Yield Enhancement through Inline Wafer Edge Inspection

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338 bn$

Sales Revenue

Source: WSTS, published June 2016
Wafers Produced in 2016

\(~6.9 \text{ Mm}^2\) of microchips produced in 2016

Source: SEMI, October 2016
Wafers Produced in 2016

>1000 Soccer Fields
74% of wafers get thinned

Source: SiS Silicon Semiconductor
The Problem

Edge Defects as a Root Cause decrease Yield
~$12 \text{bn}$

economic loss in 2016
due to wafer edge defects

Semiconductor Manufacturer Survey
Wafer Edge Inspection

depth of defect related to the wafer's thickness z-axis

arc length of the defect

r(φ)
Wafer Edge Inspection

Radial Edge Screening

Edge Thickness Evaluation
System Integration

Stand-alone Installation

Equipment and Data Integration
Our Customer’s Benefits

Save Inspection time

Improve Process Stability

Prevent in-process Wafer Breakage

Assure Quality of each Wafer and enhance Yield
Thank you

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