EAGLEview 6:
The Industry's Most Yield-Enhancing Macro Defect Inspection System

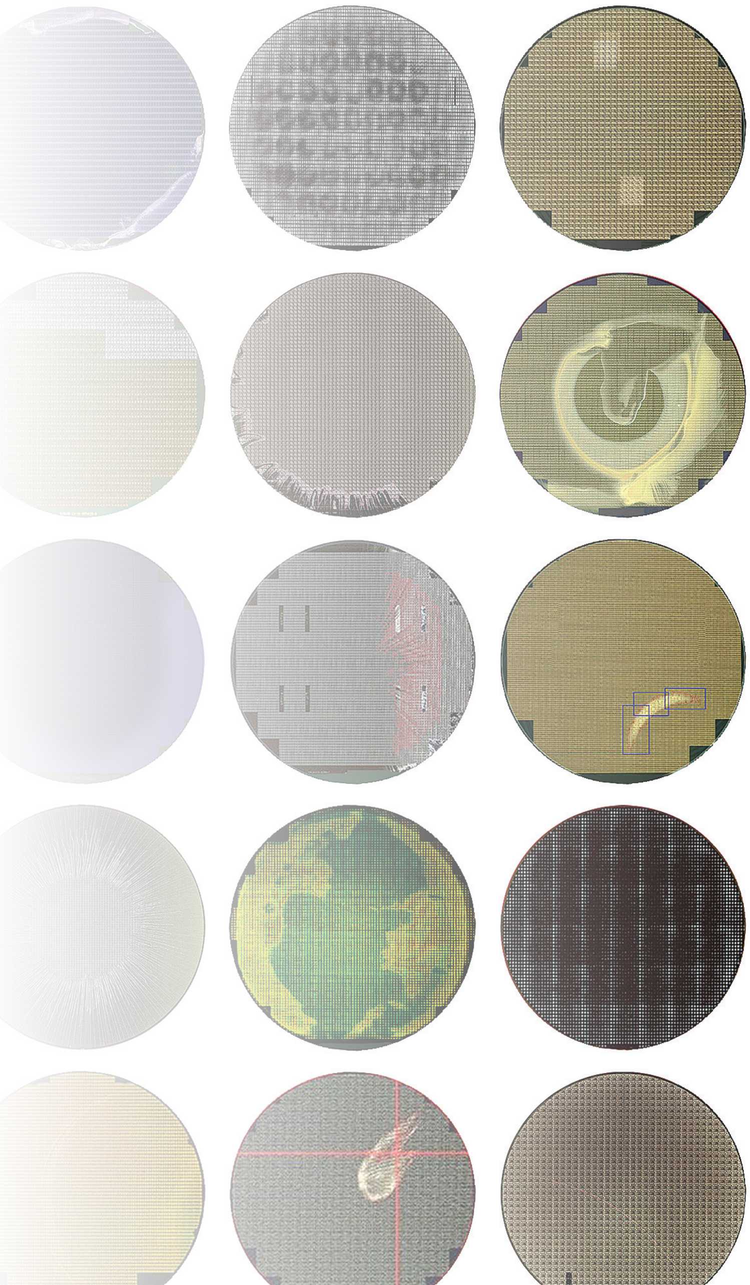
- Inspects all wafers. No sampling.
- Fully automatic. No recipes needed.
- Super-fast. 3000+ wafers/day.
- Catches more problems. Helps correct them faster.

microtronic
macro defect management

Now, 100% wafer inspection is a practical reality...

To see more defects, correct more problems and boost your yields.

It’s made possible by EAGLEview 6.

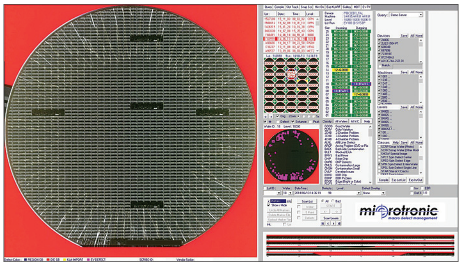


The Microtronic EAGLEview 6:

Nothing else gives you as much information on as many wafers — or as many ways to reduce defects and increase yields...

No sampling. Inspect all wafers. Super fast.

The EAGLEview 6 automatically macro-inspects every single wafer in every lot. Edge to edge. At ultra high speed: 3000+ wafers/day. This unique tool delivers an actual high-resolution full-wafer color image, not a digital construct. It creates a complete, trackable “waferbase” pictorial repository with defect lists and defect maps along with each wafer’s OCR number and slot position. Optionally, it can even weigh each wafer automatically. This data hub can provide a unique holistic picture of every wafer at every step. Plus, it can integrate inputs from microscope and micro defect inspection.



