



# IC TAIWAN GRAND CHALLENGE

GLOBAL CALL  
FOR PROPOSALS

IC TAIWAN  
GRAND  
CHALLENGE

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**Organizer:**  **國家科學及技術委員會**  
National Science and Technology Council

**Co-Organizers:**  **semi**  
國際半導體產業協會

 **TSIA** 台灣半導體產業協會  
Taiwan Semiconductor Industry Association

 **TCA** 台北市電腦公會  
TAIPEI COMPUTER ASSOCIATION

 **TTA** TAIWAN  
TGCH  
ARENA

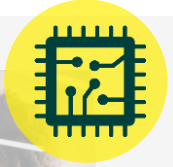
# IC Taiwan Grand Challenge



## Leveraging the Strengths of Silicon Island to Attract International Talents and Investment to Taiwan

- Combine **Generative AI** and **Chips** to drive industry-wide innovation
- Facilitate local professional development and attract **Global R&D Talents**
- Accelerate **Heterogeneous Integration** and **Advanced Technology**

# Areas of Focus



- Startups, legal entities, academic research teams, and persons that plan to collaborate with Taiwan's semiconductor chip design and manufacturing industry.
- Proposals should include core technology, challenges solved, business model, market development plan, etc.



## Domain 1

### AI Core Technologies and Chips

- AI chip design
- Hardware Acceleration
- AI systems
- Generative Applications
- Large language models
- Cybersecurity

## Domain 2

### Smart Mobility

- Electric Vehicles
- Autonomous Vehicles
- Smart Cities
- Comms/Satellite
- Drone

## Domain 3

### Smart Manufacturing

- Intelligent Manufacturing
- IC Process
- Robotics

## Domain 4

### Smart Medtech

- Biometrics
- Smart Monitoring
- e-Health

## Domain 5

### Sustainability

- Sustainable Manufacturing
- Energy Saving Innovation
- New Energy

# Criteria

40%

## LOCAL CONNECTIVITY

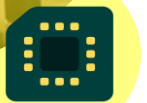
1. Have a need of resources and concrete development plans in Taiwan
2. Offer Taiwan broader industry development
3. Focus on the business plans and the goals of the applicants



40%

## VALUE CREATION

1. Able to drive technological innovation and create social welfare
2. Contribute to building new industrial links or enable industrial upgrading
3. Capable of raising funds or creating high economic value



20%

## TECHNOLOGICAL INNOVATION

1. Possess innovation in emerging fields of application
2. Propel innovation in the manufacturing process, design, and use of new materials
3. Integrate diverse innovation and cross-domain knowledge



# Benefits

1

**Prize**



**US \$30,000**

- Upon team arrival in Taiwan
- In person exhibition of innovation

\* details to follow

2

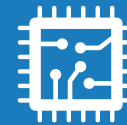
**Mentoring**



**Mentorship by  
Semiconductor Industry  
Experts**

3

**Platform**



**Prototyping to Production  
(EDA Tools, Wafer, etc.)**

4

**Resources**



**Multifaceted Resources and  
Services to Ensure Success**

- Provide key resources and expert consulting support to accelerate solution development from prototyping to production through the startup acceleration platform

# IC Startup Acceleration Platform

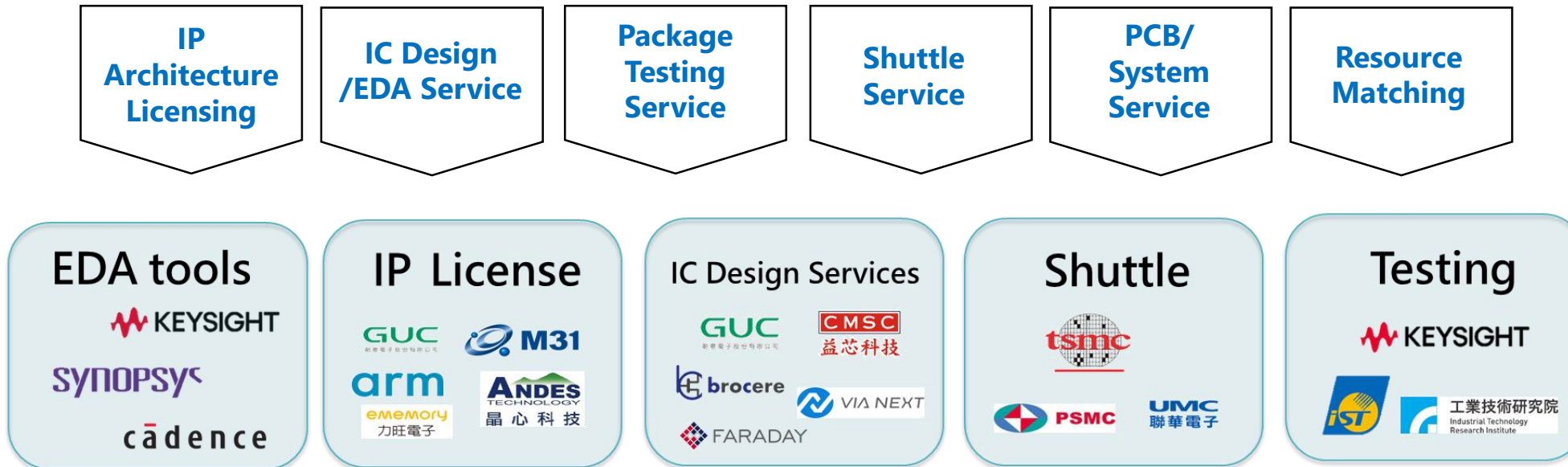
## Connecting the Semiconductor Supply Chain Players

