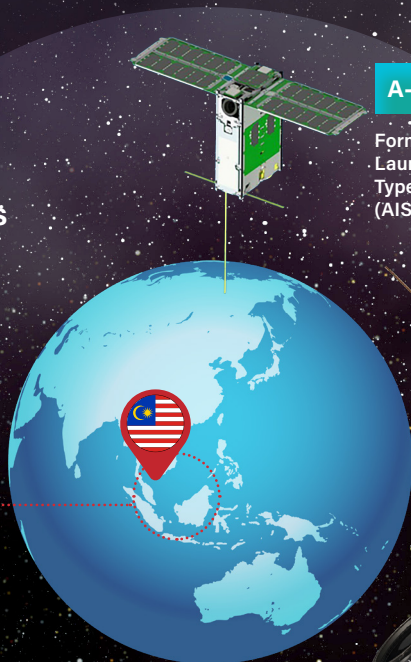


# Tiny Satellites, Big Ambitions

## Malaysia's Journey in Space Technology

Malaysia's SmallSat sector is rapidly advancing, marked by successful launches of diverse satellites like A-SEANSAT-PG-1, InnoSat-2 and UzmaSAT-1. Generating annual revenues of up to RM1.05 billion, the industry leverages Malaysia's strengths in electronics, aerospace and advanced manufacturing to develop space-grade components. Importantly, this progress aligns with and reassures us of Malaysia's strategic direction in global trends in space technology innovation, traffic management and collaboration, positioning Malaysia to expand its role in the growing space economy.

**Tiny Satellites, Big Impact**  
Charting Malaysia's SmallSat Progress



### A-SEANSAT-PG-1

Form Factor: 6U CubeSat  
Launched: June 2023  
Type: Automatic Identification System (AIS) and Earth Observation (EO)

### InnoSat-2

Form Factor: 3U CubeSat  
Launched: November 2018  
Type: Technology Demonstrator

### SpaceANT-D

Form Factor: 1P PocketQube  
Launched: November 2023  
Type: Internet-of-Things (IoT)

### UzmaSAT-1

Form Factor: Microsatellite  
Launched: January 2025  
Type: Earth Observation (EO)

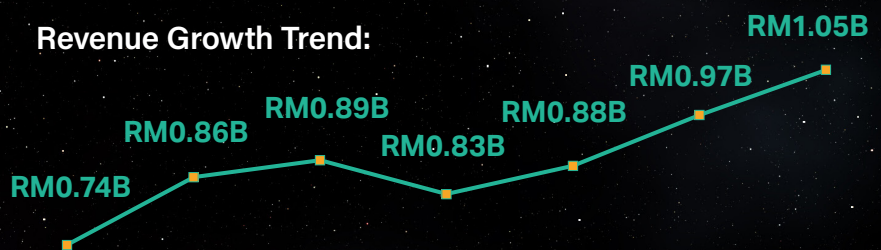
### UiTMSAT 1

Form Factor: 1U CubeSat  
Launched: June 2018  
Type: Technology Demonstrator and Education

**RM 1.05b (2023)**

The Malaysian space industry has experienced significant growth over the past decade, accompanied by impressive revenue generation. The Malaysian space industry generates an estimated revenue between RM0.74 billion and RM1.05 billion annually.

### Revenue Growth Trend:

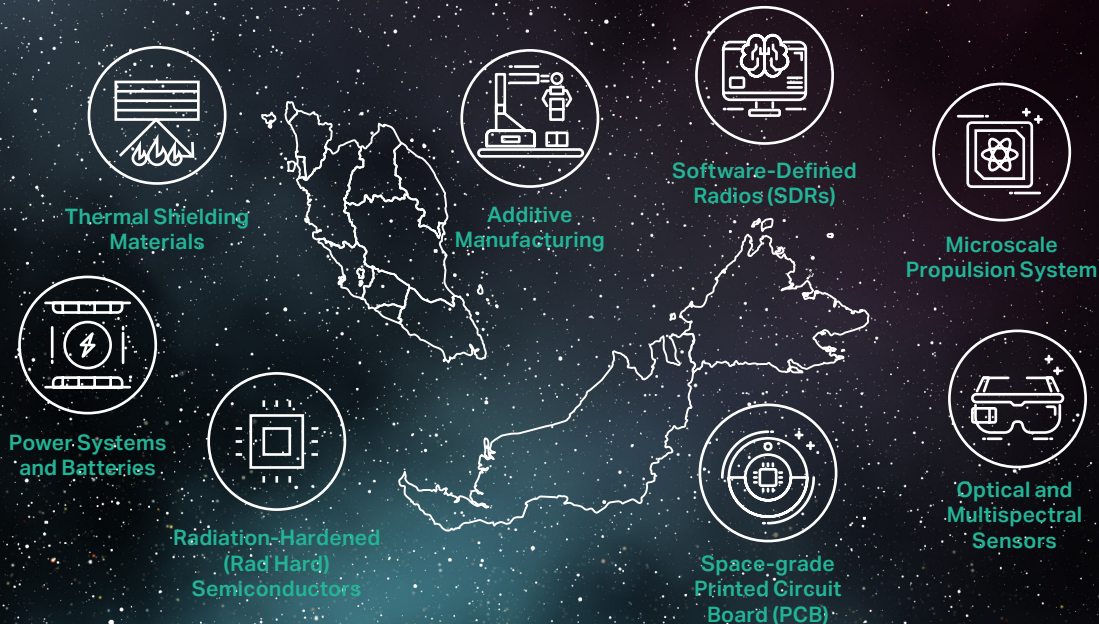


## Opportunities for Malaysia

### Leveraging Strengths, Breaking New Ground

Malaysia's ambitions to establish itself as a player in the global space industry are well-supported by its existing industrial strengths.

The country's capabilities in electronics, advanced manufacturing and aerospace offer a foundation to transition into space-grade component manufacturing.



## Space Exploration

### What's the Trend Right Now?

- Space Traffic Management:** Solutions to prevent collisions in space and manage orbital debris
- Collaboration and Competition:** Geopolitical dynamics influencing funding priorities and strategies

**Technological Innovations:** Integration of advanced technologies in space

**New Launch Technologies:** Innovation in launch systems and reusability

**Satellite Constellations:** Expansion of networks for global coverage

**Focus on Lunar Exploration:** Focal point for space exploration efforts.

**Space Manufacturing:** In-space production using advanced techniques

**NewSpace Movement:** Rise of private companies in the space sector

With a solid foundation in technology and manufacturing, Malaysia's SmallSat progress exemplifies its ambition and the potential to become a significant player in the global space sector. By focusing on key areas such as radiation-hardened semiconductors, propulsion systems, additive manufacturing and adapting to emerging trends like satellite constellations and space traffic management, Malaysia is poised to harness new opportunities for sustainable growth and innovation in space exploration and applications.



**Mohd Hafiz Ariffin**  
hafiz@might.org.my



**Iman Baihaqie Isyraq Isrul**  
imanbaihaqie@might.org.my