

India's Silicon Photonics Technology NRZ



Overview

Chennai, August 2025 — In a breakthrough for India's deep-tech ecosystem, IIT Madras researchers have developed the nation's first silicon photonics-based Quantum Random Number Generator (QRNG), a technology that promises to significantly strengthen cryptography, defence . Chennai, August 2025 — In a breakthrough for India's deep-tech ecosystem, IIT Madras researchers have developed the nation's first silicon photonics-based Quantum Random Number Generator (QRNG), a technology that promises to significantly strengthen cryptography, defence . In a momentous event that marks a significant leap towards India's technological advancement, Secretary, Ministry of Electronics and Information Technology (MeitY) Shri S Krishnan inaugurated the Centre for Programmable Photonic Integrated Circuit and Systems (CPPICS) in Chennai today. The Indian Institute of Technology Madras (IIT Madras) has indigenously developed and licensed to the industry India's first Silicon Photonics-Based high-speed Quantum Random Number Generator (QRNG) in a deal worth Rs. The Technology Transfer Office, IIT Madras, signed the Rs 1 crore. Chennai: India on Friday marked a significant step towards technological self-reliance in advanced electronics with the launch of indigenously developed Silicon Photonics solutions at Indian Institute of Technology Madras (IIT-Madras) in Chennai.

Article Content

IIT Madras signs Rs. 1 Crore deal to license India's First Silicon ...

Developed at the Centre for Programmable Photonic Integrated Circuits and Systems (CPPICS), IIT Madras, this milestone highlights the technology's strategic value and its potential to

India working towards development of Silicon Photonic Processor Chips

Under the visionary guidance of the MeitY, India is actively fostering the development of diverse PIC technology platforms, including silicon photonics, diamond photonics, polymer photonics,

IIT Madras unveils India's first indigenously developed silicon ...

The Indian Institute of Technology (IIT) Madras has launched two homegrown silicon photonics products, marking a first for India. Developed at the Centre of Excellence for Co-Packaged

Roadmapping the next generation of silicon photonics

In order to complete the transition to the era of large-scale integration, silicon photonics will have to overcome several challenges. Here, the authors outline what these challenges are and

India's Indigenous Silicon Photonics Solutions: A Leap Toward Tech

Chennai: India on Friday marked a significant step towards technological self-reliance in advanced electronics with the launch of indigenously developed Silicon Photonics solutions at Indian

India unveils homegrown silicon photonics tools, eyes chip self ...

Tech News News: In a push to strengthen India's semiconductor and photonics ecosystem, indigenously developed silicon photonics technology solutions — including a Pro.

IIT-M licenses India's first silicon photonics-based Quantum Random ...

IIT-M licenses India's first silicon photonics-based Quantum Random Number Generator The technology was created at the Centre for Programmable Photonic Integrated Circuits and

IIT Madras Licenses India's First Silicon Photonics Quantum RNG In

The Indian Institute of Technology Madras (IIT Madras) on Monday said it has signed a Rs 1 crore licensing agreement to transfer India's first silicon photonics-based quantum random

IIT Madras licenses Silicon Photonics Quantum RNG to industry

In a landmark step for India's quantum innovation ecosystem, @iitmadras has licensed its indigenously developed high-speed Silicon Photonics-based Quantum Random Number

India Opens New Silicon Photonics Research Center

(Image: Quality Stock Arts/Adobe Stock) India's new Center for Programmable Photonics Integrated Circuits and Systems (CPPICS) opened

IIT Madras Unveils India's First Silicon Photonics-Based Quantum

With this development, India joins the elite club of nations possessing home-grown, silicon photonics-based quantum security technology.

IIT Madras Indrarka Quantum silicon-photonics QRNG

"We are honoured to partner with IIT Madras in bringing India's first Silicon Photonics-based QRNG to market. We are committed to making this

IIT Madras Unveils India's First Silicon Photonics-Based Quantum

Chennai, August 2025 — In a breakthrough for India's deep-tech ecosystem, IIT Madras researchers have developed the nation's first silicon photonics-based Quantum Random Number Generator

India Silicon Photonics Market (2021

India Silicon Photonics Market Size Growth Rate The India Silicon Photonics Market is projected to witness mixed growth rate patterns during 2025 to 2029. Starting at 13.86% in 2025, the market

QSFP-DD Optical Transceivers – MapYourTech

Silicon Photonics Integration: The adoption of silicon photonics technology has improved QSFP-DD power efficiency and manufacturing scalability. Silicon photonics modules integrate optical

IIT M develops silicon photonics-based Quantum Random Number

The Indian Institute of Technology Madras (IIT Madras) has developed a silicon photonics-based high-speed Quantum Random Number Generator (QRNG). The institute has also

Made in Chennai: IIT Madras gives India its silicon photonics toolkit ...

On Friday, at IIT Madras, the Ministry of Electronics and IT (MeitY) formally launched two indigenously developed Silicon Photonics technology solutions, tools that are designed to help India

IIT Madras inks 1 cr deal to license India's 1st silicon photonics ...

New Delhi, Aug 18 (IANS) The Indian Institute of Technology (IIT) Madras on Monday signed an agreement to license the indigenously developed India's first silicon photonics-based high-speed

From Lab to Market: IIT Madras Signs Rs 1 Cr Deal for India's First ...

IIT Madras has signed a Rs 1 crore licensing deal to transfer its indigenously developed Silicon Photonics-based Quantum Random Number Generator (QRNG) to Indrarka Quantum

IIT Madras signs Rs. one cr deal to license India's First Silicon ...

Chennai, Aug 18(UNI) The Indian Institute of Technology-Madras (IIT-Madras) has
indigenously developed and licensed to the industry India's first Silicon Photonics-
based high-speed

IIT Madras licenses India's first silicon photonics quantum random ...

IIT Madras has signed a Rs 1 crore licencing deal to transfer India's first silicon photonics-based quantum random number generator to industry. Developed at CPPICS, the

Press Release Page | Press Information Bureau

Under the guidance of MeitY, Government of India, the country is actively fostering the development of diverse PIC technology platforms, including silicon photonics, diamond photonics,

IIT Madras develops India's first silicon photonics-based high-speed ...

The Indian Institute of Technology Madras (IIT Madras) has indigenously developed and licensed India 's first silicon photonics-based high-speed quantum random number generator (QRNG).

IIT Madras licenses India's first silicon photonics-based quantum ...

In a significant breakthrough for India's quantum technology landscape, the Indian Institute of Technology Madras (IIT Madras) has licensed India's first Silicon Photonics-Based

IIT Madras Pioneers India's First Silicon Photonics QRNG in Rs 1

IIT Madras licenses India's first silicon photonics-based Quantum Random Number Generator (QRNG) in a Rs 1 crore deal with Indrarka Quantum Technologies, boosting cryptography,

When Light Replaces Electricity — India's Hidden Chip Revol

When global headlines scream about chip shortages and AI revolutions, few imagined the next breakthrough might emerge not from Silicon Valley — but from indian soil.

IIT Madras licenses India's first silicon photonics

IIT Madras has indigenously developed and licensed to the industry India's first Silicon Photonics-Based high-speed Quantum Random Number

Made in Chennai: IIT Madras gives India its silicon photonics toolkit ...

When we say India is building a semiconductor future, we usually mean silicon chips that process data using electrons. On Friday, at IIT Madras, the Ministry of Electronics and IT (MeitY)

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.estlascleaning.co.za>

Email: info@estlascleaning.co.za

Phone: +27 63 214 8579

Address: 22 Oxford Road, Parktown, Johannesburg, 2193, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

