

Quantum randomness

Our QRNG generates truly random numbers using the natural quantum noise in silicon circuit. This ensures an unpredictable and high-entropy output, crucial for security applications. Its compact and efficient design allows easy integration into various systems. Unlike other methods, it does not need a light source to function. The randomness comes from electrical fluctuations that occur naturally, making it highly secure and reliable.

Hardware overview

- Compact and efficient hardware design
- Dedicated interface for seamless HW/SW integration
- Low-power solution for extra battery life

Use Cases

Our QRNG technology is highly versatile and can be applied across various industries requiring secure, high-quality randomness, for example:

- **IoT & Embedded systems**
 - Secure device authentication and identity management in connected devices
 - Enhancing randomness in distributed systems to prevent predictability attacks
- **Financial services**
 - Ensuring fairness in electronic trading and blockchain transactions
 - Enhancing security for digital wallets and banking applications
- **Scientific research & simulations**
- **Gaming & Lotteries:**
 - Providing truly random number generation for online gambling and fair gaming applications

QRNG Chip Technical Specifications

Hardware	
Die Size	1.5*1.5*0.5 mm
Speed	1 MRTN/s
Power	15 mW
Security Standart	NIST 800-90 a/b/c compliant
Technology	CMOS
Array resolution	160*180

Seamless Integration

Designed with IoT applications in mind, our QRNG can be easily integrated into various systems. Its compact form factor and efficient power consumption make it ideal for embedding directly into CPUs, microcontrollers, and security chips. The device interfaces seamlessly via USB, Ethernet, or other standard communication protocols, ensuring compatibility with a wide range of platforms. Whether for secure communication, cryptographic key generation, or enhancing system entropy, our QRNG adapts effortlessly to different environments.

Get in Touch

Interested? Get in touch with our team!
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