MYCRONIC

With the new IQX, **there is nowhere to hide**

The new IQX™ series





Engineered to be as precise as it is fast



Mycronic IQX series
Accelerating photomask inspection without compromise

IQX is a high-throughput inspection system designed to detect and classify pattern defects on photomasks. Combining advanced imaging, workflow automation, and intelligent defect detection, IQX safeguards photomask quality and maximizes inspection productivity.



IQX combines high-throughput inspection, intelligent automation and proven platform reliability.

CUSTOMER VALUE HIGHLIGHTS

Manufacturers are continuously challenged to increase productivity while maintaining the highest standards of quality. IQX addresses these demands with a powerful combination of high-throughput inspection, intelligent automation and proven platform reliability. Designed to support efficient operations and confident decision-making, IQX helps photomask manufacturers maximize inspection productivity while maintaining confidence in every inspection result.

HIGH THROUGHPUT PERFORMANCE

Built to maximize inspection productivity, IQX leverages high-speed imaging, GPU-accelerated defect detection and workflow automation to reduce inspection time and increase operational efficiency. Automated workflows and batch handling capabilities support high-volume manufacturing environments where throughput, responsiveness and consistent quality are essential.

SHARED PLATFORM AND MYINTELLIGENCE

Built on proven Mycronic platform technology, IQX combines reliable operation and long-term support with a shared architecture that enables future connectivity across mask writing, metrology, inspection and repair workflows.

Together with MYIntelligence, IQX supports data-driven manufacturing through enhanced process visibility, quality control and operational insights.

SYSTEM HIGHLIGHTS

High throughput
Accelerated inspection through high-speed imaging, GPU processing and workflow automation.

Comprehensive inspection
Supporting Die-to-Database, Die-to-Die and particle inspection with simultaneous transmission and reflection imaging.

Scalable and adaptable
A flexible platform designed to adapt to different production requirements and future demands.



Mask inspection
reimagined from the ground up

INSPECTION CAPABILITIES

IQX combines multiple inspection methods in a single platform, enabling comprehensive photo-mask quality control throughout the manufacturing process. Supporting Die-to-Database, Die-to-Die and particle inspection, IQX helps manufacturers identify, classify and analyze critical defects with speed and confidence. Simultaneous transmission and reflection imaging further enhance inspection coverage and defect visibility.

FLEXIBILITY AND CUSTOMIZATION RANGE

Built on a scalable architecture, IQX is designed to adapt to different operational requirements and production environments. Flexible configuration options, scalable computational power and support for multiple workflow strategies allow customers to balance throughput, automation and operational efficiency according to their specific needs. The platform is designed to support both current manufacturing requirements and future performance demands.

IQX

KEY SPECIFICATION	IQX 1
Inspection Modes	D2DB, D2D, particle inspection (SDX)
Takt	1 reticle/20 min
Wavelength	266 nm
Batch Capacity	12-reticle buffer
Pixel Size	150 nm
Sensitivity level	100 nm

Bringing tomorrow's electronics to life

MYCRONIC

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