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SILICON ISLAND DEVELOPMENT

Silicon Island
Research on Its Differentiating Value Propositions

2024

MAKING AN IMPACT THAT MATTERS since 1845

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Preface

The global electronics industry has garnered significant attention from countries worldwide, due to its critical role in driving new technological advancements such as artificial intelligence (AI) and electric vehicles (EVs), as well as its increasing strategic importance within the current geopolitical landscape.

Malaysia is the 6th largest semiconductors exporter and accounts for 13% of global assembly, testing and packaging (ATP) capacity. Moving up the value chain is a strategic focus with the New Industrial Master Plan (NIMP 2030) through grooming globally competitive local integrated circuits (IC) design champions and attracting wafer fabrication players; and the National Semiconductor Strategy (NSS) which targets at least RM 500 billion (~USD 110 billion) in semiconductor-related investments. Malaysia is also a key semiconductor trading partner to both Western and Eastern countries with its neutral and non-aligned stance.

Penang contributes roughly two-thirds of Malaysia's electronics industry output and boasts one of the world's most comprehensive electronics ecosystem. The Bayan Lepas Free Industrial Zone (FIZ) on Penang island has long been the preferred destination for any hi-tech and electronics manufacturer looking to set up in Southeast Asia. Unfortunately, land scarcity in the Bayan Lepas FIZ threatens to limit future investments and hinder Penang's continuous growth in the electronics industry.

Silicon Island, located off the southern tip of Penang island, is an exciting development designed to redefine Penang's landscape and position Penang as a world-leading hi-tech and electronics hub by focusing on high-value activities within the electronics industry. It has been master-planned to be a smart and sustainable city with world-class Environmental, Social and Governance (ESG) features, while leveraging its proximity to the robust electronics ecosystem in Bayan Lepas FIZ.

To provide further details on the unique value propositions of Silicon Island to overseas and domestic investors, Silicon Island Development Sdn. Bhd. (SID) has requested Deloitte Southeast Asia (hereinafter "Deloitte" or "we") to commission a study from an objective third-party perspective. This report ("Silicon Island — Research on its Differentiating Value Propositions") summarizes Deloitte's analysis on the features and market relevance of Silicon Island. As the basis for analysis, we have benchmarked Silicon Island against 3 of the world's leading electronics hubs with respect to the four aspects below:

- Workforce and Talent
- Industrial Ecosystem and Business Climate
- Infrastructure and Accessibility
- ESG Features

This report aims to provide a practical reference for any companies looking to set up operations in Silicon Island. We are grateful to SID for providing the necessary data and information.

"A 2,300-acre island development project over the next 10 to 15 years will be one of the key enabling strategies towards fulfilling the Penang State's vision – a World-Class Tourist Destination, a Green Technology Park for high technology industries, and a project with Smart City Planning addressing Environmental Sustainability"

01 Malaysia – A Key Player in the Global Electronics Industry

Malaysia is now a global key player in the electronics industry and actively going up the value chain, driven by a forward-looking and national level strategic focus.

Past: 50 years of building up an electronics ecosystem

In the 1970s, Malaysia's transformation into a major electronics hub began with the arrival of the 'Eight Samurai' in Penang, which are Intel, Robert Bosch, Clarion, Advanced Micro Devices, Hewlett Packard (now Keysight Technologies and Agilent Technologies), Litronix (now ams Osram), Hitachi (now Renesas Electronics) and National Semiconductor[1].

Current: Global established key player

Being the 6th largest exporter of semiconductors, Malaysia is one of the top players in the global electronics industry. Malaysia accounts for a substantial 13% of global assembly, testing and packaging (ATP) capacity, while being a critical semiconductor trading partner to the United States (supplying 23% of all chips used in the US) and China (~20% of exports to China are semiconductors). Malaysia's comprehensive and sophisticated ecosystem has attracted global hi-tech and electronics companies to set up operations here, resulting in the electronics industry becoming a significant contributor to Malaysia's economy.

Notes: 1) No longer present in Penang following a corporate M&A exercise
Sources: Economic History of Malaysia, Malaysian Investment Development Authority, desktop research, Deloitte analysis

An established and sophisticated ecosystem
Malaysia's electronics ecosystem houses companies from at least 8 out of the top 10 leading semiconductor manufacturing countries, with 80% of the companies operating here for at least a decade. Besides manufacturing, companies have also located their profit and loss (P&L)[1] responsibilities here while managing global and regional responsibilities[2].

An attractive destination
Since 2019, Malaysia has attracted ~RM 283 billion (~USD 63 billion) in electronics-related investments, with electronics representing 56% of total manufacturing investments in 2023. Malaysia's more than 60 Investment Guarantee Agreements have also provided foreign investors legal guarantees against political risks while ensuring fair treatment for their investments in Malaysia.

A significant economic contributor
Semiconductor devices and integrated circuits (ICs) account for RM 390 billion (~USD 84 billion) at ~30% of Malaysia's total exports.

Forward-Looking: Moving up the value chain

With the introduction of the New Industrial Master Plan 2030 (NIMP 2030) and the National Semiconductor Strategy (NSS), Malaysia aspires to strengthen its presence in high value-added activities (*e.g., IC design, R&D, wafer fabrication*) in the semiconductor value chain. The introduction of these policies aims to reinforce Malaysia's role in the ever-evolving electronics industry and position Malaysia as "a neutral and non-aligned location for semiconductor production for a more secure and resilient global semiconductor supply chain", as outlined by Malaysia's Prime Minister in the NSS.

NIMP 2030

The NIMP 2030, which drives Malaysia's industrial policy development, has identified 2 Mission-based Projects (MBPs) for semiconductors, which are to cultivate globally competitive local IC design champions in electric vehicles (EVs), renewable energy and AI, and to attract new advanced wafer fabrication to Malaysia. There is also an emphasis on establishing a Generative AI (GenAI) hub, developing end-to-end capabilities in EV manufacturing as well as accelerating adoption of smart manufacturing.

National Semiconductor Strategy

The National Semiconductor Strategy aims to attract at least RM 500 billion (~USD 110 billion) in foreign and domestic investments across the semiconductor value chain, backed by RM25 billion (~USD 5.6 billion) in fiscal support. The strategy prioritizes key areas of IC design, advanced packaging, semiconductor capital equipment, and intends to develop Malaysia as a global hub for semiconductor R&D.

Notes: 1) Autonomy on profit generation and budget allocation; 2) Includes activities such as global supply chain, commodity management, centers of excellence, and global business services
Sources: Malaysian Investment Development Authority, Department of Statistics Malaysia, Malaysia Semiconductor Industry Association, desktop research, Deloitte analysis

Malaysia remains one of the leading semiconductor manufacturing countries in the region.

Malaysia's existing electronics ecosystem is concentrated around assembly, testing and packaging (ATP) and automated testing equipment (ATE), with substantial activities in other segments of the value chain (e.g., IC design, wafer fabrication, semiconductor capital equipment). Both Vietnam and India, which are strong in electronics products assembly and IC design activities respectively, are also trying to gain a foothold in the manufacturing segment of the value chain through incentives and policies. Nevertheless, Malaysia remains advantageous for semiconductor companies looking to set up or expand their operations here, aided by a sizeable and skilled workforce as well as a government committed to elevating Malaysia as a global leader in the semiconductor industry.

