

AHB DES and Triple DES with DMA

SILVACO

Overview

The AHB DES/TDES Encryption/Decryption Engine is a configurable core that interfaces to an AHB microprocessor bus. The Controller encrypts or decrypts blocks of data based on the DES encryption standard. In order to accommodate a wide variety of system requirements, the Engine can be generated in two modes: LowLatency and LowGateCount. For a TDES system, three DES cores are instantiated.

Features

- AHB Master component DMA
- AHB Slave component Register Interface
- DES/TDES modes supported:
 - Electronic Code Book (ECB)
 - Cipher Block Chaining (CBC)
 - Output Feedback (OF)
- Maskable Interrupt

Deliverables

- Verilog Source
- Complete Test Environment
- AHB Bus Functional Model

