A Singapore-based manufacturing AI company in looking for OEM partners to onboard AI to their advanced manufacturing equipment

Summary

Profile type
Business Offer

Company's country
Singapore

POD reference
BOSG20250326006

Profile status
PUBLISHED

Type of partnership
Commercial agreement
Supplier agreement

Targeted countries
• World

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Term of validity
26 Mar 2025
26 Mar 2026

Last update
26 Mar 2025

General Information

Short summary

A pioneer in manufacturing and industrial AI based in Singapore is seeking partnerships with equipment manufacturers to onboard AI onto their machines. This can be done either by incorporating AI into the machine itself, or with the necessary modular hardware installed and integrated with the machine. This partnership will give the OEMs a critical edge over their competitors, by improving productivity, overall equipment effectiveness (OEE), and quality.

Full description

Headquartered in Singapore, the company is a market leader in manufacturing AI for advanced manufacturing that serves primarily the semiconductor manufacturing industry. It is currently operating in 7 countries and 10 cities across the world, including the EU, USA, Taiwan, Japan, China, and Southeast Asia. It provides 3 main products and scenarios that can be integrated with 3rd party manufacturing equipment:

Product: Defect Diagnosis
Key Features
Advanced defect detection and classification that does not rely on large amounts of defect data.
Proprietary methodology achieves extremely low escape rate (<0.1%) without sacrificing overkill rate (<1%).
Can be deployed on server for in-line and off-line inspection, as well as in AOI or edge device for in-line inspection.

Partnership Example Scenarios
1. Integrating with modular camera and lighting systems with mechanical automation (AOI) to provide in-line post-process defect classification for OEMs.
2. Platform with MLOps and off-line defect classification to add value to AOI manufacturers.

Product: Machine Autonomation
Key Features
AI agent to automate any complex, dynamic workflows that require human operation, intervention, monitoring, and optimization.
Non-intrusive connect and control of manufacturing equipment.

Partnership Example Scenarios
1. Automated die-to-die or wafer-to-wafer machine tuning and optimization.
2. Enable fully autonomous operation, regardless of recipes and customer usage.

Product: Insight Generation
Key Features
AI agent discovers new patterns and logic within complex processes. Optimize processes based on newly created insights.
Uses unsupervised learning - does not require full understanding of data parameters definition and significance.
Able to detect anomaly in real-time data.

Partnership Example Scenarios
1. Optimize and automate recipe creation based on desired outcomes, for OEM and their customers.
2. Tune OEM machines to provide standardized output from the same recipe (e.g. implanter beam tuning, or color tuning and configuration).
3. Detect and warn of machine health anomalies.

Advantages and innovations

Non-Intrusive Control
The company's AI agents can be integrated with any manufacturing equipment non-intrusively. This means no hardware modification or software installation required on the partner's machines.

Flexible Architecture
The AI agents can also be deployed on a central server with their command-and-control platform. This provides flexibility for the partnership with any OEM.

Industry Standard-Setting Accuracy
Extremely high accuracy defect detection and classification that avoids the industry limitation of lack of defect data means OEM partner can easily and confidently improve the quality of their output.

Game Changing Functionalities
Adding game changing intelligence to machines that auto-tunes parameters and recipes to improve expected outcomes will allow OEMs to beat their competitors and target more advanced markets.

The company is also the only one focused on AI agents entirely for operations inside fabs and production lines, with extensive experience and understanding of the state-of-the-art technologies and processes in Tier 1 semiconductor manufacturers, including foundries, IDM Semiconductor, SOI Substrate, RF IDM, MEMS, and OSAT.

Their presence in these companies can also provide opportunities to cross-sell AI-enabled equipment from OEM partners.

Technical specification or expertise sought

Stage of development

Already on the market

Sustainable Development goals

- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 8: Decent Work and Economic Growth**
- **Goal 17: Partnerships to achieve the Goal**

IPR Status

IPR granted

IPR Notes

IPR Notes

Partner Sought

Expected role of the partner

Partners are expected to have significant sales and sales pipeline in the semiconductor manufacturing and other advanced manufacturing (hydrogen cell, PCB, automotive, MedTech) markets, with an annual revenue of > $100M USD.

Partners are ideally already engaged with Tier 1 or 2 semiconductor manufacturers to provide potential sales channel of company's AI agents which can improve performance and utility of partner's existing machines.

Partners should understand the potential of AI and its application in their markets and provide valuable feedback to the company to tailor their products and marketing strategies accordingly.

Type of partnership

Commercial agreement

Supplier agreement

Type and size of the partner

- **R&D Institution**
- **University**
- **SME 50 - 249**
- **Big company**

Dissemination

Technology keywords

Market keywords

- **02007012 - Medical/health software**
- **06010003 - Energy for Industry**
- **01006005 - Other communications (not elsewhere classified)**

Targeted countries

- **World**

Sector groups involved