	Malaysia	Singapore	Vietnam	India
Overall Positioning	**Established backend ecosystem with sizeable & productive workforce and moving up the value chain with a focus on IC design**	**Focus on high-value activities (wafer fabrication and semicap) with a small and skilled workforce**	**Existing strength in electronics product assembly with intention to enter IC design**	**Strong in IC design but majority of the electronics workforce are in low-value manufacturing activities**
Electronics Ecosystem Positioning	• **~13%** of global **assembly, testing and packaging** capacity with **expertise in advanced packaging** • **Local champions** in value chain (e.g., Vitrox as ATE leader) • **Substantial activities** in **IC design**	• **~5%** of global **wafer fabrication** capacity • Houses leading **semicap players** (e.g., AMAT, KLA) • Preferred location for **regional HQs** and **corporate functions**	• **Strong in electronics products assembly** such as smartphones (e.g., Samsung) • **Targeting design activities** such as Electronic Design Automation (e.g., Synopsys)	• **~20%** of global **IC design workforce** • **Presence in EMS**[1] activities (e.g., Foxconn in Telangana) • Focus on **entering manufacturing segment** (e.g., Micron in Gujarat)
Electronics Workforce	**~620,000**, with the **major cluster in Penang**, with leading productivity-cost ratio	**~70,500**, with **a majority in high-value activities** such as wafer fabrication	**~1,300,000**, **mostly in smartphones assembly** with major clusters in Ho Chi Minh and Hanoi	**~2,000,000**, with **a majority in low-value activities** such as finished electronics and electrical products assembly
Government Support	**~USD 5.6B** fiscal allocation for National Semiconductor Strategy	No publicly announced subsidies	**National strategy** on semiconductor industry	**USD 10B** fiscal support from India Semiconductor Mission
Semiconductors Exports[2]	**USD 79B**, **~7%** of world's total exports	**USD 122B**, **~11%** of world's total exports	**USD 13B**, **~1%** of world's total exports	**USD 0.6B**, **~0.05%** of world's total exports
Ease of Doing Business	Ranked **12**th globally (**2**nd in Southeast Asia)	Ranked **2**nd globally	Ranked **70**th globally	Ranked **63**rd globally

Least Favorable *Most Favorable*

Notes: 1) Electronic Manufacturing Services; 2) 2022 data, based on HS code 8542 for integrated circuits
Sources: Ministry of Investment,Trade and Industry of Malaysia, India Semiconductor Mission, VietnamNet Global, International Trade Centre, World Bank Group, Information Technology and Innovation Foundation, desktop research, Deloitte analysis

02 Penang – Silicon Valley of the East

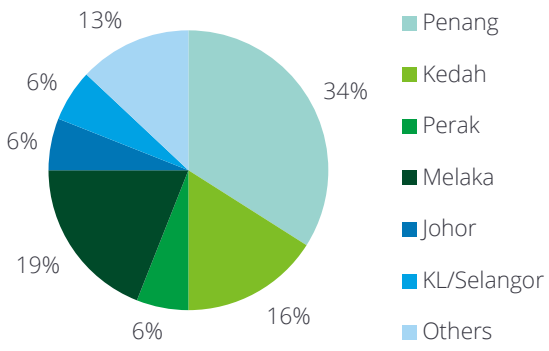
Penang represents two-thirds of Malaysia's semiconductor industry and has a mature electronics ecosystem with both breadth and depth, while welcoming companies from all countries.

At the heart of Malaysia's electronics industry is Penang, also known as the "Silicon Valley of the East", with one of the best electronics ecosystems in the world. Additionally, Penang is also a great place to live, offering a variety of lifestyle benefits, ranging from cultural heritage to nature recreation activities.

Small in stature, big in impact

In 2023, Penang ranked 3rd among all Malaysian states in terms of Gross Domestic Product (GDP) per capita and attracted 40% of Malaysia's approved manufacturing investments. It is the preferred destination for hi-tech and electronics investments in Malaysia, accounting for one-third of all approved foreign direct investments (FDIs) projects in semiconductors from 2021 to 2022, as shown in Figure 1.

Figure 1: Approved Electronic Components FDIs Projects by State from 2021 to 2022



Domestically, Penang accounts for a staggering 65% of Malaysia's semiconductor trade flows, while globally, it holds a remarkable 8% of global ATP output and contributes 5% of global semiconductor sales.

A robust and diverse industrial ecosystem

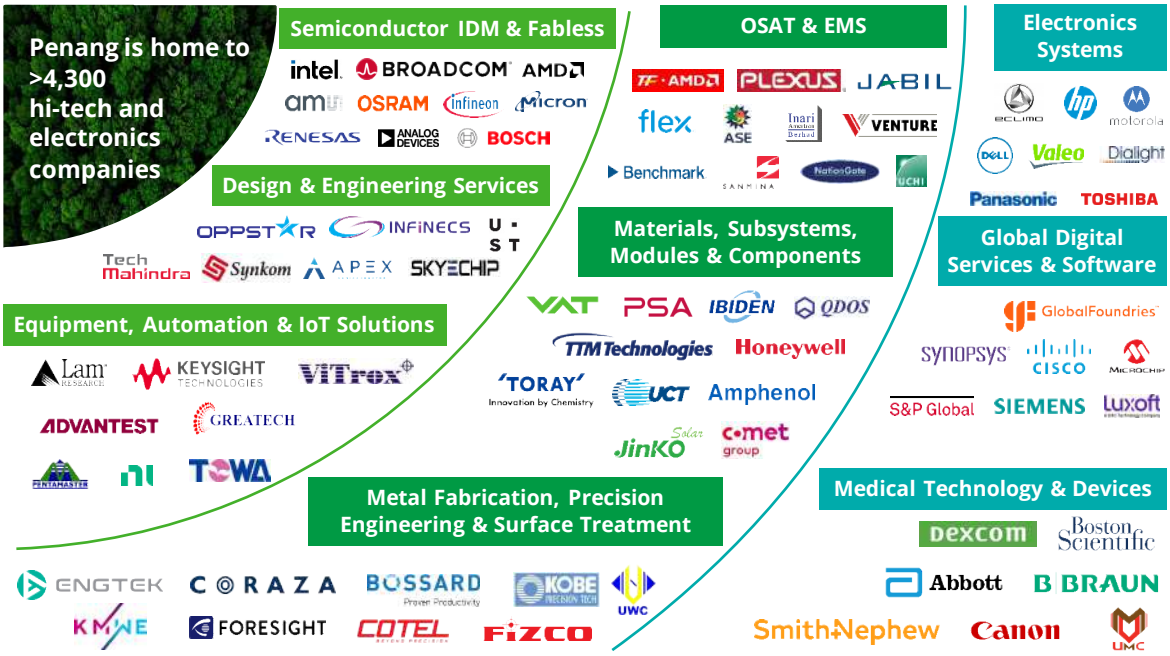
More than 4,300 hi-tech and electronics companies call Penang home, of which roughly 350 are Multi-National Corporations (MNCs) and 4,000 are Small-Medium Enterprises (SMEs) as shown in Figure 2. These companies cover the end-to-end electronics value chain, from IC design to manufacturing to end user industries such as medical devices, with strong local supply chain capabilities in supporting high-value added activities such as equipment fabrication and advanced packaging.

Penang has also made its name as a major Global Business Services (GBS) hub, housing more than 200 Malaysia Digital Status companies with major electronics companies such as Jabil and GlobalFoundries setting up their regional or global shared services here.

The SMEs in Penang are well-diversified with expertise across various fields to support the operations of automated test equipment (ATE), semiconductor equipment fabrication, and outsourced assembly and test (OSAT), to name a few. The presence of such a diverse ecosystem has contributed to a robust industrial landscape, providing companies setting up in Penang access to a localized and ready-to-support supply chain.

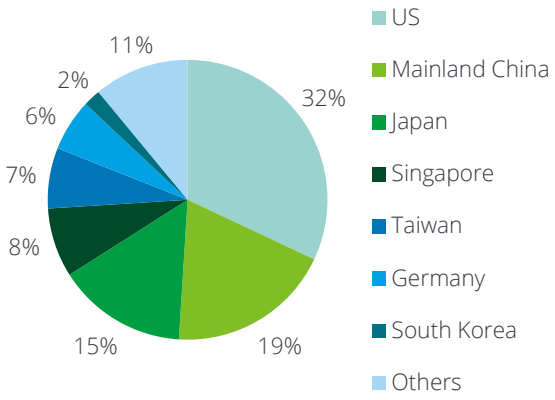
Sources: InvestPenang, Malaysian Investment Development Authority, SEMI, Department of Statistics Malaysia, Deloitte analysis

Figure 2: Examples of Companies in Penang's Ecosystem



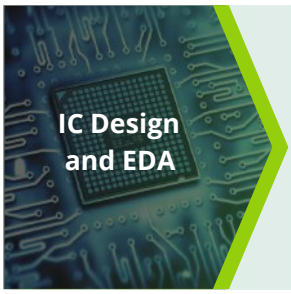
Leveraging on Malaysia's neutral and non-aligned stance, Penang is a hub for electronics companies from all over the world. Over half of all electronics MNCs in Penang are either from the United States (32%) or Mainland China (19%), with Japan (15%), Singapore (8%), Taiwan (7%) and South Korea (2%) cumulatively account for another one-third of all electronics MNCs in Penang as shown by Figure 3. Electronics MNCs from Germany also have a substantial presence in Penang, accounting for 6% of all electronics MNCs.

Figure 3: Electronics Companies in Penang by Origin



Sources: InvestPenang, desktop research, Deloitte analysis

Penang's ecosystem has drawn top companies around the world across the electronics and adjacent sectors.



