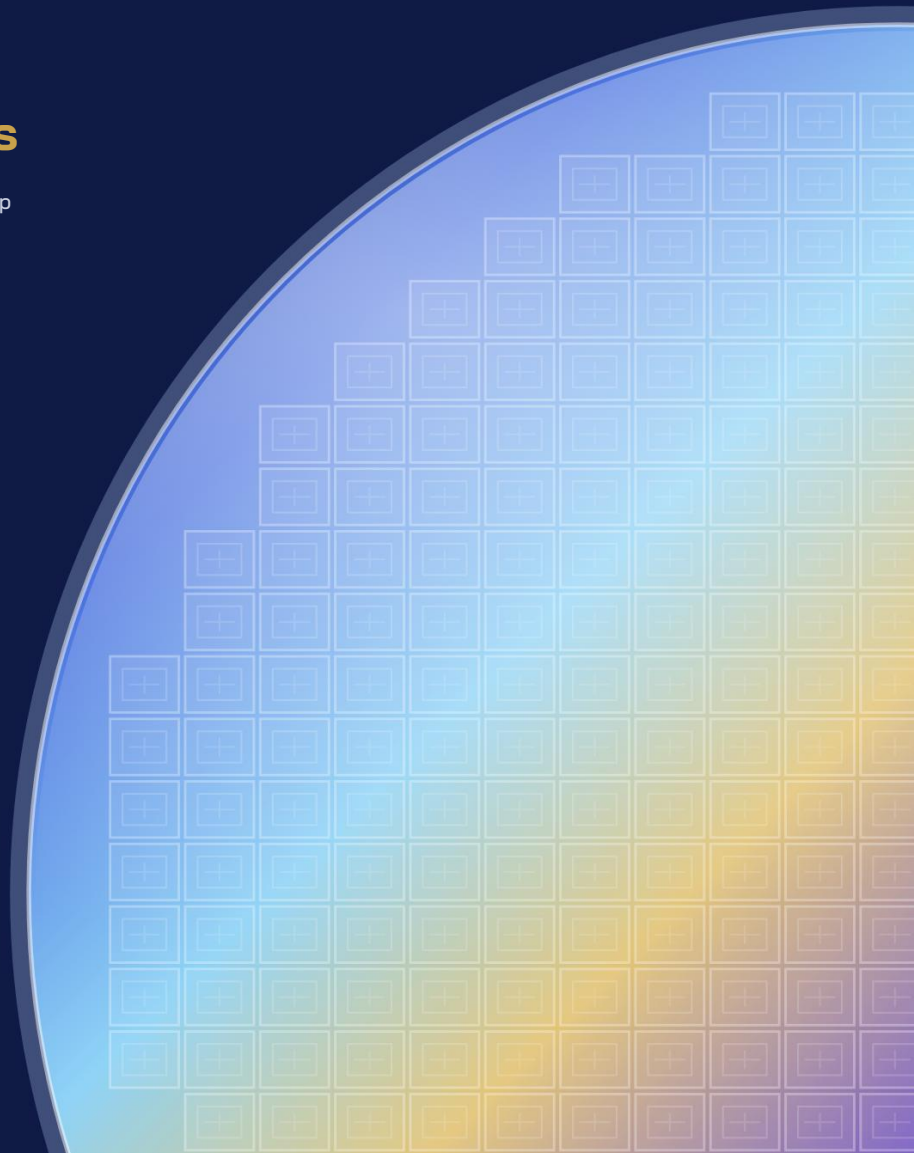


National Semiconductor and Advanced Electronics Strategy

Made-in-Thailand Chips

A 25-Year Strategic Vision for Regional Tech Leadership



EXECUTIVE SUMMARY

The National Semiconductor and Advanced Electronics Strategy (2026–2050)

establishes a comprehensive 25-year roadmap to position Thailand as a leading regional hub for advanced technology, anchored by the production of "Made-in-Thailand" chips. Driven by the Thailand Board of Investment (BOI) and guided by the National Semiconductor and Advanced Electronics Policy Committee, the strategy capitalizes on Thailand's established manufacturing foundation to accelerate economic restructuring toward high-value segments. By capitalizing on explosive global demand for Artificial Intelligence, Data Centers, Electric Vehicles, and Smart Infrastructure, Thailand is systematically bridging its upstream gaps—moving beyond downstream strengths in conventional back-end and printed circuit boards into integrated circuit (IC) design, front-end wafer fabrication, and advanced back-end.

To achieve its vision of a fully integrated, self-sustaining ecosystem with thriving domestic "Local Champions," the strategy is executed across three distinct phases through five strategic pillars: **Government Incentives** leverage dedicated financial grants and streamlined tax platforms to lower investment hurdles; **Talent Development** implements university sandboxes, the "Siam Silica" framework, and global academic partnerships to cultivate over 230,000 specialized professionals; **Technology** establishes a National Semiconductor Training Center alongside state-of-the-art R&D facilities, while mandating technology transfer and robust IP protection; **Infrastructure** ensures the seamless supply of high-stability power, clean energy, and climate-resilient water resources tailored to meet intensive industrial demands; and the **Ease of Doing Business** streamlines market entry via single sign-on portals, strategic free trade agreements, and robust domestic demand promotion. Ultimately, this coordinated national effort aims to secure more than USD 80 billion in cumulative foreign direct investment, lift annual industry revenue to USD 150 billion by 2050, and embed Thailand securely at the heart of the global semiconductor supply chain.

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Part One

AN OVERVIEW OF THAILAND'S STRATEGIC DIRECTION

ABOUT THIS STRATEGY

While electronics remains a vital economic engine for Thailand—accounting for nearly a quarter of total export, the sector faces structural challenges from global market volatility, supply chain realignments, and intense tech competition. Domestic production has traditionally concentrated in midstream and downstream packaging (OSAT) and conventional components. To maintain long-term competitiveness against regional rivals, Thailand must urgently move up the value chain into high-value semiconductors, front-end wafer fabrication, integrated circuit (IC) design, and advanced back-end packaging. This transformation requires a unified national strategy to align policy instruments and private sector capabilities toward shared strategic goals.

Serving as Secretariat to the Prime Minister-chaired National Semiconductor Policy Committee, the Thailand Board of Investment (BOI) led the formulation of the National Semiconductor and Advanced Electronics Strategy (2026–2050). Informed by global market dynamics and stakeholder consultations, this 25-year roadmap aligns national capabilities with high-growth domains like AI, Data Centers, and EVs. By 2050, the strategy aims to attract over USD 80 billion in cumulative FDI, generate USD 150 billion in annual revenue, train 230,000 specialized professionals, and foster domestic "Local Champions" alongside global leaders to produce **"Made-in-Thailand" chips**.

