



KIOXIA Employees Earn Award for Science and Technology from Japan's Ministry of Education, Culture, Sports, Science and Technology

Tokyo, Japan, 19 April 2023 - KIOXIA Corporation, a world leader in memory solutions, announced today that its employees received the Award for Science and Technology from The Commendation for Science and Technology by the Ministry of Education, Culture, Sports, Science and Technology for their Invention of high-density three-dimensional flash memory device and manufacturing method thereof, which greatly increases memory capacity and decreases manufacturing costs.

The annual award is given by the Ministry of Education, Culture, Sports, Science and Technology to individuals who have made outstanding achievements in research and development and promoted the understanding of science and technology in Japan.

KIOXIA Awardees

- Ryota Katsumata, Assistant to General Manager, Advanced Memory Development Center, Memory Division
- Masaru Kito, Group Manager, Advanced Memory Development Center, Memory Division
- Hideaki Aochi, Senior Expert, Device Technology Research & Development Center, Institute of Memory Technology Research and Development
- Masaru Kido, Chief Specialist, Memory Development Strategy Division
- Hiroyasu Tanaka, Chief Specialist, Memory Development Strategy Division

Overview of Award-Winning Technology

Flash memory is used in a variety of applications for storing data, including smartphones and data centers, and demand is expected to grow.

The award-winning three-dimensional flash memory technology is a groundbreaking approach that greatly simplified the fabrication process for stacking memory cells vertically to realize high-density three-dimensional flash memory. Whereas conventional stacking required repeated deposition and patterning processes for memory cell array fabrication, this technology first stacks the materials for the memory cells and then makes each cell simultaneously using a one-time patterning process, thereby significantly reducing the processing steps. As miniaturization technology employed in conventional two-dimensional flash memory is approaching its physical limits, high-capacity, high-performance three-dimensional flash memory technology is now increasingly applied in the market's leading products. After commercializing three-dimensional flash memory BiCS FLASH™ in 2015, KIOXIA has been working on increasing the stacking density. Last month, KIOXIA announced its 218-layer high-capacity, high-performance three-dimensional flash memory BiCS FLASH™.

This three-dimensional flash memory technology has also been recognized with the Imperial Invention Prize from the 2020 National Commendation for Invention and received the 2021 IEEE Andrew S. Grove Award.

Guided by its mission of “uplifting the world with ‘memory,’” KIOXIA is committed to its research and technology development that brings value to people across the world.

Information in this document, including product prices and specifications, content of services and contact information, is correct on the date of the announcement but is subject to change without prior notice.