StarFive 赛昉科技

1st design center in Southeast Asia

"Penang was chosen for its talent availability and the most concentrated integrated circuit (IC) design in Asia"

Ong Chin Hu
Vice President and General Manager
of StarFive Technology Malaysia

Lam RESEARCH

Largest manufacturing plant worldwide

"We chose Penang for its talented workforce with experience in aerospace, health sciences manufacturing and other high-tech fields"

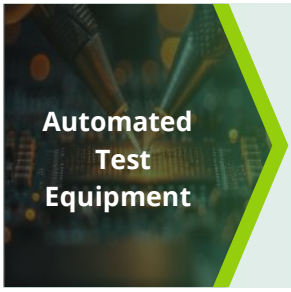
Andrew Goh
Vice President and General Manager
of Lam Research Southeast Asia

intel.

1st and largest overseas facility for 3D advanced packaging

"Intel's decision to invest in Malaysia is rooted in its diverse talent pool, well-established infrastructure, and robust supply chain"

Aik Kean Chong
Vice President of Foundry Manufacturing
and Supply Chain and Managing Director
at Intel Malaysia



Cohu

1st Semiconductor Test Group R&D center in Malaysia

"We selected Penang due to its strategic proximity to our contract manufacturer, and customer base, and a well-developed infrastructure, skilled workforce and supportive business environment"

Jeffrey D. Jones
Senior Vice President and
Chief Financial Officer of Cohu

Boston Scientific

1st manufacturing site in Asia

"Penang is the best-cost manufacturing hub, having in place a skilled workforce and logistics infrastructure with strong collaboration among the industries"

David Mitchell
Former Vice President and General Manager
for Manufacturing and Distribution of
Boston Scientific Malaysia

Sources: Desktop research

Pearl of the Orient

Penang is not only a great place to work, but also a great place to live.

Listed as a UNESCO World Heritage Site in 2008, George Town, the capital of Penang, is a captivating city known for its rich blend of history, culture and vibrant street art. Its charm lies in its unique architectural mix, featuring Chinese shophouses, colonial-era buildings, mosques and temples that reflect the city's multicultural background.

Penang Hill, which has been listed as a UNESCO Biosphere Reserve since 2021, offers a tranquil escape with stunning panoramas. Visitors can ascend Penang Hill on the funicular railway which is the steepest in Southeast Asia. In addition to Penang Hill, Penang offers a variety of tourist attractions ranging from beaches to vibrant night markets. It was also named the **Best Destination to Go by CNN Travel in 2022.**

Penang is more than just a tourist destination; it is a place where people choose to build their lives. Ranked as the **most liveable city in Malaysia by ECA International in 2019,** Penang offers a welcoming atmosphere, diverse population and thriving economy, creating an enriching environment for residents. Penang is also ranked **3rd best island to retire on by International Living in 2021.**

Sources: InvestPenang, desktop research

Silicon Island – The Next Chapter of Penang's Electronics Industry

03

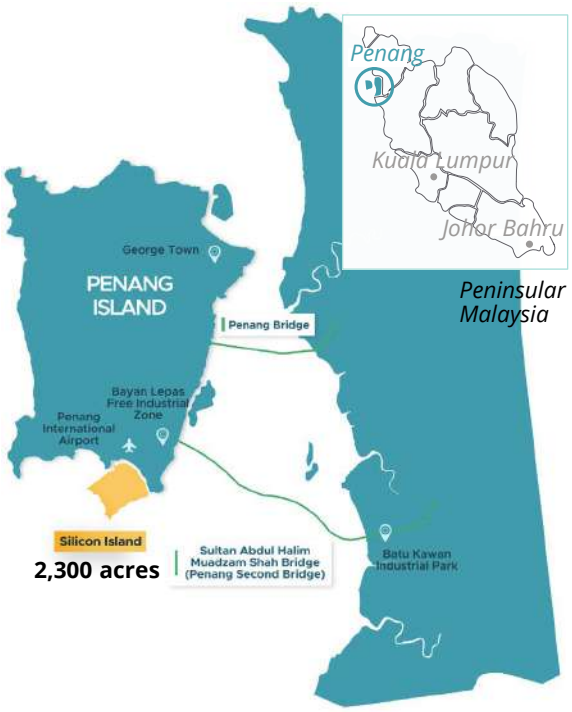
Silicon Island is designed to redefine the landscape of Penang, providing a world-class space for high-value activities in the hi-tech and electronics industry.

Overview

Silicon Island is a 2,300-acre island development project located off the southern tip of Penang island, as shown in Figure 4. It is a state project, managed by Silicon Island Development Sdn. Bhd. (SID), a joint venture between Penang Infrastructure Corporation on behalf of the Penang state government and Gamuda Berhad, one of Malaysia's largest engineering, property and infrastructure companies. Silicon Island has been master planned with two key themes in mind;

1. A smart city with carbon-neutrality anchored by a bio-diverse Green Plan;
2. A hi-tech and electronics hub complementing the existing electronics ecosystem in Bayan Lepas Free Industrial Zone (FIZ) on Penang island.

Figure 4: Location of Silicon Island



Notes: The terms "semiconductors" and "electronics" are used interchangeably in the context of Silicon Island
Sources: Silicon Island Development

Silicon Island is designed to provide the following features to its tenants.

City of the Future

Silicon Island integrates commercial spaces, industrial zones, and residential units within a single location to serve high value-added businesses and talents, creating a dynamic ecosystem.

Well-Connected

As an integral part of Penang's ecosystem, Silicon Island leverages its proximity and connectivity to existing resources such as access to talent and infrastructure.

Global Connectivity

Silicon Island is located just 3 kilometers from Penang International Airport, offering seamless global connections for businesses and talent.

Low Carbon City

Silicon Island is committed to sustainable development with a 100% renewable energy-powered Green Tech Park and super-low energy buildings, creating a future-proof tech hub.

Figure 5: Timeline of Silicon Island

2025	2026	2027	2028	2029	2030
• Industrial land ready	• Commencement of 1st factory, commercial and residential construction	• Operation commencement of 1st factory	• Launch of 1st phase commercial and residential	• State Administrative Center completed	• Commencement of Light Rail Transit (LRT)

Silicon Island is scheduled to commence manufacturing operations in 2027, with construction of the first factory in 2026 after land is made available in 2025, as shown in Figure 5.

Silicon Island is seamlessly integrated to enhance living, working, and thriving.

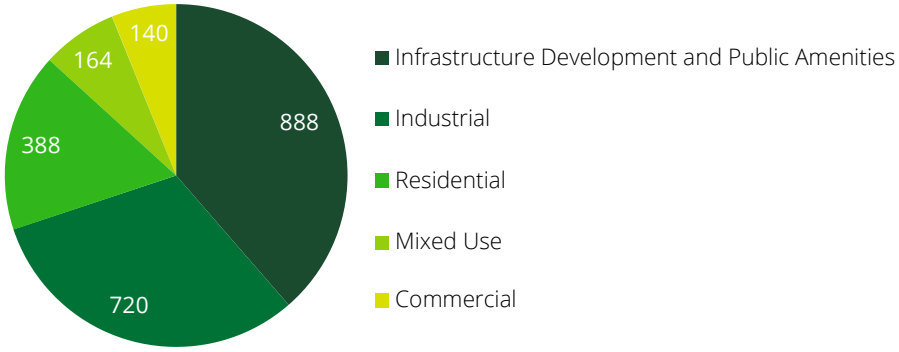
Sources: Silicon Island Development

Masterplan

Silicon Island integrates industrial, commercial, residential facilities and public infrastructure all within the island itself, as shown in Figures 6 and 7. The 720-acre Green Tech Park is the main highlight of the industrial zone, with 140 acres of commercial districts housing the GBS, R&D hubs, and a Software Campus. 388 acres are dedicated to the residential zones, primarily concentrated along the waterfront. 888 acres have also been allocated for infrastructure development, public amenities and green spaces, as well as leisure and tourism facilities. An upcoming LRT line will connect Silicon Island to Penang International Airport and George Town on Penang island, providing convenience for residents and employees.

