eMemory 1Q25 Earnings Call Transcript

May 9th, 2025, 16:00-17:00 Taiwan Time

OPENING REMARKS

Dr. Charles Hsu, Chairman

Good afternoon, everyone. Thank you for joining our conference call today.

We understand investors' primary concern is the recent significant fluctuations caused by tariffs and exchange rates and their impact on our operations. While we don't have a crystal ball, our company, with 25 years of history, has navigated several periods of macroeconomic turbulence. Our approach has always been to tightly control costs, accelerate R&D, and assist foundries and chip customers in launching more competitive technologies and chip solutions. Therefore, despite potential short-term economic volatility, as echoed by most of our chip customers, we remain very confident in the company's long-term growth trajectory.

Building on our prior mention of post-quantum cryptography security IP, we'll showcase a PUF-based Crypto-Engine Accelerator, integrated into the hardware architecture of a PUF-based HSM edge server. This system is designed to deliver both high performance and robust security for post-quantum encryption. The solution is intended to provide the essential IP, design, software and services to help enterprises prepare for quantum migration of their information systems over the next decade. I will provide more details on this later.

Next, I'll invite our president, Michael Ho, to share our first-quarter performance and future outlook.

FINANCIAL RESULTS

Michael Ho, President

Q1 2025 Financial Results

Good afternoon, everyone. Now, let's begin with our 2025 first-quarter financial results.

The first-quarter revenue was nine hundred and twelve million NT dollars (NT\$ 912 mil), down 9.8% sequentially but up 13.6% year-over-year.

Operating expenses were three hundred and eighty-nine million NT dollars (NT\$ 389 mil), down 12.5% sequentially but up 1.9% year-over-year.

Operating income was five hundred and twenty-two million NT dollars (NT\$ 522 mil), with a decrease of 7.7% sequentially but an increase of 24.2% year-over-year.

Operating margin increased by 1.3 percentage points sequentially and increased by 4.9 percentage points year-over-year to 57.3%. Our net income, amounting to four hundred and sixty-two million NT dollars (NT\$462 mil), experienced a decrease of 10.3% sequentially due to reduced foreign exchange gains, but increased 7.2% year-over-year.

EPS for this quarter was 6.18 NT dollars (NT\$ 6.18).

Revenue across Different Streams

Next, let's move on to revenue contributions by licensing and royalty.

Licensing in the first-quarter accounted for 26.3% of the total revenue, down 23.8% sequentially but up 5.2% year-over-year.

Royalties in the first-quarter contributed 73.7% of the total revenue, decreasing 3.4% sequentially but increasing 16.9% year-over-year.

Total revenue for the first-quarter decreased by 9.8% compared to the previous quarter but increased by 13.6% compared to the previous year.

Revenue by Technology

With that, I will comment on our revenue contribution by specific IPs.

<u>NeoBit</u> accounted for 23.6% of total licensing revenue in the first-quarter, decreasing 14% sequentially but increasing 18.7% year-over-year. Its royalties accounted for 25.4% of total royalty, down 0.8% sequentially but up 20.2% year-over-year.

NeoFuse accounted for 49.1% of total licensing revenue in the first-quarter, down 4.3% sequentially and down 1.7% year-over-year. In terms of total royalty revenue, NeoFuse royalties decreased by 4.4% sequentially but increased by 16.3% year-over-year, accounting for 72.4% of total royalties.

<u>PUF-Based Security IPs</u> contributed 7% of licensing revenue, decreasing 76.4% sequentially and decreasing 7.4% year-over-year, while its royalties accounted for less than 1% of total royalties, up 1.7% compared to the previous quarter, and up 542.2% compared to the previous year.

<u>MTP technology</u> accounted for 20.3% of total licensing revenue, down 11.1% sequentially but up 14.9% year-over-year. Royalty from MTP increased 0.2% sequentially but decreased 1.6% year-over-year, accounting for 2.1% of total royalties.

Royalty Revenue by Wafer Size

Now, let's look at royalties for 8-inch and 12-inch wafers.

8-inch wafers accounted for 42.5% of royalties, up 0.6% sequentially and up 16.1% year-over-year.

12-inch wafers contributed 57.5% of royalties, decreasing 6.2% sequentially but up 17.5% year-over-year.

In total, 137 product tape outs were completed in the first-quarter due to fewer working days. We will provide more information in the management report.

FUTURE OUTLOOK

Michael Ho, President

In the next section, I will address our future outlook.

Regarding licensing revenue: Driven by strong demand from foundries and end chip customers coupled with an expanding portfolio of process platforms and more advanced NVM and security-related IP, we expect licensing fees to maintain sustained growth momentum.

As for royalty revenue: We expect royalty revenue to continue its growth trend as the accumulated tape outs in advanced process nodes enter the production stage, along with continued market share gains in mature applications.

Moving on to new IP technology and business development.

For New IP technologies:

1. We are developing post-quantum cryptography (PQC) modules and expanding into a full suite of solutions—from PUFrt to PQC PUFcc and PQC PUFhsm—to build the foundational hardware security cores needed for the upcoming decade of quantum migration.