The effective operationalization of this strategic roadmap necessitates a robust institutional and execution framework. Realizing the strategic objectives relies on a structured, trilateral collaboration uniting government entities, industrial stakeholders, and higher education institutions. By systematically integrating targeted fiscal and non-fiscal incentives, private sector capital and domain expertise, and university-led human capital and research development, Thailand is building an integrated, resilient semiconductor ecosystem to secure its position as a competitive and trusted node in the global high-technology supply chain.

VISION

To position Thailand as a leading regional hub for advanced technology, producing **Made-in-Thailand Chips** through a fully integrated ecosystem and local champions

Thailand will achieve this vision by combining investment from global industry leaders with the development of its own Local Champions to build a resilient, sustainable, and fully integrated value chain for semiconductors and advanced electronics.

STRATEGIC GOALS

The Strategic Plan sets out four core goals to realize the vision, all of which can be launched in parallel in the first phase.



Reinforce and Scale Thailand's Conventional Back-end Strengths

Building on proven competitive advantages as a foundation, doubling down on power and sensor conventional back-end



Secure Anchor FDI in Advanced High-value Segments

Build advanced capabilities, especially in legacy-node / specialty front-end, IC design, and advanced back-end



Develop Local Champions in 4 Key Segments

Leverage MNCs' expertise to drive knowledge and technology transfer across four key segments: IC design, front-end, advanced back-end, and conventional back-end

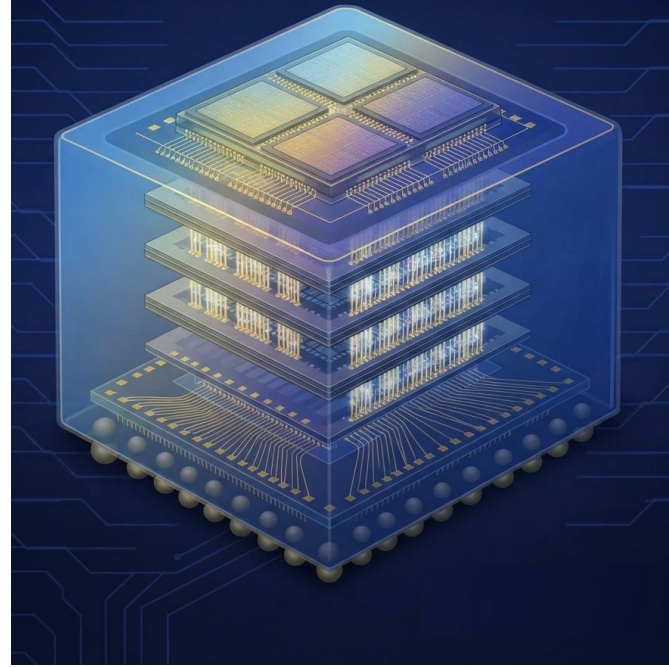


Complete an Integrated Ecosystem

Cover every segment of semiconductors and advanced electronics, from upstream to downstream.

STRATEGIC RATIONALE

Four strategic imperatives drive the necessity for Thailand's immediate intervention.



Global Supply Chain Realignment

Geopolitical shifts offer Thailand a prime window to attract semiconductor and advanced electronics investment. Beyond incoming capital, developing local capabilities from design to fabrication is essential to build supply chain resilience and create long-term value for strategic partners.

Regional Opportunities

As regional semiconductor ecosystems expand through dedicated roadmaps and aggressive investment, strategic and timely policy execution will be critical for Thailand to effectively integrate into and capture a higher-value share of the Global Value Chain, securing a vital role in this evolving landscape.

New Engine of Economic Growth

Thailand aims to ascend the Global Value Chain by leveraging its strong OSAT foundation to evolve into an advanced back-end manufacturing base. Meanwhile, the semiconductor and next-generation electronics market is forecast to grow 6% annually, driven by AI, Data Centers, EVs, and medical technology. Moving into these higher-value segments provides a clear pathway to restructure the economy for sustainable growth.