Figure 6: Masterplan of Silicon Island

Figure 7: Distribution of Silicon Island Land Purpose (Acres)



Sources: Silicon Island Development

Salient Features of Silicon Island

Recreational Park

Public Beaches

Promenade

Central Canal Park

Nature-inspired living with over 400 acres of green public spaces

Silicon Island will have diverse green spaces, ranging from 18 acres of mangrove wetlands to promote biodiversity conservation and mitigate shoreline erosion, a 3-kilometer stretch of public beaches forming the largest public leisure and recreational space for the island, a Central Canal surrounded by 200 acres of parks and waterways inspired by the iconic waterways of Amsterdam and London, and neighborhoods connected via 6 kilometers of navigable, thematic canals.

Green Tech Park

Commercial Districts

Walkways within Green Tech Park

GBS Campus for Learning Institutions

World-class infrastructure with a comprehensive industrial ecosystem

Silicon Island will house a Green Tech Park entirely powered by renewable energy for ESG-conscious hi-tech and electronics manufacturers, with super low-energy buildings in the industrial and commercial zones including the GBS, R&D Hubs and Software Campus. There will also be innovation centers, incubation and accelerator spaces, open office spaces as well as co-working spaces in the commercial districts. Dedicated real estate will be allocated for educational institutions to supply a sizeable and qualified talent pool for the industy players on Silicon Island.

Heart of the Island (HOTI)

70:30 Public Private Mode Share

City Center

State Administrative Center

Modern amenities, urban location, conducive living

The Heart of the Island (HOTI) is Silicon Island's focal point, hosting various tourism-related components and functioning as a transit hub. First-mile up to last-mile connectivity within the island will be addressed with a comprehensive bicycle-pedestrian network, the upcoming Mutiara Light Rail Transit (LRT) line, electric buses, and solar-powered water taxis, which will also serve areas along Penang's coast. 57 acres of land for public and institutional components will be strategically located within the neighborhoods for the convenience of residents, with lifestyle amenities such as retail and F&B options, schools, medical and community centers. The State Administrative Center and City Management Unit will also be located at HOTI for easy public access.

Sources: Silicon Island Development

Silicon Island delivers all the fundamental requirements and beyond to run and grow businesses.

- **Workforce and Talent**
- **Infrastructure and Accessibility**
- **Industrial Ecosystem and Business Climate**
- **ESG Features**

04 Workforce and Talent

Summary

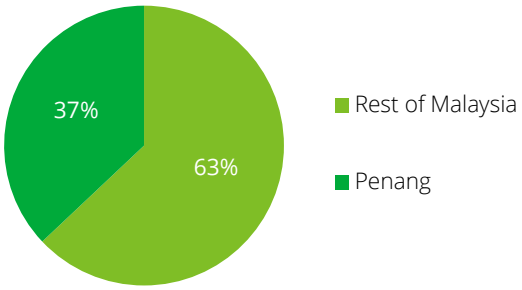
- Access to an existing sizeable and productive workforce fit for needs
- Strong academia-industry collaboration with government support
- Dedicated measures to address talent needs
- Lifestyle benefits to attract top talents worldwide

Silicon Island has access to one of the largest electronics workforces in Southeast Asia, with world-class productivity-cost ratio.

A sizeable workforce

Penang boasts an electronics workforce of roughly 237,000 persons, representing almost 40% of Malaysia's total electronics workforce, as shown in Figure 8. ~230,000 individuals are in manufacturing, while ~7,000 individuals are involved in IC design activities. The workforce is 4 times larger than Singapore's with 1 out of every 3 employees being high-skilled (*e.g., engineering, management*), providing a substantial workforce pool for companies setting up in Silicon Island.

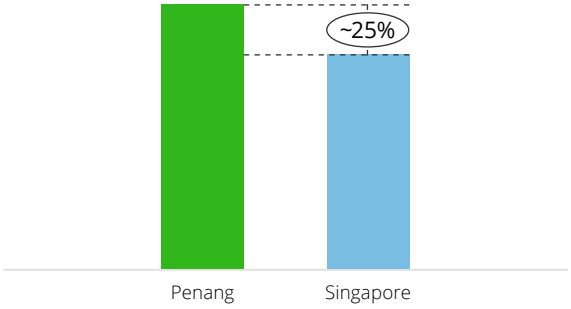
Figure 8: Composition of Malaysia's Electronics Workforce



A highly productive workforce

Penang's electronics workforce is also highly productive, generating a remarkable USD 4.30 in output for every USD 1 paid, surpassing Singapore by 25% as shown in Figure 9. A 50-year working relationship with global electronics Multi-National Corporations has put Penang's workforce at ease with the fast-paced and demanding nature of the industry. Supported by a can-do culture and a strong work ethic, their multilingual proficiency in English, Chinese, and Malay enables seamless collaboration across different cultures and countries. This makes them a valuable asset in today's globalized world, creating a talent pool that companies in Silicon Island can effectively tap into.

Figure 9: Workforce Productivity



Sources: Department of Statistics Malaysia, Economic Development Board Singapore, Economist Intelligence Unit, desktop research, Deloitte analysis

Silicon Island, as a state project, is supported by both the federal and state governments to ensure continued training and supply of industry-specific talents.

Penang Skills Development Centre (PSDC)

Malaysia Prime Minister's Offices

Growing and developing its talent pool is top of mind for the Penang state government

Penang STEM Talent Blueprint
A strategic blueprint adopting a holistic framework model to build a robust Science, Technology, Engineering and Mathematics (STEM) talent pipeline from primary to post-tertiary education in Penang. Among the targets set are to double STEM-related talent output from universities and Technical and Vocational Education and Training institutions as well as STEM enrolment in secondary schools.

Penang Silicon Design @5km+
A RM120 million (~USD 27 million) initiative spearheaded by InvestPenang with three key projects: (1) the Penang Chip Design Academy @PSDC offering a Chip Design Talent Cultivation Program for upskilling and reskilling fresh graduates and engineers, (2) the Silicon Research and Incubation Space as a one-stop center to support local and foreign chip design start-ups and SMEs, and (3) the Penang IC Design & Digital Park @Bayan Lepas with 1 million square feet of tailored office space to attract and support IC design companies.

Penang Future Foundation
A scholarship program by the Penang state government for outstanding Malaysians to pursue undergraduate degrees in STEM as well as Accountancy and Finance within Malaysia. The recipients are required to work in Penang after graduation. 475 scholars have graduated since the start of the program, with roughly 80% pursuing a degree in STEM subjects.

Malaysia's government has also made electronics talent pool development a strategic focus

National Semiconductor Strategy
RM 1.2 billion (~USD 270 million) allocation for the training and upskilling of 60,000 high-skilled Malaysian engineers for the industry within five years (30,000 high-skilled engineers from the Ministry of Education with 30,000 local TVET talents from other ministries).

Future Skills Talent Council by TalentCorp
An industry-driven initiative to identify evolving skill demands and drive essential training for the Malaysian workforce, with the electronics sector chosen as the pilot to support the Twelfth Malaysia Plan and NIMP 2030.

National Technical and Vocational Education and Training (TVET) Policy
Coordination of 1,345 TVET institutions and inclusion of the provision and enhancement of hi-tech related courses such as artificial intelligence (AI), solar energy, electric vehicles and robotics to address the skills and talent needs of the hi-tech and electronics industries.

Sources: Penang STEM, InvestPenang, TalentCorp Malaysia, National TVET Council, Buletin Mutiara, Penang Institute, desktop research

Silicon Island can benefit from a continuous inflow of fresh technical talents, supplied by a premier and capable educational landscape actively engaged with the industry.

Malaysia's Educational Landscape

Malaysia has a robust pipeline of talent, producing ~73,000 STEM graduates in 2023 from its highly regarded local institutions, while hosting 6 out of the 8 top universities in Southeast Asia.

Top Malaysian Universities in Southeast Asia

3rd University of Malaya	4th UPM Universiti Putra Malaysia	5th Universiti Kebangsaan Malaysia – The National University of Malaysia
Malaysia's premier research and innovation leader	Excellence in Engineering and Science research	Premier university focused on research and innovation
6th USM Universiti Sains Malaysia	7th UTM Universiti Teknologi Malaysia	8th Taylor's University – Wisdom · Integrity · Excellence
Innovative in Science and Technology studies	Cutting-edge Engineering and Technology programs	Top in Hospitality and Management education

Penang's Educational Landscape

Silicon Island can leverage Penang's extensive educational network of over 40 learning institutions. This network features 2 public universities (*e.g., the renowned Universiti Sains Malaysia (USM)*), 27 private universities and colleges, 7 industrial training institutes (*e.g., Penang Skills Development Centre (PSDC)*), and 2 polytechnics.

