

AI-Enhanced Automated Optical Inspection (AOI)



LEC-2290E
Nvidia® A2/L4 GPU



Previously, the AOI stations on the Printed Circuit Board Assembly (PCBA) line generated over 10,000 false positive inspection points each week, leading to additional manual inspections and increased operational costs.

Lanner collaborates with Chooch to offer the AI-enhanced Automated Optical Inspection (AOI) solution, powered by Lanner's Edge AI servers, the LEC-2290E and EAI-731, to enable Chooch's advanced computer vision algorithms on Lanner's AOI system.

The results were notable: the system achieved over 96% accuracy in defect detection and reduced false detections by up to 80%. This deployment underscores the effectiveness of Lanner's Edge AI appliances in enhancing the precision and efficiency of manufacturing processes, demonstrating their capability to drive significant improvements in operational performance through advanced AI solutions.

Solution Architecture: AI Vision + Automation + Analytics

