

Record-Breaking Delivery in Penang's First Full-Scale DC: From Brownfield to Mission Critical Data Hall in 2.5 Months

The Fortune 500 semi-conductor specialist urgently required a data hall; Open DC's Understand-Customer-First policy once again exceeded customer experience.



Client Overview

A Fortune 500 semiconductor manufacturer, valued at over USD 32.7 billion, operates across more than 20 international offices. Renowned for its innovation leadership and product excellence, the company manufactures high-performance semiconductors that power the world's growing AI and digital transformation ecosystem. With Research and Development (R&D) forming the backbone of its corporate strategy, nearly 25% of its annual revenue is dedicated to advancing next-generation technologies and securing its extensive portfolio of patents. To support this innovation agenda, the company required a secure, high-performance infrastructure capabilities of enabling real-time collaboration, efficient data exchange and global R&D integration — all within a compressed project timeline.

Business Challenge

As the company expanded its regional R&D capabilities, it required an **immediate data centre space and power to meet demand from its customers.** This site functions as a centralized and highly secure hub for its research teams — a facility that could bring together talent, innovation, and engineering excellence under one roof. Key requirements included:

- A dedicated R&D data centre environment with an integrated engineering lab and workspace.
- Operational space; capable of housing up to 200 server racks.
- Accelerated site deployment with target completion of 12 months
- Comprehensive security and compliance to safeguard sensitive IP and proprietary research data.

The challenge demanded a trusted infrastructure partner with proven capability to deliver mission-critical facilities; without compromising on quality, compliance, or delivery speed.



Expertise and Solution Delivery

Open DC; recognized for its deep expertise in enterprise-grade data centre solutions were appointed to deliver the client's stringent requirements. The holistic partnership ecosystem, world-class engineering with infrastructure specialist, were entrusted to deliver a turnkey solution.

- Meticulously designed the purpose-built 2MW data hall and 40,000sqft facility specifically for its R&D operations engineering hub.
- Dedicated and innovative workspace to promote collaboration and communication amongst the department.
- To align with the compliance and sustainability aspect of Tier-compliant infrastructure, built to meet the highest standards of uptime, energy efficiency, and scalability.
- Security excellence 24/7 Security Operations Centre (SOC) with six layers of protection, ensuring full compliance and proactive threat monitoring.
- Regulatory and operational alignment with global data protection and safety standards.
- Dedicated professional engineers to mitigate any risks during deployment.



Benefit and Outcomes

The project achieved outstanding operational and delivery outcomes, surpassing expectations on every front.



Site Selection and Transformation

Exceeded the expectation in site selection and transformed the site to be a secured and productive DC site. It was completed in just 2.5 months; significantly faster than the 12-month original target.



Security

24/7 proactive monitoring by onsite engineering team and continuous SOC oversight. Daily site inspections conducted twice per day to pre-empt potential faults before customer impact.

Capacity to Scale

Not only overdelivered power capacity, but also provided the ability to scale in the next 3-5 years.



Customer's Ouote

"The understand-customers-first policy by Open DC and the unwavering commitment stands as a benchmark for speed, precision and reliability in data centre delivery. This empowers our global teams to collaborate securely, innovate faster, and protect mission-critical intellectual property. We trusted Open DC in our bandwagon as the supreme semiconductor manufacturer with future-ready innovation R&D. Their deliverables have demonstrated proactive collaboration and client-first delivery rapid turnaround reinforced. This is truly; Pay Local, Get Global Results"

Senior VP for Infrastructure and Operations, APAC and Japan Regions.

Compliance, Sustainability and Audit Reporting

100% compliant; and aligned with the perimeters of guidelines.

Infrastructure

Future-ready DC and innovative engineering hub; projects were delivered on time by 98.2% and regional strategy Goal Achievement Rate improved by 37%.

About Open DC

Empowering Southeast Asia's Digital Future

Open DC, a wholly-owned subsidiary of Extreme Broadband Sdn Bhd, principally engaged in providing a full range of premium services in our connectivity-rich data centres. We are also home to DECIX-JBIX Internet Exchange (IX), a partnership synergy between Malaysia's second IX and the world's leading IX to accelerate the development of connectivity hubs in Malaysia.

DC Locations

- Cyberjaya: CJ1
- Johor: JB1 Menara MSC Cyberport | JB2 Menara Ansar
- Kedah: D8-1 Delapan
- Penang: PEl Menara Suntech | PE2 Bayan Lepas

















