

Manz Asia Pioneers Production-Proven 310/510/700 mm ECD and Wet Process Solutions for Panel-Level Packaging

Enabling scalable RDL manufacturing for CoPoS, FOPLP and Glass Core TGV applications

Taoyuan, Taiwan – August 18, 2026 – Manz Asia, a leading provider of semiconductor advanced packaging equipment and process solutions, has pioneered production-proven ECD (electrochemical deposition) platforms supporting 310 mm, 510 mm, and 700 mm panel formats. Building on ECD as a core technology, Manz Asia integrates key wet process tools—including cleaning, developing, etching, and stripping—into the Omni 310, Omni 510, and Omni 700 platforms to enable scalable panel-level RDL manufacturing.

Extending RDL Process Value from Established Applications to Next-Generation Advanced Packaging

As AI and advanced computing drive increasingly complex chiplet-based architectures, larger interposers and substrates are becoming essential to integrate more heterogeneous components within a single package. This evolution is accelerating the shift from 300 mm wafer-based manufacturing toward larger panel formats, while increasing the importance of RDL in enabling high-density interconnects across increasingly complex package architectures.

With expertise spanning equipment and process integration, Manz Asia addresses evolving RDL manufacturing requirements by integrating ECD and key wet processes within a unified equipment portfolio. This approach helps manufacturers simplify process integration, reduce the complexity of managing multiple equipment suppliers, and gain greater flexibility across panel sizes and advanced packaging architectures.

The Omni Series supports advanced packaging applications including FOPLP, CoPoS, and Glass Core TGV, with proven applications for PMIC and RF devices for communication and automotive markets. The platform also provides a foundation for continued technology development toward emerging AI and HPC packaging requirements.

Glass Core TGV Process Enabling High-Performance Interconnects

As Glass Core gains momentum in next-generation advanced packaging, TGV (Through-Glass Via) manufacturing requires precise glass micromachining, microvia formation, metallization, and high-aspect-ratio filling.

Manz Asia is extending its etching and ECD technologies to address these requirements. Its glass etching equipment supports substrates up to 0.4 mm thick and microvias down to 20 µm, with TGV structures featuring aspect ratios of up to 1:20, enabling precise and controlled via formation.

For TGV metallization, Manz Asia's ECD technology supports high-aspect-ratio via filling and can be integrated with seed-layer sputtering and plating chemistry to enable void-free copper filling and uniform metal deposition. This integrated approach addresses critical requirements for fill quality, plating uniformity, and structural reliability in Glass Core TGV manufacturing.

Advancing Panel-Level Packaging from Innovation to Production

"AI-driven semiconductor growth is accelerating the evolution of advanced packaging, driving greater integration, larger package formats, and increasingly complex interconnect architectures," said Robert Lin, CEO of Manz Asia. "RDL is becoming a critical enabling technology, connecting chips, interposers, substrates, and PCBs across emerging architectures such as CoPoS, FOPLP, and Glass Core TGV."

"Our 310 mm, 510 mm, and 700 mm production-proven RDL platforms reflect our commitment to scalable manufacturing across diverse package architectures and substrate formats," Lin continued. "With a broad portfolio covering most of the key process steps in RDL manufacturing, Manz Asia enables customers to streamline supplier coordination, simplify process integration, and deploy more efficient production solutions."

"Manz Asia's role goes beyond equipment delivery. We work closely with customers to bridge the gap between process innovation and high-volume manufacturing, with a focus on productivity, yield, and cost performance. By combining process expertise, equipment integration, and continuous innovation, we aim to accelerate the adoption of panel-level packaging and contribute to a more robust advanced packaging ecosystem for the AI era."



▲ Manz Asia Omni Series – ECD and Wet Process Platform for Scalable Panel-Level RDL Manufacturing

About Manz Asia

Manz Asia delivers semiconductor equipment and solutions built on core technologies in Electrochemical Deposition (ECD), wet chemistry, digital printing, automation, and software integration. Our expertise covers advanced packaging (FOPLP / CoPoS) and IC substrate processing (glass and organic core), supporting customers from R&D to high-volume manufacturing. Through system solutions, contract manufacturing, and sales representation, we help customers accelerate time-to-market, boost yield, and stay competitive in the fast-evolving semiconductor industry.

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