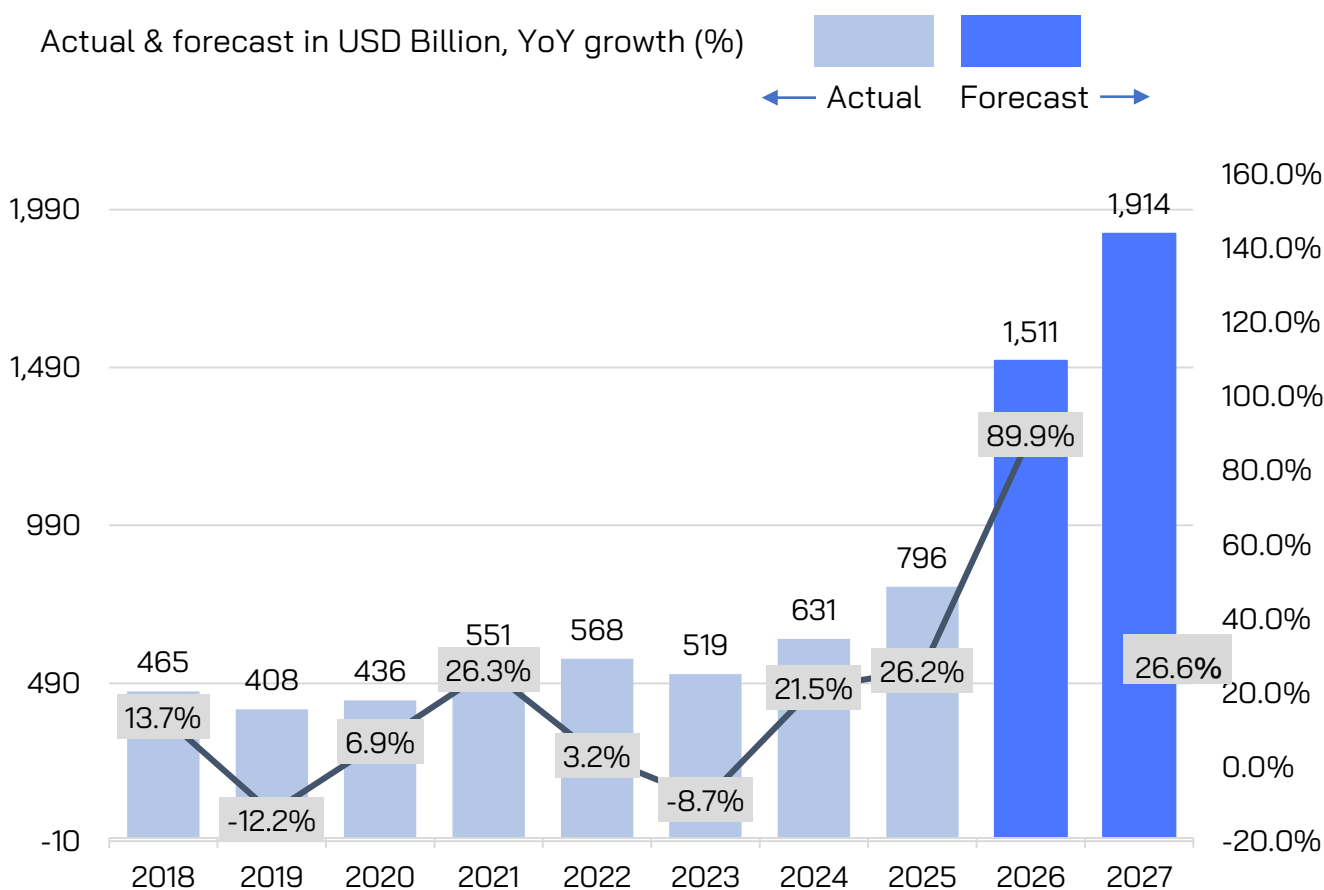
Homegrown Technological Capability

Achieving homegrown technological capability is essential for Thailand to transition from an assembly hub into a true technology creator. Developing local champions, domestic intellectual property, and a skilled workforce is central to achieving technological ownership and lasting competitiveness.

GLOBAL SEMICONDUCTOR MARKET OUTLOOK

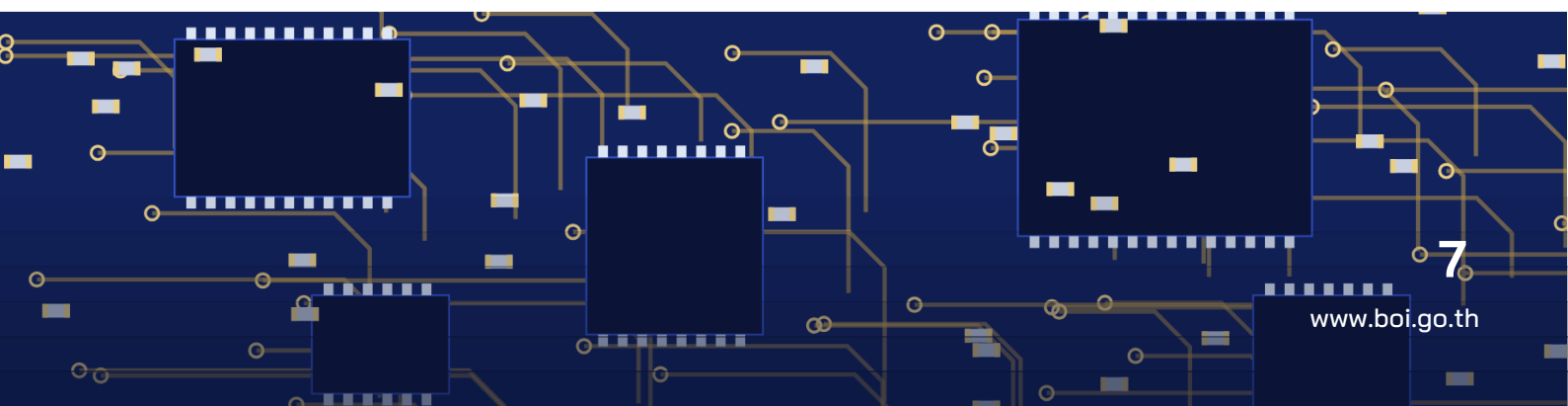
The World Semiconductor Market Forecast (2026) projects the global semiconductor market to reach approximately USD 1.51 trillion in 2026, up about 90 percent from 2025, and to grow further to around USD 1.91 trillion in 2027. This growth is driven by demand for new generations of finished products, alongside recovering economies in major markets.

Global Semiconductor Market (Billion US\$)



Source: World Semiconductor Market Forecast (2026), data as of June 2026.

Asia-Pacific retains the largest share of the global semiconductor market. However, the United States is forecast to record the fastest expansion, with an approximate 112% year-on-year increase. By product segment, memory semiconductors lead the growth curve, rising by nearly 250%. These dynamics reflect sustained high global demand and indicate a continued expansionary trajectory for the sector.



THAILAND'S LANDSCAPE

5

IC design

20

Conventional Back-end

361

Advanced Electronics

~65

USD bn industry Revenue

Electronics products make up about a quarter of Thailand's exports. In 2025, electronics exports reached THB 2.4 trillion, including THB 451 billion of semiconductors. From 2023 to June 2026, 879 electronics projects worth THB 910 billion applied for BOI promotion.

Sources: BOI, International Trade Center, Trademap

National strengths

- **Infrastructure:** Reliable utilities, multimodal transport, and established industrial estates.
- **Workforce:** Nearly 300k projected STEM graduates in engineering and science (2022–2026).
- **Supply Chain:** Mature manufacturing bases in automotive, electronics, and petrochemicals.
- **Market Access:** 70M domestic consumers with access to 600M+ across ASEAN.
- **Global Trade:** 17 FTAs connecting to 24 countries, with more pending.
- **Digital Infrastructure:** Robust 5G coverage, data centers, and digital industry ecosystems.
- **Green Energy:** Clean power availability backed by Utility Green Tariffs (UGT) and Direct PPAs.
- **Cost Competitiveness:** Affordable labor, office rentals, utilities, and logistics.
- **Government Incentives:** Comprehensive tax, non-tax, financial benefits, and investment facilitation.
- **Expat Appeal:** High living standards, 66 JCI-accredited hospitals, and 230+ international schools.

SEMICONDUCTOR AND ADVANCED ELECTRONICS VALUE CHAIN

Thailand's electronics supply chain reveals that the domestic upstream sector remains in its nascent stages of development with limited capital investment, as local manufacturers primarily specialize in outsourced semiconductor assembly and test operations. Consequently, it is imperative to attract increased global investment across semiconductor and next-generation electronics industries to Thailand. This capital inflow will strengthen the domestic supply chain and generate higher economic value.

