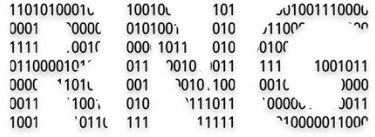
FONQP



Chaotic Borel Selector

FONQP Random Number Generator is a True Hardware RNG design producing high-quality random bits using chaotic noise.

This design has been packaged into a pluggable USB 2.0 module, making it compact and easy to use across various applications. The pipeline works by sampling an autonomous chaotic circuit to generate noise, followed by applying a stream conditioner to enhance randomness. The design is easily manufacturable with a high quality/cost ratio.

Specifications

- Source H_∞ > 0.89 bits/bit
- Conditioned H_∞ > 0.98 bits/bit
- Device bit-rate ~ 10Mbps (USB 2.0)
- Package dimensions: 70x35x20 mm

Area of Applications

Internet of Things (IoT)
Cryptographic Key Generation
Banking and Trading Sectors
Classical Encryption
Quantum Communication

Compliance & Assessments

- NIST SP 800-22 STS
- Dieharder

fonqp.github.io

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