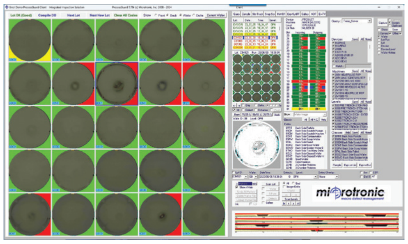
ProcessGuard shows wafer images, defect lists, defect maps, wafer tracking and more.

No recipes required. Just load and go.

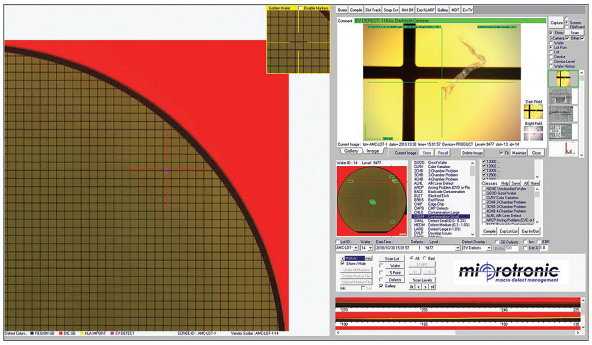
Absolutely no recipes are needed. EAGLEview is totally plug-and-play. So you can eliminate all the time, hassle and special staff that used to be required to generate and maintain recipes. With full automation, virtually anyone in your fab can use it anytime.

Frontside/Backside. Catch more defects. And more root causes.

Because it sees every wafer, EagleView can catch a lot more defects. Including edge chips. And, it gives you smarter ways to track down defect root causes. At the start of each run, EAGLEview integrates with the fab’s host automation system and obtains the lot’s tool history allowing users to perform a commonality analysis and identify a specific process tool problem. The new customer-driven LotView™ interface has drastically improved operator efficiency.



LotView’s simple operator interface allows users to quickly review, Accept (Pass) or Reject (Fail) a lot with the click of a button.



MicroView option adds microscope images to macro images, allows many types of defect data to be stored with each wafer.

EAGLEview's 100% inspection catches even those elusive one-time problems. Spotting them earlier often lets you rework wafers rather than scrapping them later. And fixing excursion issues earlier can improve fab performance. Plus, EAGLEview's guardbanding can ink-off wafer trouble areas so they won't cause problems later.

AI, Deep Learning, Auto-Defect Classification.

Improve Process and Yield with Macro Inspection using AI Based ADC. EAGLEview Deep Learning Automated Defect Classification (EVdlADC) software was developed to overcome many of the pitfalls when using AI on macro full wafer images.

Next-generation tool. Maximum performance.

The EAGLEview 6 is the most advanced EAGLEview to date. Its next-generation imager provides improved lighting, color fidelity and image resolution. Coupled with more advanced software algorithms it delivers a cleaner signal and increased defect detection. The tool is equipped with advanced imaging technology, analytical software, robotics and a 4-cassette multi-sized (100mm-300mm) wafer platform for fully-automated, unattended operation.

Machine vision: More consistent data.

EAGLEview removes the variables of human optical inspection. Its defect data recording is complete and consistent. Every day. Every shift. Using the MicroView option, microscope images are automatically captured and stored with macro images in the database. Brightfield and Darkfield capture allows quicker root-cause analysis and lot disposition. Many types of data (SEM, FIB, particle, etc.) can be stored and archived with the wafers.

Wafer randomization for free.

While EAGLEview is inspecting wafers it can also randomize or sort them. Automatically. Without operator intervention. While maintaining full speed. So, for slot position analysis you won't need to buy extra sorters. And you won't need special IT efforts to create usable databases. With EAGLEview it's automatic.

Information for all.

There are no licenses restricting how many stations can use the EAGLEview wafer data. Everyone can have access. Throughout your fab or enterprise, around the world. No extra charge.

Reduced expenses. Lowest CoO.

With EAGLEview there are no consumables, and maintenance is so minimal, customers can do it themselves. Plus, you can eliminate all the resources and time you used to spend creating and maintaining recipes. And you can get guardbanding (ink-off) virtually for free. Bottom-line: EAGLEview gives you the greatest savings at the lowest costs of any tool in its class.

We can also customize tool capabilities.

We can handle silicon carbide and other transparent substrates. Or OCR to convert vendor scribes to lot IDs. Or splitting wafers to double-spaced cassettes. Or customizing slot positions. And more.

Popular and proven.

Microtronic has won Texas Instruments' Supplier Excellence Award and the Best of West Product Award at Semicon. And EAGLEview has inspected over 500 million wafers around the world. Perhaps it could be boosting your yields, too.