Core Semiconductor Value Chain

Advanced Electronics Value Chain



Definitions: refers to Local champions, Equipment refers to Equipment Vendor, IC Design refers to Chip Designer/ IP Vendor/ IP Developer, Front-end refers to Wafer Fabrication

The Road Ahead for Thailand

Thailand aims to restructure its economy for sustainable growth by ascending to higher-value segments of the semiconductor and electronics industry. By leveraging its established OSAT foundation to evolve into an advanced back-end manufacturing base, alongside developing capabilities across IC design, front-end manufacturing, and conventional back-end assembly, the country is positioned to serve high-growth markets including AI, data centers, EVs, and medical technology. To support this transition, Thailand must achieve homegrown technological capabilities, develop local champions, secure domestic intellectual property, and cultivate a highly skilled workforce, transforming from an assembly hub into a true technology owner.

By 2050, Thailand will have a fully integrated semiconductor and advanced electronics ecosystem with local champions across all segments

NATIONAL TARGETS TOWARDS 2050

By 2050, the strategy aims to achieve the following investment, revenue, workforce, and industrial development targets

80 billion USD

Foreign Direct Investment, about THB 2.61 trillion

150 billion USD

Annual Industry Revenue

230k+

No. Talent, new engineers, technicians and operators



Made-in-Thailand Chips

Phased Implementation of the Ecosystem

Number of companies or facilities	2026	2030	2040	2050
IC design	5	8	15	60
Wafer fabrication ²⁾	–	1	2	5
Advanced Back-end	–	2	8	10
Conventional Back-end	20	25	30	35
Advanced Electronics	361	445	560	700
Industry revenue (USD bn)	~65 ¹⁾	~80	~110	~150
Cumulative FDI (USD bn)	–	18	42	80
Talent target ³⁾	–	95,000	160,000	230,000

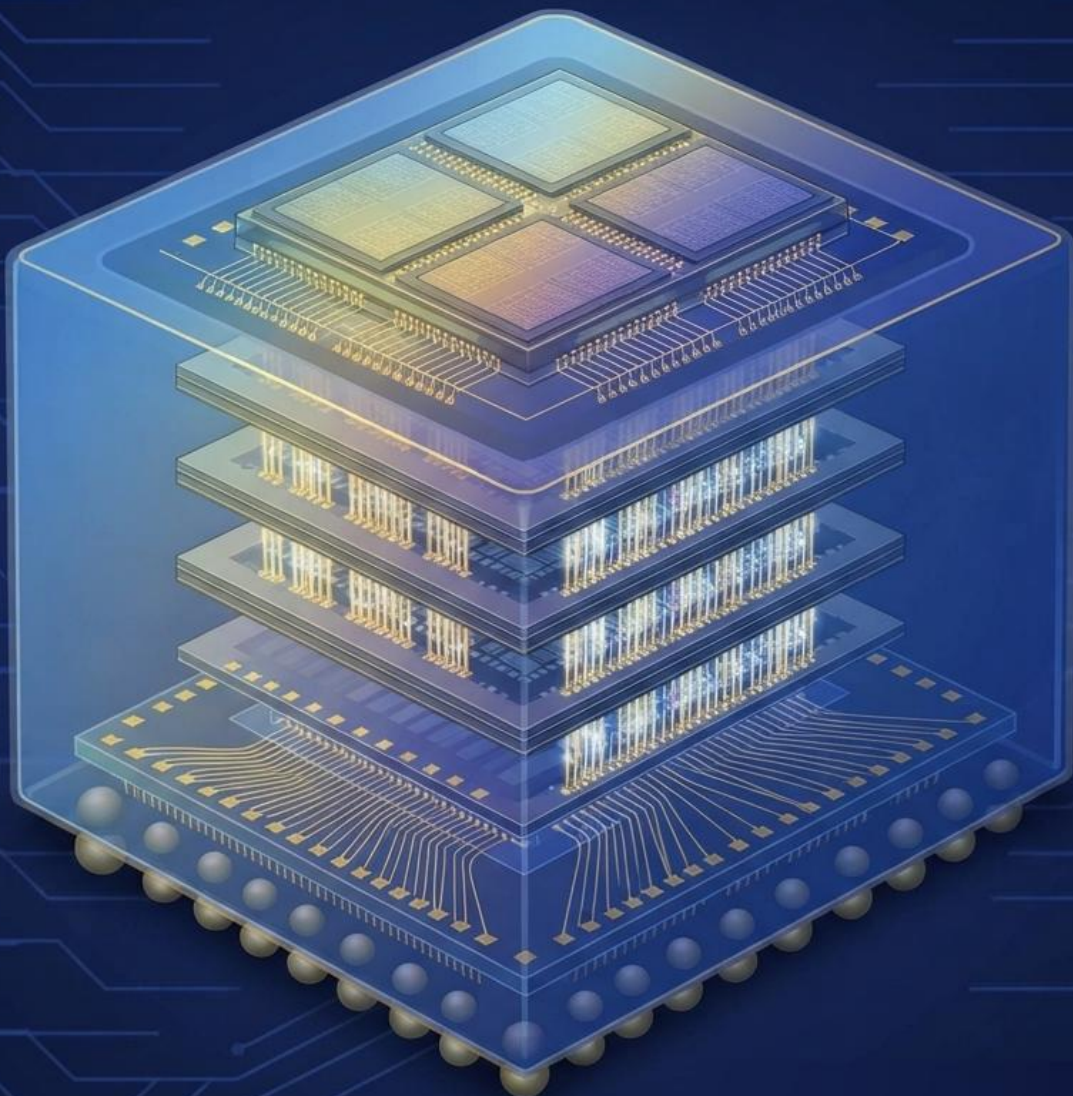
1) Data from 2022 – 2026 (Q2X with Exchange Rate: as of 27 Aug 2026 (1 USD = 32.80 THB))

