



# Himax and Rabboni Join Forces to Launch World's First Scalable Multi-Scenario Endpoint AI Sensing System - bboni Ai Enabling Real-Time AI Inference on Wearable Devices

# Next-Generation Platform Combines Ultralow Power WiseEye <sup>™</sup> AI with High-Precision IMU Motion Sensor to Enable Real-Time On-Device AI Inference at the Endpoint

**TAINAN and HSINCHU Taiwan – July 14, 2025** – Himax Technologies, Inc. (Nasdaq: HIMX) ("Himax" or "Company"), a leading supplier and fabless manufacturer of display drivers and other semiconductor products, and Rabboni Co., Ltd. ("Rabboni"), a Taiwan-based company integrating next-generation semiconductor sensing and edge computing to enable smart living, smart sensing and wearable devices, today jointly announced the unveiling of bboni Ai, the world's first multi-scenario endpoint AI sensing system. bboni Ai integrates Rabboni's high-precision IMU (Inertial Measurement Unit) motion sensors with Himax's ultralow power WiseEye2 AI processor, opening a new chapter for real-time endpoint AI inference for wearable devices and accelerating the transition of AI from concept to real-world implementation.

WiseEye2 AI processor features a high-performance architecture built on Cortex-M55 cores and is equipped with the Ethos-U55 AI inference engine. It supports always-on sensing, dynamic voltage and frequency scaling (DVFS), and a multi-level power management structure. The design empowers dynamic adjustments in core voltage and frequency based on the scenarios of wearable devices, enabling data collection, event triggering, and endpoint AI inference at ultralow power consumption of just a few milliwatts. This architecture significantly reduces reliance on cloud transmission, effectively lowering latency and power consumption. It also enhances real-time responsiveness and data privacy, delivering a commercially viable endpoint AI solution for devices requiring long-hour operation. Notably, WiseEye<sup>™</sup> AI can also collaborate with cloud-based large language models (LLMs), further enhancing the device's ability to perceive, understand, and interact with complex real -world scenarios.

## bboni Ai Brings AI to the Endpoint: On-Device AI Processing. No Cloud Needed

Featuring integrated motion sensing capability and ultralow power AI powered by Himax's WiseEye2 AI processor, the bboni Ai system enables real-time motion analysis, posture recognition, and behavior interpretation directly on the endpoint device, eliminating the need for cloud computing. With low-latency, high-efficiency, and privacy-preserving on-device AI, bboni Ai delivers a truly scalable and deployable endpoint AI solution. bboni Ai not only enhances system stability but also meets the stringent requirements for data immediacy and security in applications such as healthcare and education.

# bboni Ai Transforms Everyday Life Across Diverse Wearable Applications: Demonstrates broad real-world readiness across multiple use cases

- Smart Healthcare: Supports WHO's ICOPE (Integrated Care for Older People) framework, facilitating seniors to monitor physical function and rehabilitation progress at home, reducing the cost of care
- Sports Technology: Real-time detection of user movements and behavior, providing instant motion feedback, optimizing training postures through AI analysis, improving training efficiency and reducing the risk of injury
- Education and Interaction: Enables hands-on STEM and AI education by leveraging motion sensing and behavior analysis to foster interdisciplinary learning and innovation, cultivating the next generation of talent

#### Powered by Taiwan-Based Team with bboni Ai Developer Program to Launch in July 2025

To accelerate the development of innovative AI applications, Himax will officially launch the bboni Ai Developer Program in late-July 2025. This initiative will provide a complete set of APIs and SDKs, inviting developers, academic institutions, and corporate partners jointly to create a robust and commercial-ready endpoint AI ecosystem, advancing Taiwan's AI technology around the globe.

"The bboni Ai system was entirely developed by a Taiwanese team, integrating key technologies such as semiconductor design, sensor technology, AI algorithms, and software-hardware integration, showcasing Taiwan's technical strength in smart sensing and endpoint AI," said Richard Chiang, Chairman of Rabboni.

