

Fuji Enables SMT Placement of Large, Heavy Components for AI Servers

An industry first! Standard-configuration Fuji machines handle large, heavy components measuring 200 x 200 mm and weighing 2.0 kg.

Fuji Corporation (headquarters: Chiryu, Aichi; Representative Director, President and CEO: Joji Isozumi; hereinafter referred to as "Fuji") is committed to enhancing its solutions, which combine SMT pick and place machines, solder paste printers, and automation technologies, to meet the growing demand for AI server-related equipment driven by the widespread adoption of generative AI. Fuji is the first in the industry^{*1} to be capable of handling large, heavy components measuring 200 x 200 mm and weighing 2.0 kg with the standard configurations of both its NXTR and AIMEXR pick and place machines.



Fuji SMT pick and place machine
NXTR S model



Handling image of a large and heavy component



Development background

Driven by the proliferation of generative AI, the push toward higher performance in AI servers and data center-related equipment is accelerating. Consequently, AI semiconductor packages integrating devices such as GPUs^{*2}, ASICs^{*3}, and HBM^{*4} are becoming larger. Moreover, there is greater adoption of new cutting-edge co-packaged optics (CPO^{*5}) technologies that significantly reduce power consumption. These trends require support for panels and components that are larger and heavier.

Fuji is driving the development of technologies that eliminate restrictions in the placement process one by one under the concept of Zero Placement Limits, which aims to reduce the placements that cannot be performed to zero. To this end, Fuji has established placement technology for large, heavy components measuring 200 x 200 mm and weighing 2.0 kg and has successfully demonstrated the ability to place such components under our evaluation conditions, enabling us to meet emerging placement requirements for next-generation electronics, including AI server-related equipment.

Future plans

Looking ahead, we will continue to expand our capabilities in anticipation of components becoming even larger and heavier. Guided by Zero Placement Limits, Fuji continues to push the boundaries of surface mounting technology and contribute to the evolution of next-generation electronics manufacturing, including AI server-related equipment, by providing optimal solutions tailored to our customers' on-site challenges.

^{*1}: Based on our research (as of July 30, 2026)

^{*2}: GPU (Graphics Processing Unit): A processor that performs high-speed, advanced computational processing for applications such as AI.

^{*3}: ASIC (Application-Specific Integrated Circuit): A semiconductor integrated circuit designed and optimized for a specific application.

^{*4}: HBM (High Bandwidth Memory): A stacked memory that provides high bandwidth.

^{*5}: CPO (Co-packaged Optics): An advanced packaging technology that integrates semiconductors and optical communication components into a single package.

Company Profile

About Fuji

Company name	FUJI CORPORATION
Representative	Joji Isozumi, Representative Director, President & CEO
Address	19 Chausuyama, Yamamachi, Chiryu, Aichi 472-8686 Japan
Established	April 1959
Business details	Development, manufacturing, and sales of SMT pick and place machines and machine tools
Capital	5,878 million Yen
URL	https://www.fuji.co.jp/en/ (Official website) https://smt.fuji.co.jp/en/ (SMT website) https://www.fujiamerica.com/ (Fuji America website)

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<https://smt.fuji.co.jp/en/contact/>