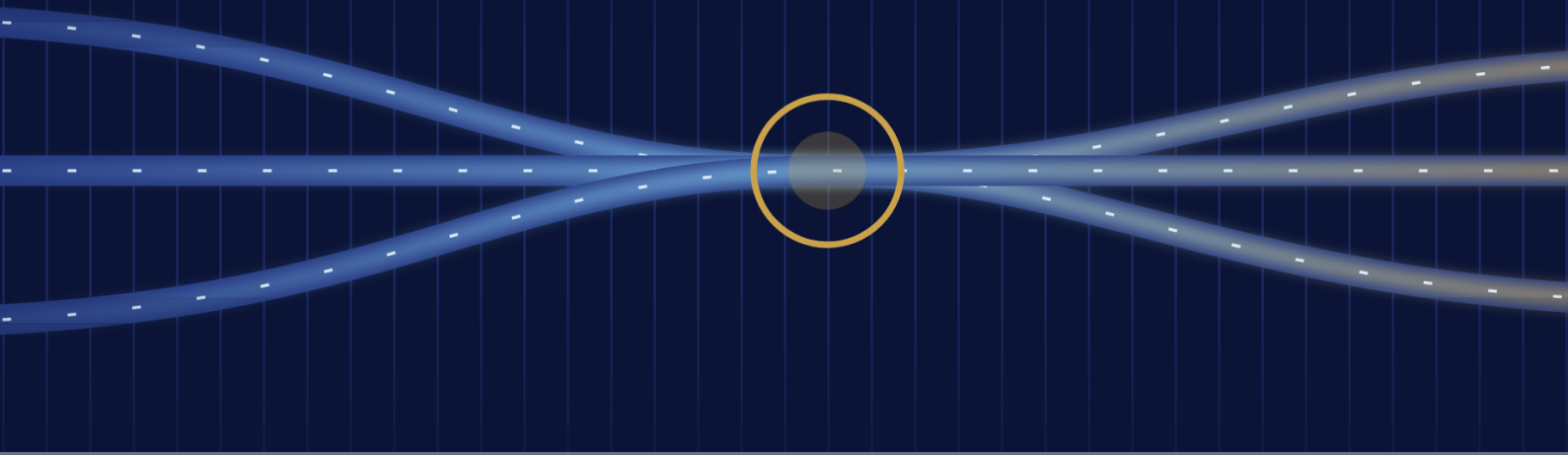
2) This first fab refers to new commercial silicon fab focusing on legacy node, which is different from FT1 (non-silicon) and TMEC (R&D fab)

3) Target to produce new engineers, technicians, and operators

Part Two

Strategic Framework





TARGET PRODUCTS

Based on Thailand's competitive position in the global supply chain, the strategy focuses on advancing technology capabilities to capture surging global demand. The roadmap targets pioneering photonics for AI data infrastructure, advancing power electronics for electric mobility and clean energy, and scaling domestic sensor capabilities for automotive and smart IoT devices. This product-focused approach systematically elevates Thailand into a high-value technology provider for next-generation global supply chains



Photonics

Creating new technology by pioneering optical hardware and transceivers to support high-speed interconnects for AI data centers and supercomputing



Power Semiconductors

Powering existing industries by advancing Power Electronics (SiC and GaN) to produce high-efficiency power modules for Electric Vehicles (EVs) and clean energy infrastructure.



Sensors

Upgrading to high-value segments by expanding domestic sensor capabilities and specialized design for automotive and IoT applications

All three target product categories can be manufactured using mature front-end processes, serving as an ideal foundation for initial investments. To support broader ecosystem needs, Thailand leverages its established manufacturing expertise and strong market base to advance high-efficiency power electronics (SiC and GaN) and specialized sensor designs. Looking ahead, pioneering optical hardware and photonics technologies for AI data infrastructure will serve as key long-term growth engines, positioning Thailand as a high-value technology provider for next-generation global supply chains

STRATEGY ARCHITECTURE

Thailand will pursue phased industry development—advancing from conventional back-end into advanced packaging, while concurrently driving high-value upstream capabilities such as design and front-end processes. Prioritizing upstream integration from the outset will facilitate early value creation and rapid technology accumulation, all driven systematically through five strategic pillars

Five pillars

- 1 Government Incentives**
 The foundational incentive mechanism designed to lower market-entry barriers, reduce investment risks, and drive long-term industry growth.
- 2 Talent**
 Addressing the industry's most critical constraint by systematically developing a highly skilled, specialized workforce equipped to support every segment of the value chain.
- 3 Technology**
 The pathway to transition Thailand from a contract manufacturing base into an innovation-driven hub that develops and owns proprietary technology.
- 4 Infrastructure**
 Developing resilient, sustainable, and stable operational environments and regional clusters that align with the rigorous demands of advanced manufacturing.
- 5 Ease of Doing Business**
 Cultivating a highly competitive, streamlined, and supportive regulatory environment to retain global investors and stimulate a strong domestic market.



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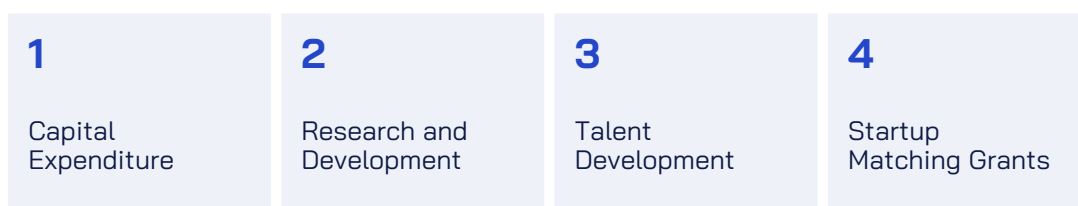
Pillar one

GOVERNMENT INCENTIVES

Government incentives are the foundation of the strategy. They lower market-entry barriers, reduce investment risk and strengthen Thailand's case as a regional semiconductor and advanced electronics hub.

Subsidies and Grants

Dedicated financial support for the semiconductor and advanced electronics industry, in five forms: capital expenditure, research and development, talent development, matching grants for startups

**Tax Incentives**

Thailand offers tailored incentives aligned with each value-chain segment, technology level, and value-added potential. By providing target-driven support—including CapEx, R&D, talent development, and startup grants. Thailand lowers entry barriers, reduces investment risks, and maximizes its appeal during global site selection.

Balanced Support

Incentives for foreign investors will be balanced with support for Thai companies, through conditions on technology transfer and joint ventures, and links between incentives and industry–university collaboration. Measures will also take account of the global minimum tax so that investment incentives remain effective.

Phase 1 focus

Provide targeted cash grants and tax incentives to attract anchor FDI in front-end & advanced back-end sectors, while ensuring efficient use of public funds.

Phases 2–3 focus

Broaden incentives to cover players across the entire value chain, promote joint R&D partnerships between multinationals corporation and Thai enterprises, and conduct ongoing policy reviews to maintain regional competitiveness.

2 Pillar two TALENT

Addressing the industry's most critical constraint, the strategy systematically develops a highly skilled, specialized workforce equipped to support every segment of the value chain. The strategy establishes phased workforce capacity targets of:



University Programmes and Partnerships

Spearheaded by the Ministry of Higher Education, Science, Research and Innovation (MHESI), Thailand is advancing the "**Siam Silica**" framework to aggressively build the country's "human infrastructure". The initiative connects talent development directly to real-world industrial needs through:

- **National Sandbox Programs:** Specialized, fast-tracked degree programs designed to address severe talent shortages, beginning with semiconductor engineering.
- **Global Academic Partnerships:** Strategic collaborations and joint research initiatives with world-leading institutions (such as Imperial College London, Arizona State University, and prominent universities) to produce industry-ready engineers, researchers, and PhD graduates.
- **National Training Infrastructure:** The establishment of National Semiconductor Training Centers (NSTCs), national pilot plants, and regional training centers to bridge the gap from academic laboratories to commercial industry production.

