Media Factsheet
For Immediate Release

HITACHI

13 May 2025

Hitachi to Showcase Sustainable Semiconductor Solutions at SEMICON SEA 2025

Hitachi Asia Ltd. will be participating in SEMICON Southeast Asia (SEMICON SEA 2025), where it will showcase how its latest and next-generation semiconductor innovations are driving the shift toward more sustainable manufacturing across the global supply chain.

In alignment with this year's SEMICON SEA theme, "*Stronger Together*," Hitachi's presence emphasizes the importance of cross-industry collaboration in navigating today's most pressing challenges, from economic uncertainty and shifting global policies to the accelerating demands of sustainable semiconductor manufacturing.

Located near the main entrance at **Level 1** of the **Sands Expo and Convention Centre, Singapore**, the Hitachi booth (L1801) will showcase an integrated suite of semiconductor capabilities spanning infrastructure enhancements as well as front-end and back-end processes, across its **Energy & Management**, **Materials / Logistics**, and **Production** offerings to drive digital and green transformation in semiconductor fabrication facilities:

1. **Energy & Management**: Hitachi's energy management solutions support greener semiconductor manufacturing through smarter, more resilient energy systems. Aligning with global ESG targets, SF6-free technology significantly reduces greenhouse gas emissions.
2. **Materials / Logistics**: Hitachi enhances the supply and value chain network through the sourcing of sustainable materials. With Autonomous Mobile Robot (AMR) solutions, logistic efficiency is greatly improved both in the clean fabrication environment and within the compounds of the semiconductor plant.
3. **Production:** From recipe development to fabrication optimization, Hitachi is advancing all key processes in both front-end and back-end production. By meeting stringent standards and

regulations, Hitachi's solutions, including automation, oil-free compressors and connected intelligence such as AI-powered support for engineers contribute to a sustainable semiconductor manufacturing ecosystem.

Featuring a comprehensive portfolio of 17 solutions at its booth, the exhibit showcases the strength of the One Hitachi approach, addressing key challenges that the industry is facing today, and the pressing question of **"What's next in sustainable semicon manufacturing?"**

Hitachi Solutions at a Glance

Energy & Management	
Solutions	**About**
EconiQ® • *SF6-Free Switchgear*	State-of-the-art gas-insulated switchgear designed for maximum energy efficiency and sustainability. It reduces greenhouse gas emissions by using SF6-free technology, helping meet global ESG targets.
Digital Transformer • *Digital Solutions for Transformer*	The TXpert™ Ecosystem is a groundbreaking innovation in energy infrastructure, digitally revolutionizing transformers. It boosts performance and reliability through real-time data monitoring and predictive analytics, improving grid resilience and supporting the transition to a more sustainable and flexible energy system.
Grid-eXpand™ • *Modular and Prefabricated Grid Connection Solution*	A modular and prefabricated grid connection solution that accelerates grid expansion for a carbon-neutral future. Tailored to specific needs, it offers easy upgrades, fleet harmonization, and reduced construction risks.

Material/Logistics	
Solutions	**About**
Total Solution Services • *Value & Supply Chains Solutions*	Value Chain & Supply Chain Solutions for more efficient procurement and management of sustainable materials.
AMR-Elevator Integrated Solution • *Autonomous Mobile Robot (AMR) Solutions*	Serves as a key enabler of smart factories by utilizing advanced automation and autonomous navigation within the factory grounds, reducing human error, enhancing productivity, and providing reports for traceability.

Production	
Solutions	**About**
Nano & Core Technology Solutions • *Process & Metrology Equipment* • *Electron Microscopes / Atomic Force Microscopes*	Process and metrology equipment (Etcher, CD-SEM, SEM, etc.) designed to meet stringent process requirements and deliver high-quality outputs. Available in various configurations to support advanced operational needs.
CXL accelerator platform • *Data Processing Platform*	Redefining the boundaries of high-performance computing, enabling high-speed communication between CPUs and accelerators. Compatible and flexible across multiple computing environments.
ApSRAM Controller	Designed to manage fast, ultra-low-power memory for AI and smart systems. Easily adjustable and updatable for various uses without

