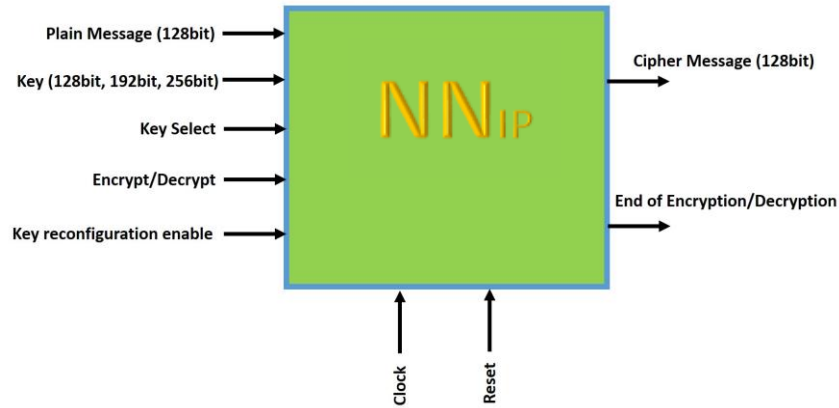# NNIPLPIOTACORN100

100µW 100Mbps IoT ACORN Module

Features

- Implements ACORN to latest NIST FIPS PUB 197
- 100µW maximum power consumption
- Maximum throughput of 100Mbps
- Handles encryption/decryption and key expansion in one IP core
- Supports all ACORN operating modes.
- Optimized for Xilinx FPGA kits
- Optimized for multiplexing and sensor fusion applications

Applications

- Low power tiny area IoT hardware security modules for biomedical, body area network, wearable, and sensor fusion applications.

Block Diagram

Description

The NNIPLPIOTACORN100 soft IP is intended to be used in Xilinx FPGA kits as an RTL optimized code. In addition, it is available as a hard ASIC IP which can be cost-effectively ported across process nodes and technology foundries.

The hard ASIC IP provides up to 100Mbps throughput with power consumption of 100µmW and very small Silicon area.

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IP Deliverables

- Datasheet
- RTL code for the soft IP core
- Layout View (gds2) for the hard ASIC IP core
- Integration Support

Najah Now IP

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NajahNow Digital hard IP cores have been silicon verified in a number of foundries (TSMC, Global Foundries, UMC, and Fujitsu) at nodes ranging from 180nm to 22nm.