Professional Upskilling Programs

Because the semiconductor and advanced electronics industry relies heavily on hands-on, practical expertise, the private sector will take a direct role in workforce development. Upskilling and reskilling initiatives will be executed through the STEMPlus framework, train-the-trainer schemes, and intensive practical bootcamps. Moving forward, active participation in these collaborative skill-building programs will become a mandatory condition for companies receiving investment promotion privileges.

Visa and Work Permit

To bridge the immediate domestic talent gap while local capabilities are cultivated, Thailand is streamlining visa and work permit processes to enhance investor convenience and attract global expertise. By shifting Smart Visa evaluations toward business potential and consolidating digital entry platforms into a unified, user-friendly system, Thailand significantly reduces bureaucratic hurdles—making it faster and easier for multinational corporations to deploy critical talent and scale high-tech operations in the country.

Phase 1 focus

Co-develop curricula and practical upskilling programs directly with the industrial sector, and streamline visa and work permit processes to rapidly integrate necessary global expertise.

Phases 2–3 focus

Scale up Sandbox programs and training infrastructure nationwide, strengthen collaborative partnerships with global institutions, and regularly review and refine curricula to precisely meet the evolving technological needs of the industry.

3

Pillar three TECHNOLOGY

Four mutually reinforcing programs will be driven in parallel to build enduring domestic technological capability:

R&D Infrastructure

Upgrade TMEC into a regional semiconductor R&D centre. It will build front-end research capability and use its advanced back-end expertise to link local companies with target chipmakers, without the need for a new training centre.

Technology Transfer

Investment privileges will carry technology-transfer conditions. Multinational investors will run training programmes, host student interns and co-develop curricula with Thai institutions, so that skills and knowledge accumulate in Thailand.

Local Champion Incubation

To build local champions and high-tech startups, Thailand will leverage matching funds, university incubators, and multinational partnerships to connect industry, academia, and investors. This ecosystem empowers Thai firms to transition from contract manufacturing to developing proprietary technologies.

Contract Manufacturer
Builds to others' designs

Local Champion
Owns its technology

Global Competitor
Competes in the global value chain

Intellectual Property Protection

To build investor confidence for high-value research and advanced technologies, Thailand is upgrading legal frameworks and IP enforcement mechanisms to international standards. This includes acceding to key international agreements. This will accelerate advanced foreign direct investment, foster high-tech R&D collaboration, and empower local innovators to safely commercialize new technologies globally.

Phase 1 focus

Enhance TMEC's capabilities commercially, establish business incubators for startups, and establish mandatory technology transfer requirements for multinational corporations (MNCs).

Phases 2–3 focus

Establish dedicated R&D centers focusing on advanced packaging & testing, as well as an IC design center. Upgrade specialized R&D centers within specific fields, such as raw materials, machinery & equipment, or advanced back-end.

4

Pillar four

INFRASTRUCTURE

Thailand is proactively upgrading its infrastructure to ensure full readiness for industry expansion. By establishing resilient, sustainable, and highly stable operational environments, the nation is prepared to seamlessly support the rigorous demands of semiconductor and advanced electronics manufacturing.

Industrial Clusters

Thailand aims to designate specific roles for regional value chain clusters to optimize investor site selection based on unique local strengths.

Utility Readiness

Due to the exceptional stability required for semiconductor production, the strategy prioritizes comprehensive infrastructure preparation. Key measures include securing supplementary water supply networks for wafer fabrication and migrating high-voltage power lines underground with real-time power quality monitoring.

Green Utilities

Thailand has set a target achieving 51 percent renewable energy by 2037. The strategy incorporates clean power initiatives to strategically position Thailand as a global investment destination that fully aligns with stringent international sustainability standards.

Disaster Management

To ensure continuous business operations and mitigate supply chain risks associated with climate change, Thailand is implementing practical disaster-resilience measures. These measures include tax deductions for flood-resilient factory CAPEX and tax privileges for developing water-retention systems within industrial estates.

Phase 1 focus

Define regional clusters to guide investor site selection and develop readiness plans for water, electricity, and clean energy.

Phases 2–3 focus

Upgrade industrial estate power grids, secure supplementary water supplies, and drive renewable energy initiatives to reach the 51% target while ensuring continuous infrastructure management

5

Pillar five

EASE OF DOING BUSINESS

The strategy cultivates a competitive business environment through three core initiatives to establish Thailand as the region's most attractive destination for advanced manufacturing:

One-stop Portal

A unified One-Stop Portal featuring single sign-on across inter-agency systems, full bilingual services, and English document acceptance will streamline investor onboarding. Requiring no additional budget, these administrative efficiency enhancements significantly cut entry costs and processing delays

Trade Agreements and Export Control

Thailand will pursue free trade agreements with the strategic partners covering semiconductors, to close the market-access gap with regional competitors. These agreements will be paired with strict and transparent export controls, so Thailand can access advanced chips and technology without restriction.

Domestic Demand Promotion

The strategy aims to create a reliable domestic market to absorb growing local capacity through public procurement price advantages, the continuous expansion of the "Made in Thailand" (MiT) program, and a national supplier qualification framework. Ensuring Thai enterprises secure continuous orders and are universally accepted in the global market.

