

Description :

eScan® series of e-beam inspection systems is designed for advanced wafer manufacturers. With the advent of eScan®, defectivity baseline in advanced fabs is being recalibrated. eScan® offers fast yield enhancement with the smallest e-beam inspection pixel size, highest sensitivity to DOI, and high-resolution imaging for inspection. Crystal clear on-tool review images effectively reduce the time-to-result cycle by eliminating most review SEM requirements. eScan® 320xp e-beam inspection system captures tiny physical defect and VC (Voltage Contrast) defects with HMI patented resolution enhancement

electron gun. eScan® 320xp's LeapNScan™ technology with LFOV (Large Field of View) and WWDS (Whole Wafer Die Sampling) provides effectively flexibility for process monitoring. eScan® 400xp with continuous scan e-beam inspection system provides most cost effective solution with balanced sensitivity and throughput for advanced memory and logic fabs.

**eScan® 500 :**

eScan®500 is the next generation model for the current flagship models eScan®320 and eScan®400. Faced with the continuing miniaturization demands of the manufacturing processes of the semiconductor customers, the image resolution of the eScan®500 is enhanced by more than 30% compared to the eScan®320. At the same time, it bundles a more flexible "LeapNScan™" scanning system with the Continuous Scan system

Value Proposition :

- An EBI system with a longest life time for advanced fabs.
- An EBI system with the highest sensitivity to DOI (defect of interest) signature detection.
- An EBI system with the most reliable data and the highest defect location matching.
- An EBI system offering the highest confidence level on advanced device analysis.
- An EBI system with HMI's unique advanced charge control capability.
- The eManager™ ADC system with the most advanced defect binning algorithm.

Applications :

eScan® is capable of generating defectivity baseline for both physical and electrical defects. eScan®'s main applications include : Front-end of line at Salicide, HKMG and FinFET; Mid-end of line at contact ACI and WCMP; and Back-end of line at Via ACI and Cu-CMP, etc.