Regarding the business development platforms:

- 1. Following our recognition as TSMC OIP's Best Embedded Memory IP Partner, we joined the Intel Chiplet Alliance, integrating our OTP/PUF technologies to become a key enabler of Intel's U.S.-based chiplet security innovation solutions.
- 2. At the upcoming Computex, we launched the PUF-based HSM edge server, which serves as the cornerstone of our Security as a Service platform strategy.

This concludes my comments. Next, I will pass the time to Charles.

CHAIRMAN REMARKS

Dr. Charles Hsu, Chairman

(Page 14: NeoPUF-based HSM Edge Server for PQC Migration)

I would like to use this section to introduce our new IP, which is a system IP—the NeoPUF-based HSM edge server solution for PQC migration. In our research, we have been devoted to NeoPUF-based security IP innovation. We have developed a range of solutions, from Root of Trust, security co-processors, and secure elements to HSM, HSM accelerators, and HSM edge servers. We will continue to innovate the best security solutions to achieve Zero Trust security for the world and to resist quantum computer attacks.

Additionally, I want to emphasize that as a security technology and solution provider, we will continue to focus on a licensing-based business model rather than selling physical products.

(Page 15: Why Migrate to PQC?)

Post-Quantum Cryptography (PQC) migration is critical because quantum computers, which are rapidly advancing, threaten to break current cryptographic systems like RSA and ECC by solving complex mathematical problems exponentially faster. These systems underpin the security of our digital infrastructure, from online banking to secure communications. Migrating to PQC, which uses algorithms resistant to quantum attacks, ensures long-term security. Acting now is essential to stay ahead of quantum advancements, protect data integrity, and maintain confidence in our increasingly digital world.

(Page 16: PQC Migration Steps & Scope)

Post-Quantum Cryptography (PQC) migration is critical. There is a multi-step process to secure our digital world against quantum threats. First, organizations must inventory all cryptographic assets--identifying where RSA and ECC are used in systems, software, and hardware. Next, they should assess risks, prioritizing sensitive data like medical records or financial transactions that need long-term protection. Then, plan the transition, often adopting hybrid cryptography to combine traditional and PQC algorithms during the shift. Testing and deployment follow to ensure compatibility and performance with continuous monitoring to address vulnerabilities. A security accelerator is essential because PQC algorithms are computationally intensive, requiring specialized hardware to handle larger key sizes and complex calculations

efficiently. Without accelerators, systems face performance bottlenecks, risking delays and vulnerabilities. By leveraging accelerators and following these steps, we ensure robust, quantum-resistant security for the future.

(Page 17: NeoPUF-based HSM Edge Server)

NeoPUF, developed by eMemory, plays a pivotal role in Post-Quantum Cryptography (PQC) migration for Hardware Security Modules (HSMs) on edge servers by providing a quantum-resistant foundation for secure key generation and storage. Unlike traditional methods that rely on external key injection, NeoPUF leverages quantum-tunneling and silicon variations to create unique, unclonable identifiers directly on-chip, ensuring robust protection against quantum attacks. This is critical for HSMs on edge servers, which secure sensitive data in distributed environments like IoT or cloud infrastructure. By integrating NeoPUF with PQC algorithms like Kyber and Dilithium, HSMs achieve crypto-agility, enabling seamless transitions to quantum-safe standards without vendor lock-in. This solution addresses the threat of "store now, decrypt later", enhances performance in resource-constrained edge settings, and ensures long-term security, making NeoPUF a cornerstone for PQC migration.

(Page 18: NeoPUF-based HSM Edge Server Applications)

NeoPUF-based HSM edge servers can be applied across seven major sectors as shown in the slide. If these sectors fail to implement post-quantum cryptography (PQC) in time, they will face significant risks in the future. These applications are (1) financial sector, (2) e-commerce and retail, (3) healthcare industry, (4) public sector, (5) telecommunications, (6) cloud and data center, and (7) automotive industry.

NeoPUF-based HSMs not only address current cybersecurity demands but also create a robust defense against emerging quantum threats.

(Page 19: NeoPUF-based PQC Security as a Service)

We build a comprehensive solution called "PUF-based PQC Security as a Service." on the server.

At the heart of this solution is the expansion of PUF technology's security benefits to the service layer. This allows any application that demands high-level security, whether for key management, identity authentication, or system access control, to benefit directly from the solution.

A system architecture for the service solutions is illustrated in the slide, the foundation is the yellow-highlighted block representing the PUF-based HSM edge server. On top of this server, the platform runs essential services such as PKI (Public Key Infrastructure) and KMS (Key Management System), with further support for CMS (Certificate Management System) and Zero Trust identity management.

This is what I would like to share with you today. Thank you.

Next, we will enter the Q&A session.

CLOSING REMARKS

Dr. Charles Hsu, Chairman

For more information about our PUF-based security IPs and technology, we encourage you to visit our PUFsecurity website at <u>https://www.pufsecurity.com/</u> and check out our articles and other materials.

Thank you once again for your patience and support for eMemory. We will continue to work hard on technology and IP innovation and PUF-based hardware security solutions for our customers and bring higher returns for our shareholders. Thank you!