Phase 1 focus

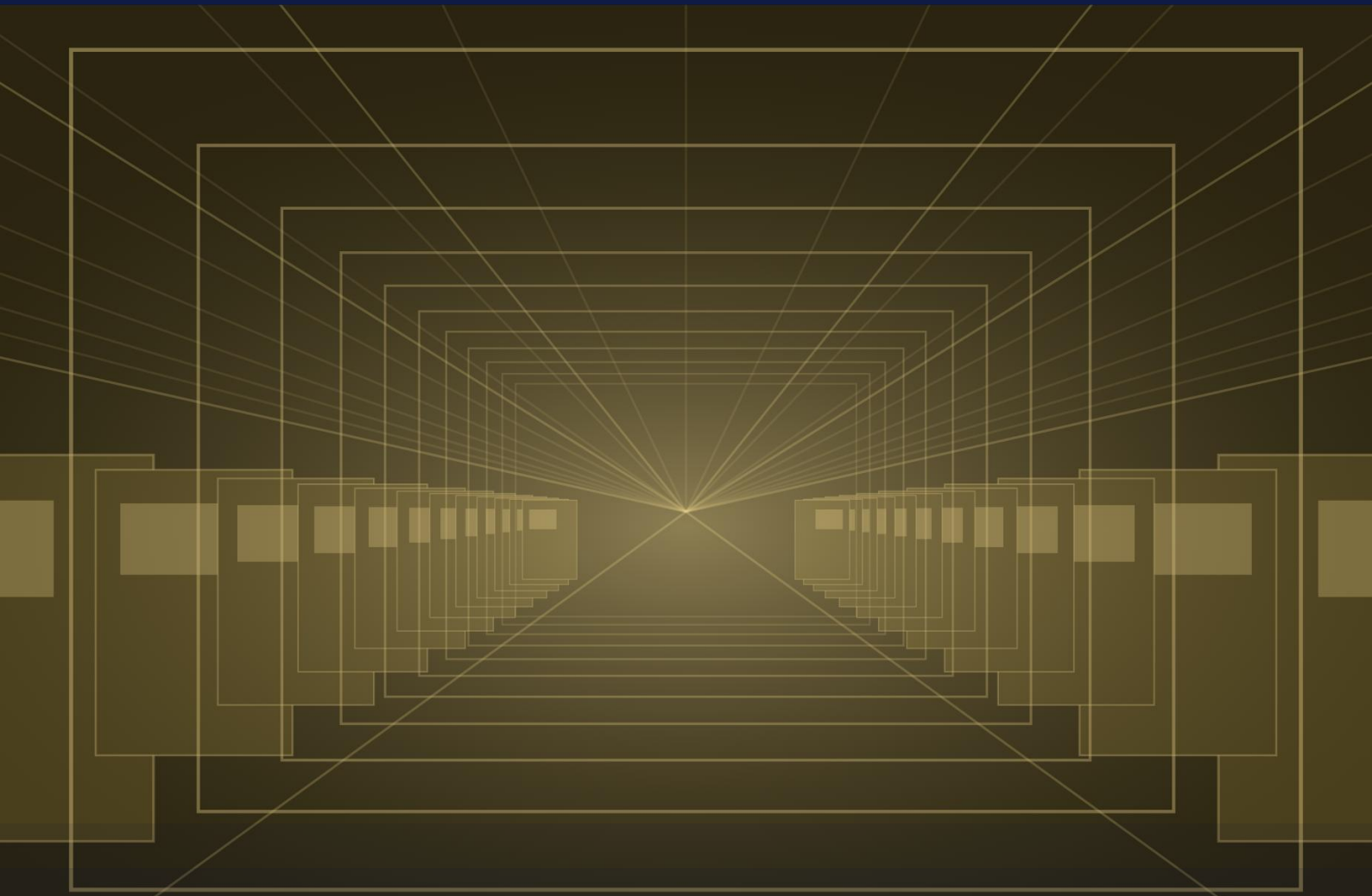
Strengthen export controls through origin and destination verification, tracking, and legal reforms. Enhance the Single Sign-On (SSO) system for faster e-service access and expedite FTA negotiations.

Phases 2–3 focus

Expand the scope of FTA negotiations with key strategic partners to broaden market access. Paired with the 'Made in Thailand' initiative and international standards (JEDEC, IPC), this strategy enhances the global competitiveness and credibility of Thai semiconductor products

Part Three

Operational Enablement



A horizontal timeline with a light blue line and a grey arrow pointing right. Four dots are placed along the line: a gold dot at 2026, and three blue dots at 2030, 2040, and 2050. The years are written above the line in matching colors.

Reinforce the Foundation

Grow the existing base while building the first new capabilities, including the country's first Front-end fab.

Accelerate Strategic Growth

Draw new investment into IC design,
Front-end and Advanced Back-end,
while retaining the existing base.

Achieve an Integrated Value Chain

A strong, complete ecosystem of global leaders and Thai champions from upstream to downstream.

8 IC design

1 Wafer Fabrication

2 Advanced Back-end

25 Conventional Back-end

445 Advanced Electronics

Industry Revenue ~USD 80 bn

FDI USD 18 bn

Talent 95.000+

15 IC design

2 Wafer Fabrication

8 Advanced Back-end

30 Conventional Back-end

560 Advanced Electronics

Industry Revenue ~USD 110 bn

FDI USD 42 bn

Talent 160.000+

60 IC design

5 Wafer Fabrication

10 Advanced Back-end

35 Conventional Back-end

700 Advanced Electronics

Industry Revenue ~USD 150 bn

FDI USD 80 bn

Talent 230.000+

21

THE ACTION PLAN

The Action Plan turns the five pillars into measures with responsible agencies, budgets and indicators. It has two parts: the second builds on proven results from the first and adapts to changes in investment and technology.

Part 1 · Phase 1, 2026–2030

Lay the ecosystem's foundation and attract the first wave of investment in assembly and test, power semiconductors and sensors, and industry talent.

Government Incentives	Provide targeted Cash Grants and tax incentives, including QRTC, to attract anchor FDI in Front-end and Advanced Back-end sectors
Talent	Adapt and expand university programmes, especially Advanced Back-end and Front-end; run bootcamps in scarce fields; attach technology-transfer conditions to privileges.
Technology	Set up NSTCs, enhance TMEC's commercial capabilities and establish startup incubators, alongside enforcing technology transfer requirements for MNCs..
Infrastructure	Define regional value chain clusters based on local strengths while developing infrastructure readiness plans covering water, electricity, and clean energy.
Ease of Doing Business	Upgrade the government one-stop portal; advance FTAs; stimulate domestic demand through Made in Thailand Initiative.

Lead agencies: BOI, MHESI, NSTDA, MoE, IEAT

Part 2 · Phases 2–3, 2031–2050

Expand into front-end manufacturing, build domestic innovation and intellectual property, and establish Thailand as a regional hub.

Government Incentives	Expand value-chain support, foster joint MNC-local R&D, and refine measures to maintain competitiveness.
Talent	Scale up Sandboxes and nationwide training while strengthening global partnerships and continuously refining curricula to meet evolving industry needs
Technology	Establish dedicated R&D centers for Advanced Packaging, Testing, and IC Design, while progressively upgrading specialized centers across raw materials, equipment, and advanced back-end fields.
Infrastructure	Upgrade power grids, water supply, and renewable energy to reach the 51% target while ensuring continuous infrastructure management for industrial requirements.
Ease of Doing Business	Continue FTA negotiations with strategic partners while driving the "Made in Thailand" initiative and upgrading manufacturing standards to international criteria (JEDEC, IPC) to enhance global competitiveness.