USM – Universiti Sains Malaysia

- 2nd oldest university in Malaysia
- Top 10% of all universities ranked by QS globally
- Collaborative Microelectronics Design Excellence Centre (CEDEC), Ministry of Finance (MoF)-approved Centre of Excellence for the coordination of IC design among Malaysian universities

PSDC

- 1st and largest tripartite, industry-led skills training and education center in Malaysia
- Trained over 257,000 participants through more than 13,000 courses over the last 34 years

Sources: Ministry of Higher Education Malaysia, InvestPenang, Penang Institute, QS Top Universities, desktop research, Deloitte analysis

Penang's educational institutions are well-connected to the industry through close collaborations, helping to bridge the gap in electronics workforce by preparing industry-ready talent. Below are some notable examples of academia-industry collaborations in recent years.

Institutions of Learning	Company	Partnership
USM Universiti Sains Malaysia	Infineon	Memorandum of Understanding (MoU) and Research Grant Agreement (RGA) for research collaboration
	intel	Intel Advanced Packaging Research Grant 2024 for research in advanced packaging
	Micron	R&D collaborations in semiconductor materials, smart manufacturing, and AI
	SKYECHIP	Collaboration Agreement (CA) to develop training modules and research in IC design
	OPPSTAR	Memorandum of Agreement (MoA) to advance research opportunities in IC design
	SILTERRA	Collaboration Agreement (CA) for Multi-Project Wafer (MPW) Program which enables the local IC design community to access technology processes for prototyping at cost-effective rates
UOW Malaysia KDU	intel	Launching of UOWM-Intel IC Design Centre of Excellence and being Southeast Asia's first university to be included in Intel's University Shuttle Program, joining the ranks of Massachusetts Institute of Technology, Michigan State University; and the University of California, Berkeley
INTI International University & Colleges	OPPSTAR	MoU to develop students' technical skills through teaching, training, research and development

Sources: Desktop research

Silicon Island has allocated dedicated spaces for institutions of learning to aid the talent needs of its industrial tenants.

The 1st commercial block, expected to be ready by 2028, will potentially house some of the universities in Silicon Island, with dedicated spaces for other institutions to support the talent needs of its industrial tenants.

Industry-led University City Campus and Training Facility

Innovation Center

Schools

Sources: Silicon Island Development

Silicon Island offers differentiating features for top talents, not found anywhere else in Malaysia.

Top talents typically look for factors such as integrated lifestyle, short commuting times, presence of educational institutions and healthcare facilities, cultural activities, and outdoor recreation which Silicon Island has in place.

Residential districts concentrated along the waterfront to create a quiet ambience

Public transportation such as the upcoming Mutiara LRT line, cycling tracks, walking networks and electric buses

Public and lifestyle amenities such as medical and wellness centers

Entertainment and recreation hub includes sports center, community center and shopping malls at the Heart of the Island

Nature spaces such as parks, wetlands, promenades, mangroves, beaches and canals

GBS campus to house educational institutions to provide talent pool

Sources: Silicon Island Development

Industrial Ecosystem and Business Climate

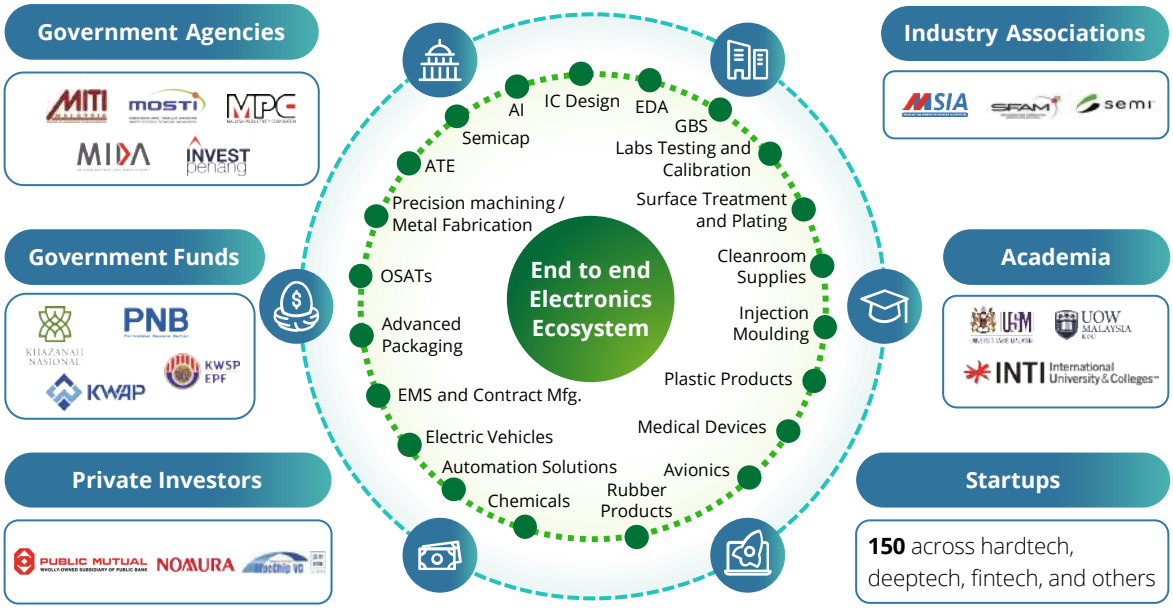
05

Summary

- One of the world's most comprehensive electronics ecosystem
- An investor and business-friendly environment

Located in one of the most comprehensive electronics ecosystems in the world, Silicon Island offers tenants various clustering benefits.

Figure 10: Penang's Electronics Ecosystem



Sources: InvestPenang, desktop research, Deloitte analysis

End-to-end Electronics Ecosystem

Enterprises in Silicon Island will have access to a complete end-to-end electronics ecosystem not only limited to industrial players in Penang and across Malaysia, but also support from government agencies, sources of funding from both government funds (*e.g, Khazanah Nasional*) and private investors (*e.g., BlueChip Venture Capital*), as well as collaboration with academia and industry associations, as shown in Figure 10.

Existing value chain

Companies setting up operations in Silicon Island will be able to leverage on existing suppliers and supporting capabilities in Penang such as existing metal fabricators and precision engineering SMEs, some of which are supplying Lam Research and Applied Materials. They will also benefit from easier access to existing and potential customers, while also having ease of access to funding support.

Operations synergies

Due to proximity to suppliers and distributors, companies in Silicon Island will enjoy a reduction in transportation costs and material lead times, as well as enjoying close relationships with them. Tenants will also be able to leverage economies of scale on facilities and services.

Intellectual synergies

The concentration of talent, industry champions and thought leadership in Penang's existing ecosystem for networking and knowledge sharing will benefit companies in Silicon Island looking to locate some of their most advanced innovations here.

Silicon Island offers access to an investor-friendly environment with streamlined procedures and tailored incentives for hi-tech and electronics players.

Ease of Doing Business

Malaysia is ranked 2nd in Southeast Asia for Ease of Doing Business. Among the efforts by Malaysia is streamlining of its permitting requirements, processing timeline and cost, to be above OECD[1] average, as illustrated in the table below.

Construction Permitting Requirements[2]	Malaysia	OECD's Average
Total Procedures (number)	9	12.7
Permitting Cost (% of build value)	1.3%	1.5%
Completion Time (days)	53	152

Tenants in Silicon Island will benefit from Malaysia's extensive trade network of 16 Free Trade Agreements (FTAs) which includes the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

Notes: 1) Organization for Economic Cooperation and Development; 2) For building a warehouse
Sources: InvestPenang, World Bank Group, Ministry of Investment, Trade and Industry of Malaysia, desktop research, Deloitte analysis

Malaysia also has a robust intellectual property (IP) ecosystem and protection, being ranked 2nd in Southeast Asia in both the Global Innovation Index 2023 and the 2023 International IP Index. Malaysia's IP laws are in conformance with the international standards below.

- Member of the World Intellectual Property Protection Organization (WIPO)
- Signatory of the Paris Convention and Berne Convention which govern IP rights
- Signatory of the Agreement on Trade-Related Aspects of IP Rights (TRIP 8) under the WTO

Targeted Incentives

Tenants of Silicon Island will benefit from specific incentives offered by the federal and state governments for the hi-tech and electronics industries, including both subsidies and policies. The table below provides a non-exhaustive list of incentives available.