"WiseEye's ultralow power and always-on sensing capabilities make it a perfect fit for power-constrained endpoint devices, especially wearable applications in smart care, interactive education, and health monitoring that require long-hour operation," said Mark Chen, Vice President of Smart Sensing Business at Himax. "Himax is excited to collaborate with Rabboni to integrate our respective technological strengths and bring AI out of the conceptual stage and into everyday life, enabling truly meaningful smart applications."

#### About Rabboni Co., Ltd.

Rabboni Co., Ltd., originating from Silicon Instruments Co., Ltd. founded in 2009, is dedicated to integrating nextgeneration semiconductor sensing and edge computing to build the foundation of smart living. The company empowers professionals across various service domains to achieve digital and AI transformation, thereby enhancing their value-added services. For years, Rabboni has supported National Yang Ming Chiao Tung University (NYCU) in university social responsibility (USR) programs and MIT-collaborated science outreach projects, as well as medical research initiatives. Through these efforts, Rabboni has developed interdisciplinary platform technologies and established a comprehensive industry chain for smart sensing and wearable technologies.

Rabboni also introduced the TEA Innovation Service Platform, inspired by the concept: "Technology x Experts x Aids = Brew better futures." In collaboration with Himax's engineering team, Rabboni successfully completed the development of the bboni Ai platform. An Endpoint AI Startup Competition will soon be co-hosted by Himax, Rabboni, and NYCU, featuring the world's tiniest and ultralow power bboni Ai system.

## About Himax Technologies, Inc.

Himax Technologies, Inc. (NASDAQ: HIMX) is a leading global fabless semiconductor solution provider dedicated to display imaging processing technologies. The Company's display driver ICs and timing controllers have been adopted at scale across multiple industries worldwide including TVs, PC monitors, laptops, mobile phones, tablets, automotive, ePaper devices, industrial displays, among others. As the global market share leader in automotive display technology, the Company offers innovative and comprehensive automotive IC solutions, including traditional driver ICs, advanced in-cell Touch and Display Driver Integration (TDDI), local dimming timing controllers (Local Dimming Tcon), Large Touch and Display Driver Integration (LTDI) and OLED display technologies. Himax is also a pioneer in tinyML visual-AI and optical technology related fields. The Company's industry-leading WiseEye<sup>™</sup> Ultralow Power AI Sensing technology which incorporates Himax proprietary ultralow power AI processor, always-on CMOS image sensor, and CNN-based AI algorithm has been widely deployed in consumer electronics and AloT related applications. Himax optics technologies, such as diffractive wafer level optics, LCoS microdisplays and 3D sensing solutions, are critical for facilitating emerging AR/VR/metaverse technologies. Additionally, Himax designs and provides touch controllers, OLED ICs, LED ICs, EPD ICs, power management ICs, and CMOS image sensors for diverse display application coverage. Founded in 2001 and headquartered in Tainan, Taiwan, Himax currently employs around 2,200 people from three Taiwan-based offices in Tainan, Hsinchu and Taipei and country offices in China, Korea, Japan, Germany, and the US. Himax has 2,609 patents granted and 370 patents pending approval worldwide as of June 30, 2025.

#### **Forward Looking Statements**

Factors that could cause actual events or results to differ materially from those described in this conference call include, but are not limited to, the effect of the Covid-19 pandemic on the Company's business; general business and economic conditions and the state of the semiconductor industry; market acceptance and competitiveness of the driver and non-driver products developed by the Company; demand for end-use applications products; reliance on a small group of principal customers; the uncertainty of continued success in technological innovations; our ability to develop and protect our intellectual property; pricing pressures including declines in average selling prices; changes in customer order patterns; changes in estimated full-year effective tax rate; shortage in supply of key components; changes in environmental laws and regulations; changes in export license regulated by Export Administration Regulations (EAR); exchange rate fluctuations; regulatory approvals for further investments in our subsidiaries; our ability to collect accounts receivable and manage inventory and other risks described from time to time in the Company's SEC filings, including those risks identified in the section entitled "Risk Factors" in its Form 20-F for the year ended December 31, 2024 filed with the SEC, as may be amended.

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