

Features

- FIPS 46-3/ANSI X9.52 compliant triple DES core
- Supports key sizes of 56 and 112-bits
- Performance >500 Mbps
- Higher performance available
- Portable to any technology library
- Easy integration into any SoC design

Benefits

- Full-width data ports maximize performance, minimize latency
- Fast delivery for accelerated time to profit

Applications

- Encrypted data storage
- Secure communications
- Secure processing
- IPsec acceleration
- E-commerce
- VPN
- Financial Transactions



3DES-A100

Triple Data Encryption Standard

The Athena Group delivers the Triple Data Encryption Standard (3DES) as a semiconductor intellectual property (IP) core. Athena's 3DES-A100 3DES core complements Athena's leading-edge TeraFire public key (PK) cryptography accelerators. Whether your application demands 3DES performance or the power savings of a dedicated core, Athena's 3DES-A100 core delivers.

The 3DES-A100 is compliant with FIPS 46-3 and ANSI X9.52 and supports user programmable key sizes of 56 and 112-bits. The 3DES-A100 can provide encryption/decryption performance greater than 500 Mbps.

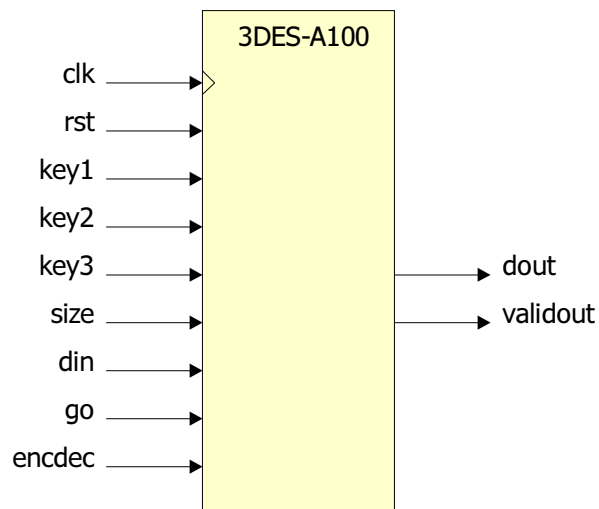


Figure 1: Block Diagram of 3DES-A100

Product Description

The 3DES-A100, shown in Figure 1, is a fully synchronous design and features dedicated, full-width data input, output, and key input ports for maximum throughput and minimum latency. A data valid output is provided to simplify retrieval of output data.

Each 3DES-A100 core is delivered as a firm core optimized to any customer-specified library. The package includes the core, verification suites, timing and simulation models, and documentation.

Athena's IP cores are designed for efficient implementation and rapid delivery. The company's proprietary, wholly automated implementation and verification methodology produces synchronous, testable IP cores of the highest quality. All Athena IP cores achieve a score of 95% or better on the OpenMore scale of IP reusability.

About The Athena Group, Inc.

The Athena Group, Inc. of Gainesville, Florida licenses high-performance DSP technology that delivers breakthrough performance, reduced area, and lower power consumption in a broad range of SoC products. Athena's proprietary technology powers leading edge applications such as secure e-commerce, wireless communications, and video compression. In addition to their high-value application level solutions, Athena also produces a full line of fundamental DSP functions suitable for SoC integration.

Athena was founded in 1986 and is privately held.



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