Some examples of incentives available:

- Pioneer Status (PS): Income Tax Exemption (ITE) on Statutory Income (SI)
- Investment Tax Allowance (ITA): Allowance of Qualifying Capital Expenditure to be offset against Statutory Income (SI)

Activity	Examples of Incentives[1] Available
Hi-tech Manufacturing	• 100% ITE on SI up to 5 years (PS) • 60% ITA up to 5 years deducted up to 100% of SI
Strategic Projects	• 100% ITE on SI up to 10 years (PS) • 100% ITA up to 5 years deducted up to 100% of SI
Research and Development	• 100% ITE on SI for 5 years (PS) • 50-100% ITA within 10 years deducted up to 70% of SI
Aerospace and Avionics	• 100% ITE on SI up to 10 years (PS) • 60% ITA up to 5 years deducted up to 70% of SI
Next Generation Vehicles	• Available but specifics not disclosed
Machinery and Equipment	• 100% ITE on SI up to 10 years (PS) • 100% ITA up to 5 years deducted up to 100% of SI
Green Tech and Services	• 100% ITE on SI up to 3 years • 100% ITA up to 3 years deducted up to 70% of SI • ITE of 70% up to 10 years on SI for solar leasing
Workforce Development	• Double deductions and tax exemptions
Digital Activities[2] utilizing technology enablers[3]	• Malaysia Digital (MD) New Investment Incentive – Reduced Tax Rate (RTR) depending on income type * IP income: 0% RTR, for up to 10 years * Non-IP income: 5-10% RTR for up to 10 years – For capital-intensive services activities * 60-100% of ITA against up to 100% SI for up to 5 years • MD Expansion Incentive – 15% RTR on qualifying IP or non-IP incomes for up to 5 years; or – 30-60% of ITA against up to 100% SI for up to 5 years

Notes: 1) Pioneer Status and Investment Tax Allowance are typically mutually exclusive; 2) Eligible for companies with Malaysia Digital (MD) Status only; 3) Examples include IC design, AI, blockchain, drone technology and robotics
Sources: Malaysian Investment Development Authority, World Intellectual Property Organization, US Chamber of Commerce's Global Innovation Policy Centre, Malaysia Digital Economy Corporation, Malaysia Ministry of Investment,Trade and Industry

Infrastructure and Accessibility

06

Summary

- High quality, robust supply and advantageous cost-structure of utilities, enhanced by dedicated infrastructure
- Excellent logistics connectivity of airport, seaport and road access
- Well-connected and unique public transportation

Silicon Island can meet tenants' utility needs with one of the lowest costs among leading electronics hubs, with enhanced electricity and water infrastructure surpassing Penang's existing infrastructure.

Electricity Supply

Penang will benefit from the RM 500 million (~USD 110 million) Monopole Transmission Tower project led by Tenaga Nasional Berhad (TNB), the main electricity utility for Peninsula Malaysia, which will add an impressive 2000MVA of power capacity for Penang, as shown in Figure 11.

Silicon Island's electricity infrastructure has been designed for reliability and scalability. Among the features are:

1. Dual feeders for interim 33kV and ultimate 275kV lines from TNB to provide n+1 redundancy to ensure a continuous power supply and minimize outages risk.
2. Cable corridors for Transmission Main Intake and Main Distribution Sub-Station are designed with a ring configuration to eliminate any single point of failure, significantly enhancing reliability.
3. A proposed 275kV Transmission Main Intake at The Light will draw power from two robust sources: Prai Power station via the new 1000MVA marine transmission line along Penang first bridge and Gelugor Power Station.

Figure 11: Penang Electricity Supply Landscape, MVA

Malaysia has four types of industrial electricity tariffs, typically ranging from USD 0.04/kWh to USD 0.09/kWh. Malaysia's electricity tariffs are typically ~70% lower than those in Singapore, as illustrated in Figure 12.

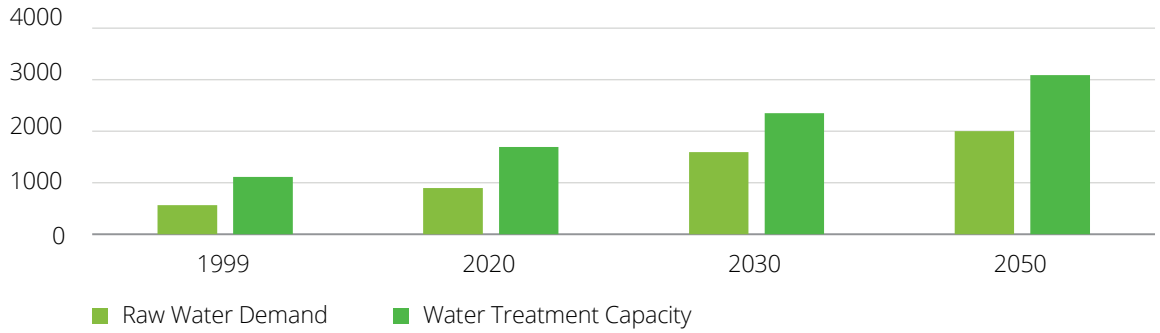
Figure 12: Industrial Electricity Tariff, USD/kWh

Sources: Silicon Island Development, Tenaga Nasional Berhad, InvestPenang, desktop research, Deloitte analysis

Water Supply

Penang's water treatment capacity is designed to exceed demand through 2050 and beyond, with a ~40% increase (~600 million liters daily (MLD)) before 2030 through eight projects worth RM 1.2 billion (~USD 270 million), and an additional 700 MLD with the Sungai Perak Raw Water Transfer Scheme (SPRWTS), as shown in Figure 13.

Figure 13: Penang Raw Water Demand and Water Treatment Capacity from 1999 - 2050, MLD



Penang Water Supply Corporation (PBAPP) has also collaborated with Indah Water Konsortium (IWK), Malaysia's national sewerage company for a 300 MLD water reclamation project from 3 regional sewage treatment plants using bio-effluent technology to significantly enhance the island's water resources. Additionally, Silicon Island's dual-function Sewage Treatment Plant (STP) will produce 25 MLD of recycled water for industrial non-potable uses.

Water tariffs in Penang are ~60% lower than those in Singapore as shown in Figure 14. For non-domestic users, the water tariffs start from USD 0.14/m³ and typically do not exceed USD 0.46/m³.

Figure 14: Industrial Water Tariff, USD/m³

Sources: Silicon Island Development, Penang Water Supply Corporation, Indah Water Konsortium, InvestPenang, desktop research, Deloitte analysis

Silicon Island offers exceptional air, sea, and land connectivity to support tenants' global operations.

Figure 15: Distance between Silicon Island and Penang International Airport

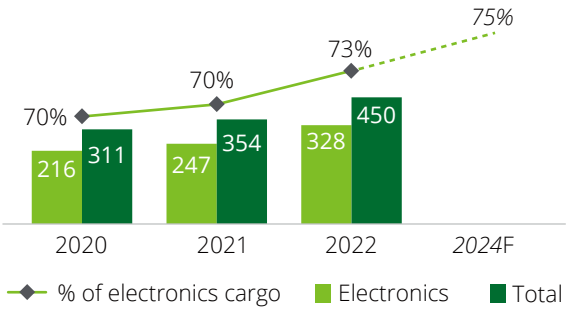
Air Access

Silicon Island, located just 3 kilometers from Penang International Airport (PIA) as shown in Figure 15, offers unparalleled air connectivity to its residents and businesses. PIA currently serves 30 destinations via direct passenger flights and over 10 destinations via direct cargo flights as shown in Figure 16, providing convenient access to key markets and business hubs. With one-stop flights, Silicon Island is connected to over 400 global destinations, ensuring extensive global reach.

Figure 16: Direct Routes from PIA

Passenger Flights	
Singapore	Hong Kong
China	Indonesia
Taiwan	Thailand
Qatar	Vietnam
United Arab Emirates	India[1]
Air Cargo	
Singapore	Taiwan
Thailand	Indonesia
Cambodia	Vietnam
Hong Kong	Korea
Luxembourg	

Figure 17: Penang Exports, RM billion



Penang is the major logistics hub for electronics in Malaysia, as it accounts for roughly two-thirds of Malaysia's electronics trade flows. PIA is the 2nd busiest airport in Malaysia by cargo handled. ~70% of air cargo handled by value in Penang is from the semiconductor industry, as shown in Figure 17. The Penang Freight Forwarders Association (PFFA) anticipates a 5% increase in cargo volume, projecting a total of 61,809 tons to be handled in 2024. This highlights the airport's role as a critical logistics and trade gateway, providing Silicon Island with efficient access to global supply chains and export markets.

