**Microip's self-developed NFC chip hits 99% first-pass yield, targets AIoT security**

Jay Liu, Taipei; Eifeh Strom, DIGITIMES AsiaMonday 29 December 2025


*Credit: DIGITIMES*

ASIC design service and artificial intelligence (AI) software solution provider Microip announced on December 26, 2025, that its first self-developed near-field communication (NFC) transceiver IC has completed chip testing and verification, achieving a first-time right (FTR) initial test yield of as high as 99%.

Microip chairman James Yang stated that this achievement not only marks a breakthrough in technical performance but also tangible proof of the company's operational transformation. The high 99% yield rate indicates the company's strong cost control capabilities and mass-production stability, significantly shortening time-to-market and enabling it to deliver more competitive solutions to customers.

Microip noted that the NFC IC adopts a field-oriented, highly flexible architecture compatible with major international standards including ISO 15693, ISO14443 A/B, and ISO 18092, differing from general-purpose specifications in the consumer electronics market. The chip places particular emphasis on enhanced interference resistance and flexible parameter tuning, and is purpose-built for industrial environments and specialized application scenarios, ensuring stable communication even in complex

settings.

**Strategic integration for AIoT ecosystem**

The NFC chip represents a key strategic component in building Microip's comprehensive AI-of-Things (AIoT) ecosystem. Focusing on the future cybersecurity needs of smart environments, the company is actively integrating this hardware chip with its proprietary AI image recognition software to advance next-generation smart security solutions featuring two-factor authentication.

In response to the cybersecurity vulnerabilities commonly found in access control systems, such as stolen cards or forged images, Microip has proposed a dual-verification mechanism using NFC physical credentials and AI biometric features, creating a more robust security network. Going forward, the company will target professional environments, including smart offices, data centers, and high-sensitivity laboratories, offering one-stop integrated design services.

**Expanding beyond consumer electronics**

Looking ahead, Microip plans to continue deepening its presence in non-consumer electronics markets, with applications spanning Industry 4.0 logistics tracking, medical device data management, and smart city infrastructure. Following the successful validation of its first proprietary IC, the company aims to gradually establish a sustainable, recurring design-services revenue model while continuously iterating chip products with higher cybersecurity specifications.

*Article edited by Jerry Chen*