Lead agencies: BOI, MoC, MoF, MHESI, IEAT, Energy Agencies

REGULATORY STREAMLINING

Faster, simpler dealings with government are part of Thailand's offer to investors.

Approvals

Enhance the One-Stop Portal and streamline access to government e-services, with greater integration across agency platforms to reduce administrative burdens for investors.

Sites and Land

Regional clusters guide investors to locations prepared for each part of the value chain.

Environment and Utilities

Faster provision of clean energy, water and efficient waste management for high-technology plants.

People

Empower local talent while attracting global experts by consolidating visa and work-permit systems into two business-plan-based channels

NATIONAL SECURITY AND COMPLIANCE

A trusted semiconductor hub must protect technology and keep supply chains clean.

Dual-use Items

Rules for overseeing dual-use items, including checks at the point of import, to prevent advanced electronics and technology from being misused.

Export Control

Clear and transparent export controls that give partners confidence to share advanced chips and technology with Thailand.

Cybersecurity

Further strengthen and update the existing cybersecurity framework to enhance the resilience of advanced systems against digital threats.

Supply-Chain Integrity

Enforce strict supply chain integrity measures to prevent illicit transshipment and safeguard global trade compliance

Intellectual Property

Penalties for trade-secret theft and specialised dispute resolution.

Business Continuity

Stable power distribution and a clear, practical national plan for preventing and responding to natural disasters, so supply-chain risk stays low.

GOVERNANCE FRAMEWORK

The strategy is steered by a national policy committee that brings ministers and industry leaders together, with the BOI as secretariat and lead agencies accountable for each measure.



Governance Principles

- An adaptive mechanism: the 25-year plan will be reviewed and adjusted as the industry changes.
- Clear accountability: each Action plan measure has a responsible agency, a budget and indicators.
- Balance between foreign investment, regional cooperation and domestic demand.

NOTES AND SOURCES

About the figures

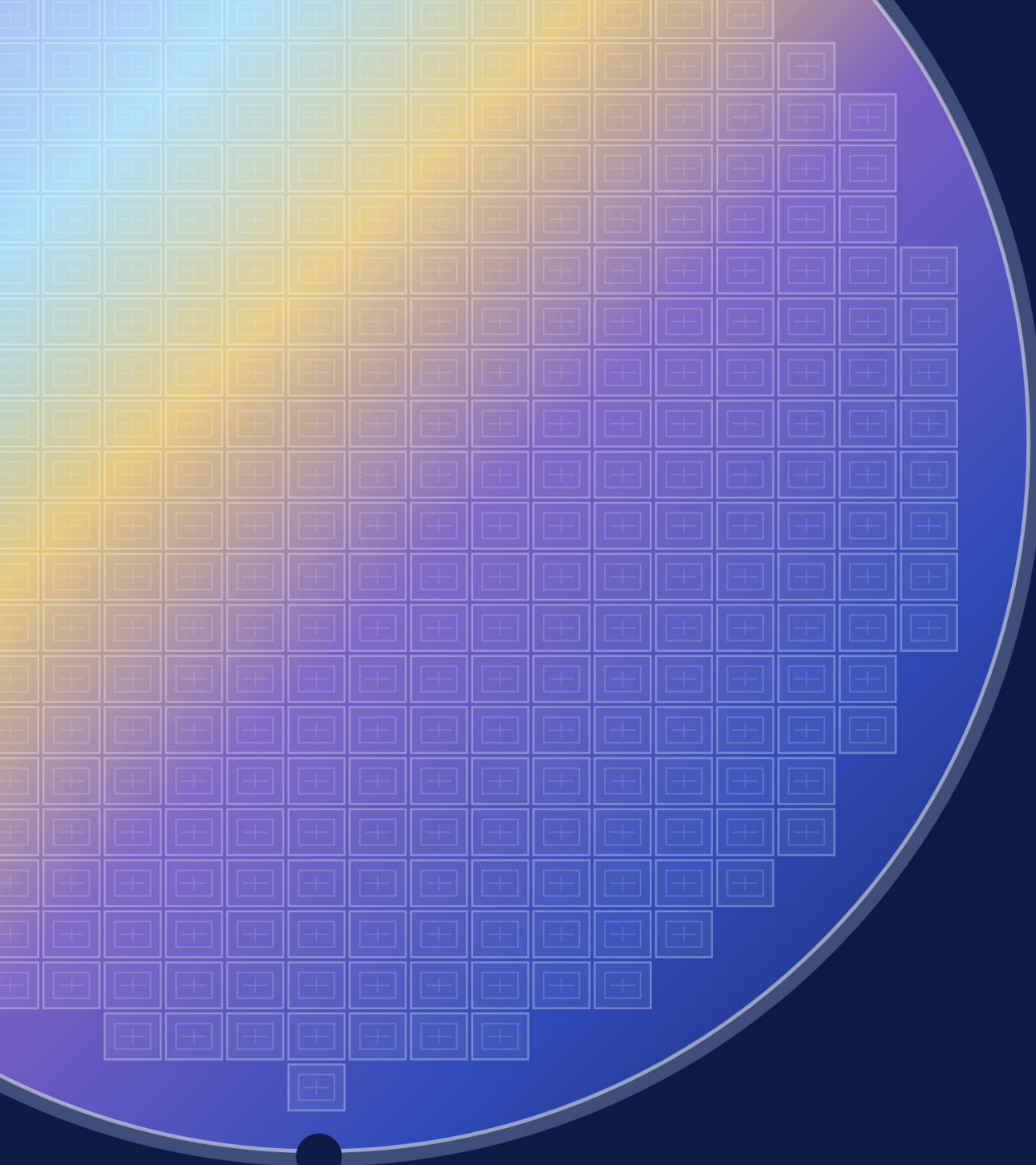
Targets, phase benchmarks and policy measures are taken from the National Semiconductor and Advanced Electronics Strategy and its Action Plan, prepared by the BOI for the National Semiconductor and Advanced Electronics Policy Committee (2026). Investment, revenue and talent figures for 2040 and 2050 are cumulative. Baht conversions use the Bank of Thailand rate of 9 June 2026 (USD 1 = THB 32.564).

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Abbreviations

BOI	Thailand Board of Investment
EMS	Electronics manufacturing services
FDI	Foreign direct investment
IEAT	Industrial Estate Authority of Thailand
MHESI	Ministry of Higher Education, Science, Research and Innovation
NSTDA	National Science and Technology Development Agency
OSAT	Outsourced semiconductor assembly and test
TMEC	Thai Microelectronics Center



INVEST IN THAILAND'S SEMICONDUCTOR FUTURE

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