Penang International Airport

PIA is also undergoing a major RM 1 billion (~USD 220 million) expansion and upgrade project, which is expected to double its annual passengers handling capacity from 6.5 million to 12 million. This significant investment will solidify the airport's role as a key transportation hub, offering improved facilities and enhanced connectivity for Silicon Island's residents and businesses.

Notes: 1) Anticipated to start in 2024
Sources: Silicon Island Development, Flight Connections, Penang Infrastructure Corporation, desktop research, Deloitte analysis

Port of Penang

Seaport Access

Silicon Island is strategically located 28 kilometers from Port of Penang, which is approximately a 35-minute journey via two existing bridges connecting Penang island to the mainland. This proximity to port provides Silicon Island with excellent access to global trade routes and supply chains.

The Port of Penang, Malaysia's 3rd busiest container port, handled 1.44 million TEUs[1] of cargo in 2023. To meet the growing demand for port facilities driven by the development of new industrial parks in Penang, Perak, Kedah, and Perlis, the North Butterworth Container Terminal (NBCT) is currently undergoing a RM 250 million (~USD 55 million) expansion project to increase its capacity to 1.55 million TEUs in 2024.

Figure 18: Penang Transport Master Plan

Land Access

Silicon Island plans for 70% public transport coverage, the highest in Malaysia, ensuring seamless and efficient connectivity for its residents and workforce.

Phase 1 of the upcoming 22.6-kilometer Mutiara Light Rail Transit (LRT) line will connect Silicon Island to George Town, with four LRT stations provisioned for Silicon Island, as shown in Figure 18[2].

Green Tech Park LRT Station

Additionally, sustainable mobility is a key focus, featuring a dedicated network of safe and convenient bicycle-pedestrian pathways, solar-powered water taxis for eco-friendly transportation, a Bus Rapid Transit (BRT) corridor, and an electric bus system utilizing smart technology for tracking and timely scheduling, all contributing to a modern and sustainable public transportation infrastructure.

Connected to Penang Island via two bridges as shown in Figure 19, Silicon Island will further benefit from five new toll-free highways and roads totaling 45 kilometers, significantly reducing commute times and enhancing access for employees and logistics.

Figure 19: Bridges Connecting Silicon Island to Penang Island

Notes: 1) Twenty-foot Equivalent Unit; 2) All transit alignments and systems for the shown Light Rail Transit (LRT) lines are subject to review prior to implementation
Sources: Silicon Island Development, Penang Infrastructure Corporation, Penang Port Corporation, Deloitte analysis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07 ESG Features

Summary

- Designed to be a world-class green city with ambitious ESG features
- Nature-inspired lifestyle environment

Silicon Island has ambitious Environmental, Social, and Governance (ESG) features to help satisfy the corporate goals of its tenants.

Concerns over climate change remain among the top three priorities for businesses globally, with several actions already being taken by companies as part of sustainability efforts and strategies.

59% have increased the **efficiency of energy use in buildings**

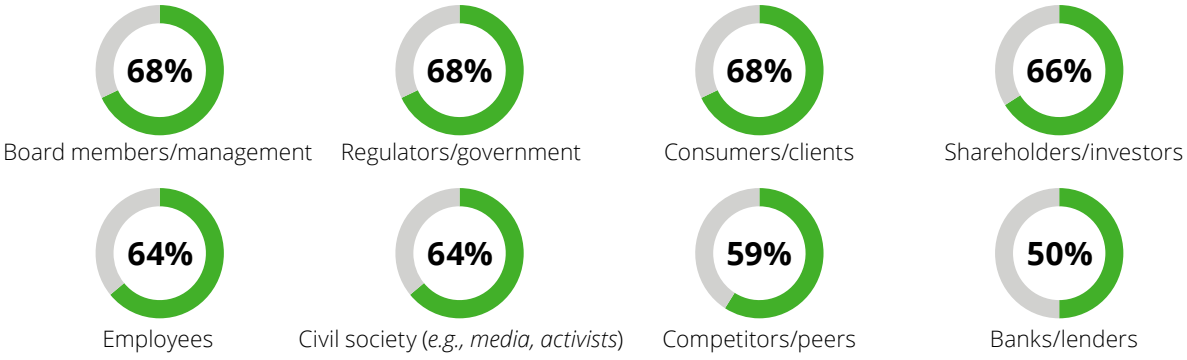
54% have used **energy-efficient machinery, technologies and equipment**

43% have **relocated** or updated their facilities to areas **more resistant to climate impacts**

Broad pressure from all sides

Companies are facing significant pressures to act from various stakeholder groups, ranging from board members to customers and to employees as shown in Figure 20. As a result, over 50% of organizations have enhanced their sustainability actions due to employee activism, while 65% have increased their climate-related initiatives due to more stringent ESG regulatory requirements internationally. Businesses are also willing to pay up to 30% more for green products to cater to their customers' preferences.

Figure 20: Share of Companies Facing Significant Pressure from Stakeholders to Act on Climate Change[1]



Notes: 1) Companies can select more than 1 option
Sources: Deloitte 2023 CxO Sustainability Report, MIT Technology Review, Deloitte analysis

Beneficial, but not an easy task

Organizations have seen their sustainability efforts translate into higher brand recognition and reputation, better customers satisfaction as well as enhanced morale and wellbeing of employees. However, several obstacles to climate action remain, with insufficient supply of low-emissions inputs such as renewable energy for operations identified to be among the top five challenges faced.

Silicon Island: A Sustainable Hub for Innovation

Silicon Island is committed to Environmental, Social, and Governance (ESG) principles, making it an attractive choice for environmentally conscious businesses, with some of Silicon Island's key ESG features shown below.

45% Target Reduction in Carbon Emissions

Awarded the 5-Diamond MGTC[1] Low Carbon Cities 2030 Challenge Accreditation in recognition of its masterplan objective to be a low carbon city.

100% Renewable Energy

The Green Tech Park will use 100% renewable energy from off-site solar farms and supported by solar panels on rooftops throughout Silicon Island.

"Super Low-Energy" Buildings

All industrial and commercial buildings will adhere to GBI[2] Gold (or equivalent ratings) and designed to minimize energy consumption through efficient cooling systems, smart features, and integration of renewable energy sources.

34% Fresh Water Consumption Reduction

Presence of a dual-purpose sewage treatment plant to recover water for non-potable use and water-saving measures in buildings such as water-efficient fixtures and rainwater harvesting systems.

Sustainable Waste Management Initiatives

A city-wide waste management strategy comprising a food macerator system and a pneumatic waste collection system to reduce waste in landfills, with on-site composting bins to up-cycle organic waste.

70:30 Public-Private Transportation Model Share

Significant reduction in transport-related emissions with public transportation ranging from Light Rail Transit (LRT), electric buses to solar-powered water taxis and parking restrictions to discourage the use of private vehicles.

110 km of Bicycle-Pedestrian Network

Extensive and dedicated bicycle networks and pedestrian walkways to provide first and last-mile connectivity and prioritize cycling over cars.

6 km of Water Canals and Blue-Green Network

Act as flood mitigation measures while serving as recreational spots and routes for water taxis.

Over 400 Acres of Public Green Spaces

Allocated land for the development of public gardens and parks, wetlands, promenades, mangroves and beaches to promote livability and a healthy lifestyle.

18 Acres of Mangrove Wetlands

Preservation of biodiversity, mitigation of possible shoreline erosion, and for effective carbon sequestration, as well as being an alternative recreational spot for residents.

These comprehensive ESG features highlights Silicon Island's commitment to a sustainable future and will serve environmentally conscious businesses and individuals alike.

Notes: 1) Malaysian Green Technology and Climate Change Corporation; 2) The Green Building Index in Malaysia is a rating system which awards buildings GBI Platinum, Gold, Silver or Certified ratings based on the environmental performance scores of the buildings
Sources: Deloitte 2023 CxO Sustainability Report, Silicon Island Development

Strategic Industry Sectors

08

Electronics and adjacent sectors that are strategic to Malaysia's vision, which requires top talents and strong ESG consciousness, will gain the most from Silicon Island.