The fully-automated EAGLEview 6 needs no recipes and features four cassettes for 100mm to 300mm wafers.

ProcessGuard Software from Microtronic

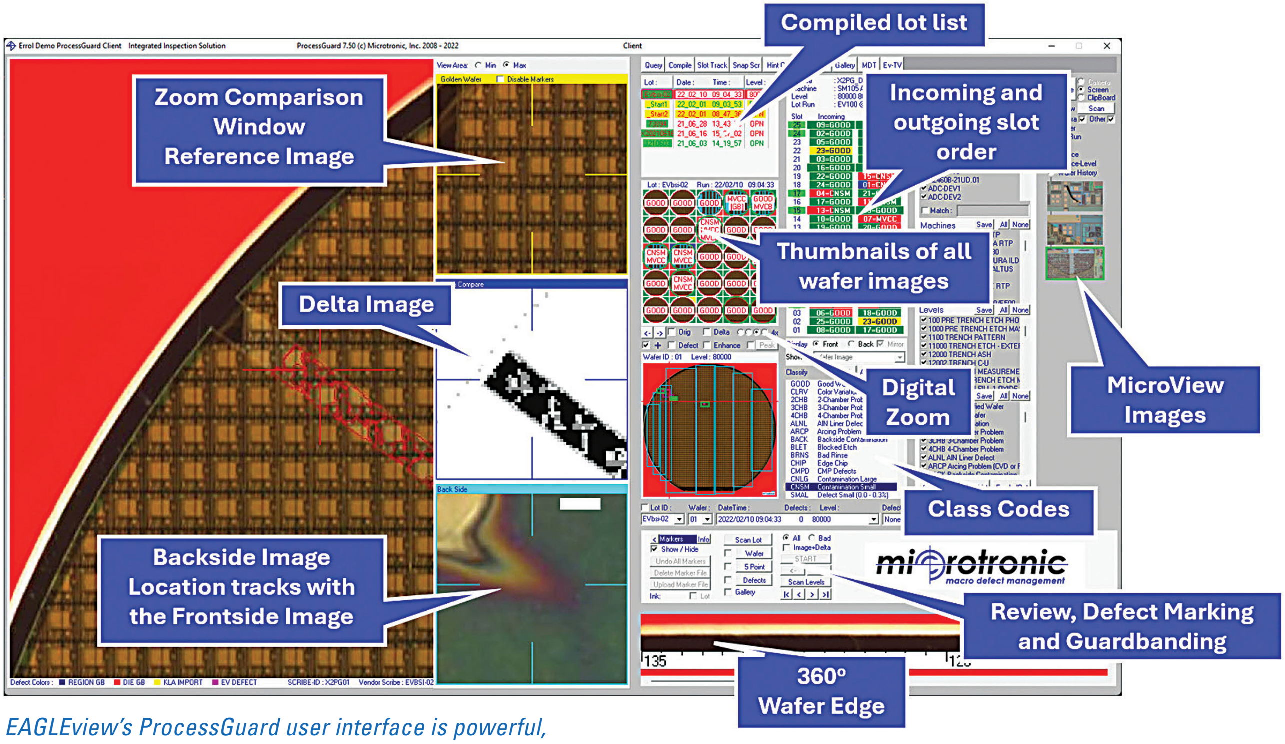
Defect intelligence and data management for the EAGLEview 6

Smarter, more powerful software.

Microtronic's ProcessGuard software is the desktop client for the EAGLEview macro defect inspection system. This software provides both power and flexibility to customize the user interface and application features to your precise needs. It is a high-speed, high-volume solution that delivers an extremely easy-to-use and extendable means of managing your fab's inspection processes. ProcessGuard is feature-rich and includes a user-definable defect library, an integrated trainer and knowledge base, wafer randomization capability and a great deal more...

ProcessGuard Advanced Capabilities

- Seamlessly view wafer frontside and backside
- Unlimited ProcessGuard desktop clients
- Enterprise-wide ProcessGuard access
- LotView provides user-customizable classification and navigation buttons
- Integrated lot and equipment historical data
- Easy drill-down Pareto for root-cause analysis
- MicroView – integrated microscope images
- View multiple layers and guard-banding for each wafer
- Sort by class code, tool, operation, time, or device
- Automated wafer randomization analysis
- Incoming and outgoing slot order
- Export KLARF files
- Edge bead removal review (EBR)
- Customizable user interface, customizable query screens
- Import any data/images into the macro database
- Integrated trainer and knowledge base



EAGLEview's ProcessGuard user interface is powerful, informative and very flexible.

European Customer Support & Demo Center
An der Moosach 7 • 85376 Massenhsusen • Freising • Germany