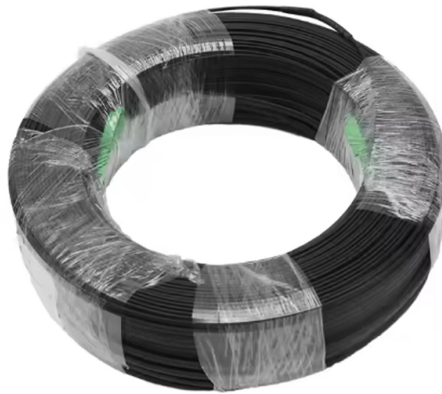


The most advanced silicon photonics module in ASEAN



Overview

CHIPX develops advanced technologies for AI clusters, hyperscale data centers, high-speed communications, and sovereign-grade mission-critical systems. The core technology is based on silicon photonics transceivers and receivers—designed for high-speed data transfer in AI clusters. Malaysia has long been a bedrock of the global semiconductor supply chain, with a significant number of players that have established production plants in Penang, Kulim, Muar, Melaka, and Kuala Lumpur, mainly for assembly, test, and packaging. SINGAPORE and. In particular, we have developed one of the world's fastest modulators and photodetectors. This enables electrical and optical signals to be converted interchangeably at a high speed of 400 billion times a second per channel, paving the way towards multiple-fold improvements in energy efficiency. Dedicated 8" Silicon Photonics enhanced foundry services with world class production capabilities. Copyright 2018 CompoundTek Pte Ltd. The facility will introduce advanced GaN/SiC manufacturing, driving Malaysia's entry into.



Article Content

Silicon photonic transceivers in the field of optical communication

Abstract Silicon photonics has developed rapidly in recent years, which has received widespread attention due to the

Silicon Photonics

The origin of silicon photonics can be dated back to Soref's very early works in 1980s [1,2]. Fig. 1 shows the advantages, materials,

Silicon photonics: from transceivers to speed-of-light AI

Since 1985, silicon photonics has progressed from the initial development of high confinement waveguides to

A New Era in Data Center Networking with NVIDIA Silicon Photonics

NVIDIA is integrating silicon photonics directly with its NVIDIA Quantum and NVIDIA Spectrum switch ICs to improve

CHIPX to build advanced semiconductor manufacturing fabrication ...

CHIPX, a next-generation semiconductor and photonics manufacturer, has announced plans to establish a state-of

Malaysia Advances Semiconductor Manufacturing

CHIPX™, a next-generation semiconductor and photonics manufacturer, announced plans

Southeast Asia Semiconductor | Industry Outlook 2026 (FREE)

This progress confirms the rising importance of the Asia semiconductor ecosystem within the wider semiconductors –

The “Silicon Crossroads”: A visit to BOI Thailand as the nation bets ...

Backed by a national strategy targeting \$79 billion in investment, Thailand is rapidly repositioning itself within the

Silicon Photonics Devices and Integrated Circuits

The purpose of this Special Issue, “Silicon Photonics Devices and Integrated Circuits”, is to present the most recent

ASEAN Semiconductor Market Size, Share & Forecast

The ASEAN semiconductor market size was valued at \$95.91 billion in 2024 & is projected to grow from \$109.62 billion

The photonics industry in Southeast Asia is poised for significant ...

APE 2025 is set to deliver a lineup of insightful conferences, curated in partnership with industry experts, thought

CHIPX Plans ASEAN's First 8-Inch GaN/SiC Wafer Fab in Malaysia to ...

Semiconductor and photonics company CHIPX has announced plans to build an 8-inch (200mm) wafer fabrication

UMC Licenses imec's iSiPP300 Technology to Extend Silicon Photonics ...

United Microelectronics Corporation (NYSE: UMC; TWSE: 2303) ("UMC"), a leading global semiconductor foundry,

Intel® Silicon Photonics

What Is Silicon Photonics? Silicon Photonics is a combination of two of the most important inventions of the 20th

A*STAR — Powering the Future of Silicon Photonics and Advanced

The Institute of Microelectronics (IME) in Singapore has emerged as a strategic research and development hub in Asia,

Silicon Photonics Based 1.6T Transceiver Modules

Mar. 31, 2025. Coherent will show a live demonstration of its silicon photonics-based 1.6T-DR8 transceiver module using a Marvell®

Mapping ASEAN's semiconductor moment

GLOBAL SUPPLY CHAIN RESILIENCE AND SECURITY White paper Mapping ASEAN's semiconductor moment

Mapping ASEAN's semiconductor moment

This is a shortened version of Angela Tritto's paper on Mapping ASEAN's position in the global semiconductor

Semiconductor Industry | A*STAR

Anchored in advanced packaging and advanced photonics, and reinforced by complementary capabilities, we help companies move

Press Release

Combined with UMC's advanced packaging technologies, these complementary silicon photonics and TFLN platforms

Silicon Photonics Momentum Builds: Samsung

Aside from Samsung, Taiwan's UMC is also pushing forward in silicon photonics. According

Tower Semiconductor and Innolight Collaborate on Breakthrough Silicon ...

Potential Positives Collaboration with Innolight to utilize new Silicon Photonics platform enhances product offerings in

Photonic Integrated Circuits: Research Advances and Challenges in ...

Silicon photonics, serving as a cornerstone technology in modern information technology, demonstrates significant

Industry insight: photonics to scale AI data centers

From co-packaged optics at the board level to silicon photonics and optical circuit switches at the rack and network

Silicon Photonics | Compoundtek Pte Ltd

Dedicated 8" Silicon Photonics enhanced foundry services with world class production capabilities.

CHIPX's plan to expand ASEAN's high-end chip design

CHIPX develops advanced technologies for AI clusters, hyperscale data centers, high

What is Silicon Photonics? : Hitachi High-Tech Corporation

What is Silicon Photonics? Silicon photonics is a technology for fabricating optical and electronic integrated circuit on

What's New

Two groundbreaking innovations drew strong attention. The first is a silicon photonics chip engineered for high-speed,

Contact Us

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