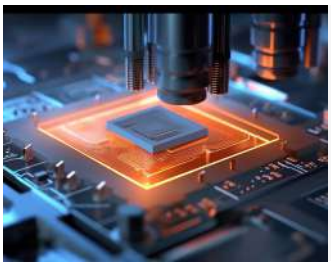
Key Sectors for Silicon Island

Integrated Circuit (IC) Design

Automated Test Equipment (ATE)

Electronic Design Automation (EDA)

Avionics Module Design



Advanced Packaging

Medical Devices

Semicap Equipment

Sources: Deloitte analysis

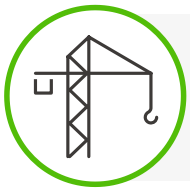
All these sectors possess the characteristics below, which makes them a great fit for the unique features of Silicon Island.

World-class electronics hub: Globally recognized electronics hub, providing a comprehensive ecosystem required for growth and success

Characteristic: Sectors within or closely related to electronics, supporting hi-tech trends

Magnet for elite talent: A place where top-tier talents across the world converge, live, work and thrive

Characteristic: Sectors with high demand for top-tier talent



Penang state project: Strategic advantages with unparalleled government support and incentives, positioning business at the forefront of national initiatives

Characteristic: Sectors with national strategic focus

Realizable ESG impact: Committed to sustainable practices, showcasing an organization's dedication to Environmental, Social and Governance (ESG) responsibilities

Characteristic: Sectors with high ESG standards

Sources: Deloitte analysis

Additionally, Silicon Island offers specialized benefits to these sectors.

Integrated Circuit (IC) Design

Electronic Design Automation (EDA)

- 90% of local semiconductor IC design companies within 30 minutes' drive
- Presence of thought leadership – *e.g., Synopsys Users Group (SNUG) conference*
- E2E design, prototyping and application within Penang with DFM[1] enhanced by close collaboration

Advanced Packaging

- Skilled workforce with transferable expertise – *e.g., in quality and yield management*
- Cost effective equipment and local support from established players
- Proximity to design firms for faster optimization – *e.g., thermal profiles, power delivery network*

Semicap Equipment

Automated Test Equipment (ATE)

- Proximity to customers for quick requirements capture and support
- Access to Asia distributor network for cost competitive components and services
- Existing local supply chain support – *e.g., precision calibration and machining, high-purity parts manufacturing and distribution*

Avionics Module Design

- 2nd largest hub in Southeast Asia with access to the Malaysian market projected to reach RM 35 billion[2] (~USD 7.8 billion) in 2030
- Close to advanced electronics design and manufacturing for critical systems – *e.g., navigation, altimeter*
- Close to manufacturing base, with Malaysia housing 54% of skilled workers in Southeast Asia and a network of 240 companies

Medical Devices

- Access to Malaysia market which is projected to grow at 9.5% CAGR till 2028 to ~RM 21 billion (~USD 4.7 billion)
- Electronics spillover from being in one the world's most mature electronics ecosystem
- Presence of 10 out of 30 global medical device leaders, enhancing customer perception of Penang

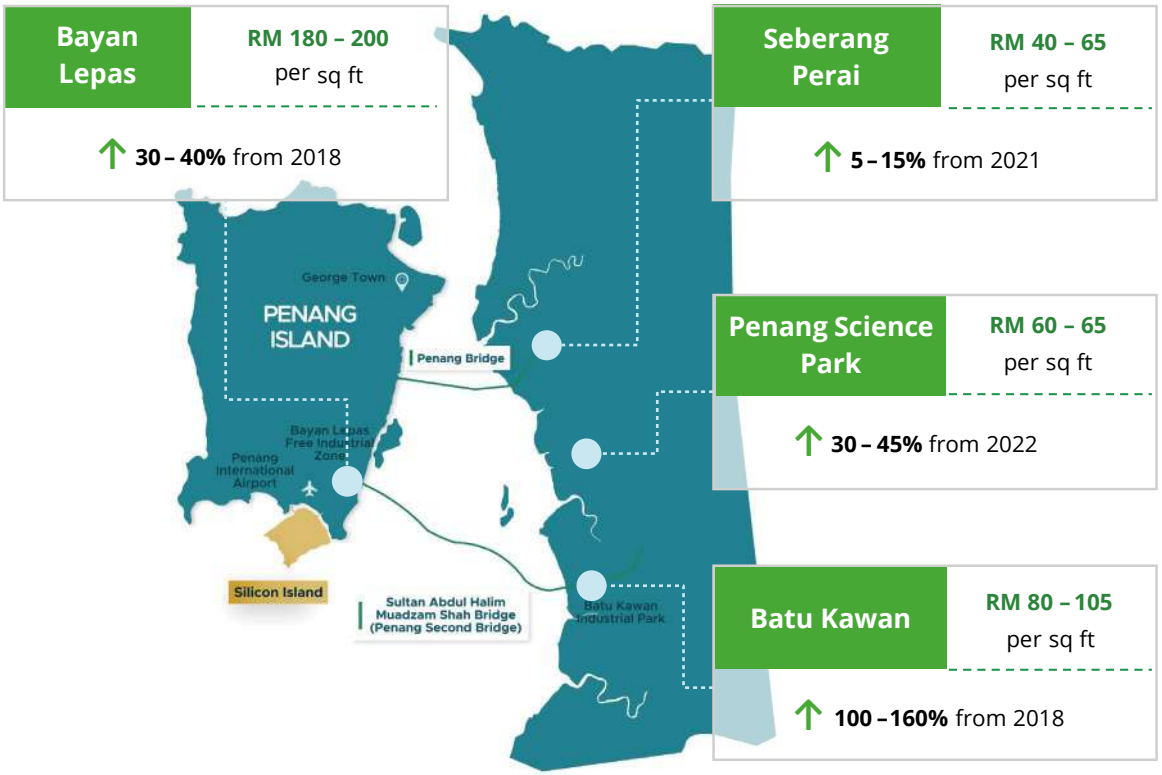
Notes: 1) DFM – Design for Manufacturing; 2) Based on aero-manufacturing, engineering and design services in Malaysia's aerospace sector; non-exhaustive list of specialized offers
Sources: Malaysian Investment Development Authority, InvestPenang, Deloitte analysis

Silicon Island from Investment Perspective

09

Increasing Foreign Direct Investments (FDIs) are expected to drive the growth of land requirement in Penang, potentially adding to Silicon Island's attractiveness from an investment point of view.

Figure 21: Average industrial land prices in Penang



The average prices for industrial land in Penang has been rising significantly over the past few years as shown in Figure 21. Industrial land demand in Penang is expected to continue going up, driven by growing FDIs into Malaysia and Penang. Malaysia is ranked as the top country in emerging and developing Asia on the Global Opportunity Index for foreign investment. The Malaysian government has also set a target of at least RM 500 billion (~USD 110 billion) in investments with the National Semiconductor Strategy supported by RM 25 billion (~USD 5.6 billion) in fiscal support and incentives. Penang, consistently ranked among the top states for FDIs, expects to see increased FDIs in the coming years.

Combined with the limited industrial land in Penang Island, Silicon Island could present attractive investment opportunities.

Sources: Knight Frank Research, Valuation and Property Services Department Malaysia, Penang Development Corporation, Malaysian Investment Development Authority, Milken Institute, desktop research, Deloitte analysis

Closing Summary

Silicon Island is designed to offer unique features for its upcoming tenants.

Workforce and Talent

Tenants in Silicon Island will have access to an existing sizeable and productive workforce fit for needs, supported by a fit-for-purpose educational landscape having strong academia-industry collaboration with government support. The masterplan of Silicon Island has also included dedicated measures such as public amenities as well as entertainment and recreation facilities to address talent needs, with excellent lifestyle benefits to attract top talents worldwide.

Industrial Ecosystem and Business Climate

Silicon Island is in one of the world's most comprehensive electronics ecosystem and provides its tenants access to the investor and business-friendly environment of Malaysia.

Infrastructure and Accessibility

Silicon Island provides tenants with a high quality, robust supply and advantageous cost-structure of utilities enhanced by dedicated infrastructure. It also has unparalleled logistics connectivity with its proximity to the airport, seaport as well as good road access. The inclusion of well-connected and unique public transportation will provide convenience and accessibility to its tenants and residents.

ESG Features

Silicon Island has been designed to be a world-class green city with ambitious ESG features complemented by a nature-inspired lifestyle environment.

Conclusion

Located in one of the most comprehensive electronics ecosystems in the world, Silicon Island is designed to redefine the landscape of Penang, providing a world-class space for high-value activities. It delivers all the fundamental requirements and beyond to run and grow businesses, particularly for strategic industry sectors, and could potentially present attractive investment opportunities.

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