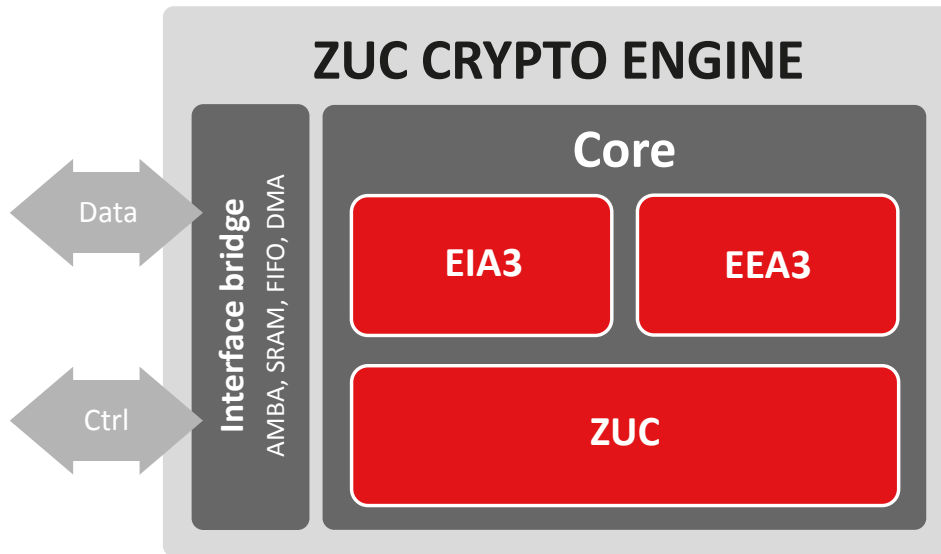




## ZUC CRYPTO ENGINE

The ZUC IP core is 3GPP confidentiality and integrity algorithms (EEA3/EIA3) stream cipher for telecommunication applications, requiring high performance with reduced silicon resources. It is optimized for maximum throughput and minimum latency.

The unique architecture enables a high level of flexibility. The throughput and features unique to each application can be taken into account in order to select the most optimal configuration of the implemented IP.



### Features

- ✓ ASIC and FPGA
- ✓ ETSI specifications & OSCCA compliant
- ✓ Supports:
  - EEA3 (confidentiality)
  - EIA3 (integrity)
- ✓ Data interface: AMBA (AXI/AHB) with optional DMA
- ✓ Control interface: APB/AXI4-lite

### Applications

- ✓ 3GPP mobile telephony (GSM, UMTS, LTE, 5G)
- ✓ Secure mobile communications

### Implementation aspects

Standardized AXI-4 and AHB (optional) I/O simplifies system integration. All our IP cores are delivered with software drivers to simplify ASIC or FPGA integration.

We are also offering other 3GPP IP cores, such as KASUMI (BA422) and SNOW3G (BA423).

### Deliverables

- ✓ Netlist or RTL
- ✓ Scripts for synthesis & STA
- ✓ Self-checking RTL test-bench on referenced vectors
- ✓ Documentation

V1.1

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