



SECURING THE CONNECTED WORLD

WITH EMBEDDED SECURITY IP SOLUTIONS



Our security platforms and solutions includes flexible and high-performance crypto and protocol engines which are easy to integrate and a eSecure IP module which provides a complete security solution for all platforms.

www.silexinsight.com

Complete Security IP Solutions

Choose Single IP or a Complete Module

Highly scalable and flexible silicon proven Security IP for embedded systems used in the ever growing connected world of the IoT. All our turn-key solutions are compliant with most common industry standards (NIST and others). IP integrators can benefit from decades of experience in security ASIC and FPGA design.

SECURITY ENCLAVE

Single subsystems for SoC/ASIC/FPGA to address key security challenges, playing the role of the Root-of-Trust.

MEMORY PROTECTION

Enables on-the-fly encryption/decryption and authentication on the external memory.

PROTOCOL ENGINES

High-performance IP blocks to offload network and security processing.

CRYPTO ACCELERATORS

Accelerates cryptographic operations in System-on-Chip (SoC) environment on FPGA & ASIC.



Click on product name to be redirected to product page for more information

SECURITY ENCLAVE

Highly flexible modules that fit all applications of the heterogeneous Internet-of-Things ecosystem, from the ultra-low power sensor to the connected car.



eSECURE - THE SINGLE MODULE FOR SoC SECURITY

A single subsystem for SoC/ASIC/FPGA to address key security challenges, playing the role of Root-of-Trust.

eSecure Module For SoC Security: BA470



HSM FOR AUTOMOTIVE

The ISO 26262 functional safety standard compliant solution for automotive applications, for use on SoC, ASIC or FPGA.

HSM For Automotive (ASIC): BA470
HSM For Automotive (FPGA): BA471



HSM FOR INDUSTRIAL

For a wide range of applications for use on SoC, ASIC or FPGA.

HSM For Industrial (ASIC): BA470
HSM For Industrial (FPGA): BA471

MEMORY PROTECTION

Securely and transparently write/read data or code from external memory. It Leverages our AES core and the unique architecture enables a high level of flexibility (cache size, performances) and allows it to be used by micro-controller and multi-core architectures.



Inline Decrypter IP Core

Enables on-the-fly execution of encrypted code from Flash.

Inline Decrypter IP Core: BA432a



Memory & Bus Protection IP Core

Enables on-the-fly encryption/decryption and authentication to the external memory.

Memory and Bus Protection IP Core: BA432b

PROTOCOL ENGINES

The key components to boost your data center, including one of the fastest SSL/TLS handshaking engines in the industry and ultra-high performance MACsec and IPsec processing.



TLS Handshake Hardware Accelerator

A secure connection engine that can be used to offload the compute intensive Public Key operations.

TLS Handshake Hardware Accelerator: BA452a



Blockchain Hardware Accelerator

Offload compute-intensive public key operations such as signature generations and verifications.

Blockchain Hardware Accelerator: BA452b



1.5Tb MACsec Engine

Providing connectionless data integrity, data origin authenticity and confidentiality on OSI layer 2.

1.5Tb MACsec Engine: BA451



IPsec Engine

Providing confidentiality, connectionless data integrity, data-origin authentication and replay protection on OSI layer 3.

IPsec Engine: BA454

CRYPTO ACCELERATORS

A wide range of silicon proven IP Cores for implementation on ASIC/SoC and FPGA technology that enables faster cryptographic processing.



Crypto Coprocessors

Hardware IP core platform that accelerates cryptographic operations in System-on-Chip (SoC) environment on FPGA and ASIC.

Crypto Coprocessor (Compact): BA457
Crypto Coprocessor (Standard): BA450
Crypto Coprocessor (Premium): BA456



Public Key Crypto Engine

A versatile IP core for hardware offloading of all asymmetric cryptographic operations.

Public Key Crypto Engine: BA414EP



Block/Stream Ciphers

A wide range of solutions suitable for a wide range of low-cost and high end applications.

AES Engines

AES-GCM Multi-Booster: BA415
AES-GCM Ultra-Low Latency BA415LL
AES-XTS Multi-Booster: BA416
AES Multi-Purpose: BA411e

ChaCha20-Poly1305 Engines

ChaCha20-Poly1305 Multi-Booster: BA420
ChaCha20-Poly1305 Crypto Engine: BA417

SM4 Engines

SM4-GCM Multi-Booster: BA415
SM4-XTS Multi-Booster: BA425
SM4 Crypto Engine: BA419

ARIA Engine

ARIA Crypto Engine: BA424

3GPP IP Cores

SNOW3G Crypto Engine: BA423
ZUC Crypto Engine: BA421
KASUMI Crypto Engine: BA422

3DES Engine

3DES Crypto Engine: BA412



Hashing Engines

Flexible wrappers supporting a wide selection of programmable hashing models.

Hash Crypto Engine: BA413
SHA-3 Crypto Engine: BA418



Random Number Generators

Used for key generation, key exchange, digital signature, encryption and more for all FPGA, ASIC and SoC designs.

True Random Number Generator: BA431
Deterministic Random Bit Generator: BA433

About Silex Insight

Silex Insight is a recognized market-leading independent supplier of Security IP solutions for embedded systems and custom OEM solutions for AVoIP/Video IP Codecs. The security platforms and solutions from Silex Insight include flexible and high-performance crypto-engines which are easy to integrate and an eSecure IP module that provides a complete security solution for all platforms. For custom OEM solutions for AVoIP/Video IP Codecs, Silex Insight provides high-end image and video compression solutions for distributing low latency, 4K HDR video over IP. Development take place at the headquarters near Brussels, Belgium.

SECURE ANY APPLICATION






CONFIGURABLE
Include features as needed

SCALABLE
Define performance and footprint depending on your requirements

CUSTOMIZABLE
Adapt to your specific needs

BUILT FOR YOUR SPECIFIC NEEDS



-  Global sales offices
-  Worldwide customer base
-  Founded in 1991



-  Silex Insight = Silicon experts with know-how
-  Expertise on PCB design, FPGA and ASIC
-  Design services to fully develop to your needs

Part No: MKTSI001-EN 2.2

WE'VE GOT YOUR SECURITY COVERED!



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