• *Edge AI Memory Solution*	hardware changes. Delivers fast, reliable performance while saving energy.
AI-based support for Semicon Recipe Development • *Recipe Optimization*	Leveraging machine learning for recipe optimization in the complex field of nanoscale plasma processes. Accelerates process development for next-generation technology nodes.
Smart Maintenance of Semicon Equipment	Increase equipment uptime through efficient maintenance operations. Empower field service engineers with real-time AI advice and training through virtual demonstrations.
Recipe Management	A comprehensive system for managing recipe specifications in factories, offering full control over access rights, version management, visual editing, and seamless download/upload of recipes to/from equipment.
Upper Host Connectivity Platforms • *GEM/GEM300, EDA Package*	Includes GEM300 and EDA connectivity packages, enabling equipment automation and data collection for 200mm and 300mm semiconductor, PV, MEMS, and LED factories during wafer processing and testing. Fully compliant with SEMI 300mm and SEMI EDA standards.
CyberSIM • *Host & Equipment Simulator*	A connectivity test tool for semiconductor fabs that simulates both Host and Equipment. It supports GEM/GEM300 compliance checks, verifies non-functional requirements on equipment, and validates SEMI compliance of fab operation scenarios.
Equipment Front End Module (EFEM) • *AGV/AMR Implementation*	Hitachi is a leading provider of fully GEM300-compliant panel EFEMs, customized to meet the specific needs of process tools, including lithography, plasma treatment, edge coating, laser, and shipping preparation tools. We offer a single-wire SECS/GEM link to the Host Controller, connecting both GEM300 and non-GEM300 compliant tools within the same production line.
Automation Solutions • *Consumer Electronics Automation* • *Warehouse Automation* • *Life Sciences Automation*	With core competencies across various engineering disciplines, Hitachi provides high-speed, high-precision solutions, including turnkey automation, customized assembly equipment, feasibility studies, and build-to-print equipment. We have a strong track record in industries such as semiconductor, electronics, and medical device manufacturing.
Compressed Air Solutions	Oil-free screw air compressors provide ultra-clean air for semiconductor applications. Featuring Zero Purge technology, they optimize energy use, enhance productivity, and reduce costs. Available in 15-450kW ranges, we deliver reliable performance for sensitive manufacturing processes.
Compressed Monitoring Solutions	IoT-powered to enhance performance, reliability, and optimize compressor efficiency in semiconductor manufacturing. Enables proactive maintenance through real-time monitoring, alerts, and failure history tracking.

As part of the event, visitors can attend a featured session at the **TECHStage on 20 May at 4.00pm (Basement 2)**, where **Mr Shinichi Sakai, Managing Director of Hitachi Asia**, will share insights into Hitachi's expertise in the semiconductor space and how its innovations are tackling key industry shifts. He will be joined by **Mr Genichiro Yamaguchi, Managing Director of Hitachi High-Tech Singapore**, who will delve into the company's comprehensive semiconductor solutions and its role in shaping the future of the industry.

Booth Information of Hitachi at SEMICON SEA 2025
Date & Time: 10am - 5pm (20 – 21 May), 10am - 4pm (22 May)
Booth: L1801(First row near main entrance)
Location: Level 1, Sands Expo and Convention Centre

Hitachi TECHStage Showcase
Date & Time: 20 May, 4pm – 4:15pm
Location: Basement 2, Sands Expo and Convention Centre
Speakers: Mr Shinichi Sakai (MD of Hitachi Asia Ltd.) & Mr Genichiro Yamaguchi (MD of Hitachi High-Tech Singapore)

End of Media Factsheet

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Participating Hitachi Group of Companies
Hitachi Ltd.
Hitachi Asia Ltd.
Hitachi Digital Services
Hitachi Energy
Hitachi High-Tech Singapore
JR Automation
Mobiveil, Inc.

About Hitachi Asia Ltd.

Hitachi Asia Ltd., (Hitachi Asia) a subsidiary of Hitachi, Ltd., is headquartered in Singapore. With offices across seven ASEAN countries Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam – Hitachi Asia and Hitachi's subsidiary companies offer IT, OT (Operational Technology) and products to support customers in their transformation journeys. We will contribute to the growth in the ASEAN region by co-creating with customers to identify the social challenges and needs and deliver the solutions. For more information on Hitachi Asia, please visit the company's website at https://www.hitachi.asia/.

Information contained in this media factsheet is current as of the date of the announcement, but may be subject to change without prior notice.