### Execution

- One-stop services to support startups in linking to necessary resources in Taiwan.
- Accelerating product development and fostering innovation through Taiwan's semiconductor expertise and resources.



### IC Design Flow



# Competition Timeline

**November, 2025**

**Online Application **Open****



**\*Winning teams will attend award ceremony and exhibit at COMPUTEX/ InnoVEX held on June 2<sup>nd</sup>-5<sup>th</sup> in Taiwan**

## TIMELINE

**February, 2026**

**Online Application **Deadline****



# 1st Batch of Winners (August 2024 Announcement)



UNITED KINGDOM

## SMART DATA & AI



ULTRA-EFFICIENT  
REVOLUTIONARY QUANTUM  
POWERED UNIVERSAL COMPUTER  
MEMORY

**Quinas  
Technology  
(ULTRARAM)**



UNITED STATES

## SMART MOBILITY

**GALAVVERSE**

LARGE BANDWIDTH, LOW  
LATENCY, AND COMPLEMENTARY  
DEPLOYMENT, HIGH FREQUENCY  
RADIO TECHNOLOGIES

**GalaVerse USA**



TAIWAN

## SMART MOBILITY

**Ranictek**

IC DESIGN, 5G/6G BASE STATION  
CHIPS, SATELLITE  
COMMUNICATION CHIPS

**Ranictek Inc.**



UNITED STATES

## SUSTAINABILITY



EMPOWERING INTEGRATED  
PHOTONICS FOR  
COMMUNICATIONS AND  
COMPUTATION

**Polaris Electro-  
Optics**



TAIWAN

## SUSTAINABILITY



WIRELESS POWER · WIRELESS  
FREEDOM

**Voltraware  
Semiconductor  
Co. Ltd.**



Pioneers a breakthrough memory that merges the speed of DRAM with the non-volatility of flash, enabling next-gen storage.

Leverages high-frequency radio to power low-latency, high-bandwidth connectivity for the future of ubiquitous computing.

Develops cost-effective, energy-saving baseband chips to accelerate 5G/6G and satellite communication deployments.

Delivers industry-leading high-speed, energy-efficient photonics through patented materials and design innovations.

Enables multi-device, long-range wireless charging with advanced magnetic resonance ICs for e-mobility and consumer electronics.

# 2nd Batch of Winners (April 2025 Announcement)



SINGAPORE

**SMART DATA & AI**



#AI大語言模型、#高效記憶體、#生成式AI

**TurboNext.ai**



Scales large language model performance with heterogeneous compute and high-memory AI accelerators.

SINGAPORE

**SMART DATA & AI**



#後量子密碼學、#資安韌性、#PUF、  
#硬體安全晶片

**JMEM TEK  
HOLDING CO PTE.  
LTD.**



Provides post-quantum, uncrackable chip-level security through innovative semiconductor IP and hardware design.

UNITED KINGDOM

**SMART MEDTECH**



#基因電路工程技術、#器官晶片、  
#OOC(ORGAN-ON-A-CHIP)

**Genenet  
Technology (UK)  
Limited**



Revolutionizing preclinical drug discovery with an AI- and quantum-powered multi-organoid-on-chip platform for streamlined drug screening.

FRANCE

**SUSTAINABILITY**



#氮化鎵電源元件、#大幅提高功率密度

**WISE-  
INTEGRATION**



Enabling ultra-compact, high-efficiency AC-DC power supplies with integrated GaN power ICs and proprietary digital controllers.

SWEDEN

**SUSTAINABILITY**



#奈米純水解決方案、#提升半導體良率、#永續發展

**NSS Water**



Transforming semiconductor industry with cutting-edge nanopure water technology for a cleaner, sustainable future.



# IC TAIWAN GRAND CHALLENGE



Play video



**Website**

[ictaiwanchallenge.org](http://ictaiwanchallenge.org)



## Contact Us

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