Very low

AHB



PRODUCT CODE
BA457

STANDARD

Integrates desired cryptographic IP cores additional interfacing, DMA & software layers



Low

AHB/AXI



PRODUCT CODE
BA450

PREMIUM

Builds on top of standard features to support isolated hardware key generation & usage



Medium

AHB/AXI



PRODUCT CODE
BA456



All variants offer full security features, and the same crypto engines can be included in all.



For more information:

www.silexinsight.com

contact@silexinsight.com