PRESS RELEASE

Lasertec Corporation
2-10-1 Shin-yokohama, Kohoku-ku, Yokohama
(Tokyo Stock Exchange Prime Market, Code 6920)

Lasertec Releases MATRICS X712 Series Mask Inspection System

Yokohama, March 31, 2026 – Lasertec Corporation today announced the release of the MATRICS X712 Series, a new mask inspection system designed to meet the needs of both mask shops and wafer fabs.

Design nodes at 90nm to 250nm and above remain widely used in applications such as logic, analog, and power devices, as well as discrete components. Manufacturers of these nodes are seeking mask inspection solutions that deliver higher sensitivity, shorter inspection times, and lower cost of ownership.

To address these needs, Lasertec developed the MATRICS X712 Series, a mask inspection system built on the MATRICS platform that incorporates fully redesigned optics, a new image processing engine, and an enhanced user interface. Using an in-house 266nm laser and proprietary algorithms, X712 can execute up to three inspection modes (DDB[1], DD[2], and SD[3]) simultaneously and achieve inspection times as fast as 22 minutes per mask.

The MATRICS X712 Series supports 5-, 6-, and 7-inch masks and commonly used mask materials including Cr, MoSi, and OMOG. It is compatible with MEBES, OASIS, and other database formats and can be seamlessly integrated into existing data workflows. It also includes features that improve operability in the field, such as auto-calibration, an intuitive recipe-management interface, and a centralized storage unit for managing recipes and inspection results across multiple systems.

Lasertec remains committed to the advancement of leading-edge semiconductor manufacturing by delivering innovative solutions that improve quality and productivity, thereby contributing to the continued evolution of the industry.

1: DDB (Die-to-Database) inspection: A method of inspection that compares the mask pattern with its design data and treats any differences as defects.
2: DD (Die-to-Die) inspection: A method of inspection that compares adjacent die patterns on the same mask and treats any differences between them as defects.
3: SD (Single-Die) inspection: A method of inspection that detects defects within a die without an external reference.

Features

- Die-to-Database inspection, Die-to-Die inspection, and Single-Die inspection
- Support for a wide range of design nodes: 90nm to 250nm+
- Compact footprint and maintenance-friendly design for stable, long-term operation

Applications

- Defect inspection and quality assurance inspection during mask manufacturing processes
- Incoming mask inspection and periodic quality assurance inspection at wafer fabs

Lasertec

MATRICS X712 Series Mask Inspection System

Contact:
Yuya Ono
Solution Sales Department 1
Lasertec Corporation
Phone: +81(0)45-478-7337
Fax: +81(0)45-478-7333
Email: sales@lasertec.co.jp