Key Features

- ASRock Industrial's Robust Edge AIoT Platform, integrated with PEGAAi, enables on-premise AI visual inspection and intelligent agent insights to enhance smart factory operations and product quality

- Supports AI-based AOI visual inspection through a no-code MLOps platform, accelerating AI deployment

- Integrates AI Agents driven by local LLMs to provide instant insights though a natural language interface

- Operates fully on-premise with edge inference to ensure secure data handling and low-latency response

Product Overview

Ai InduAgent is an edge based AI solution designed for real-time AOI analysis and intelligent insights delivery through a local AI agent interaction. The system integrates high accuracy Automated Optical Inspection (AOI) with a local LLM agent that analyzes defect data in real time, providing instant insights to operators using natural language queries. Optimized for PCB, SMT, and mixed model production environments, Ai InduAgent enables manufacturers to transition from labor intensive inspection to smart, data driven quality control with traceability and actionable feedback.

Product Features

Streamlined AOI

Performs automated AOI analysis to enhance product quality and reduce inspection overhead. Built on PEGAAi's MLOps platform to enable simplifies setup, model updates and system expansion
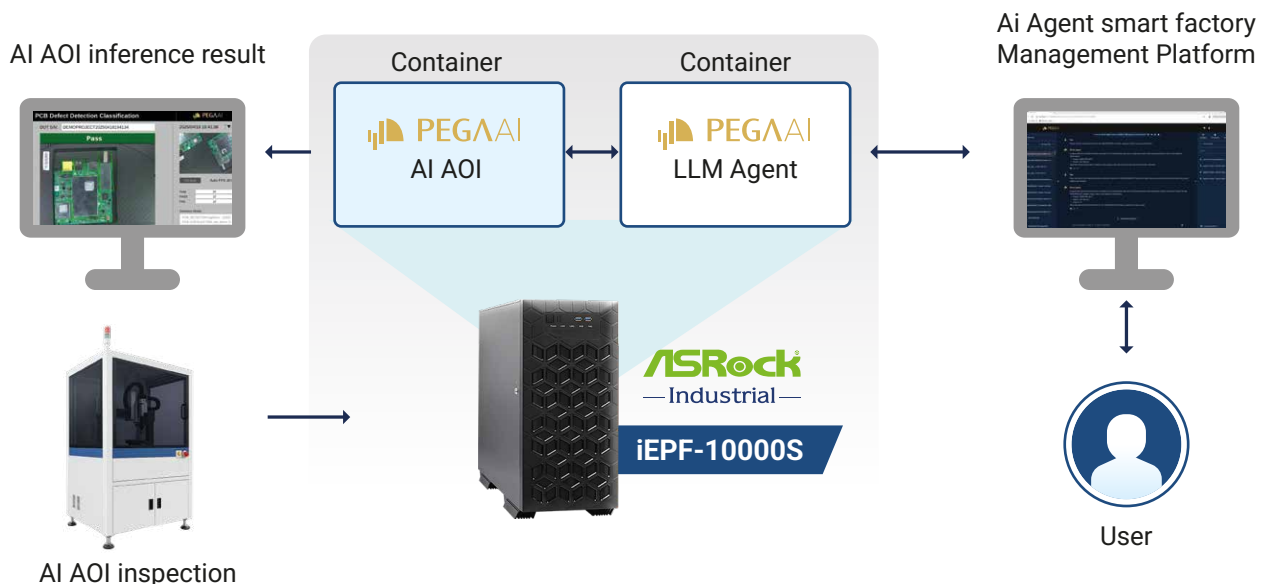
AI Agents for Instant Insights

Operators can query the system directly using everyday language to access inspection results, yield data, and defect summaries. Summarizes defect trends and prioritizes key issues to accelerate root cause analysis

Local and scalable deployment

Runs entirely on-premise with edge inference to ensure secure data processing and fast response times. Easily deployable across multiple production sites with minimal integration required

How it works

AI AOI inference result

Container — PEGAAI AI AOI

Container — PEGAAI LLM Agent

Ai Agent smart factory Management Platform

ASRock Industrial — iEPF-10000S

AI AOI inspection

User

Differentiators

- AI AOI enabled by a no-code MLOps platform, accelerating AI deployment
- Uses LLM for defect analysis and operator queries, not rule-based logic
- Supports natural language queries without custom UI development
- Runs fully offline in secure, on-premise environments

System Requirements

Specifications	Description
Recommended System iEPF-10000S System	• CPU: Intel Core™ Ultra Processor (Arrow Lake-S) • GPU: NVIDIA RTX 6000 Ada • Dual Channel DDR5 5600 MHz Long-DIMM 192GB • Storage: M.2 2280 PCIe Gen4x4 SSD 1TB
iEPF-9040S Series System/ iEPF-9030S Series System	• CPU: Intel® Core™ Processors (Series 2)/14th/13th Gen Core™ processors • Memory: Dual Channel DDR5 5600 MHz SO-DIMM 96GB • GPU: NVIDIA RTX 6000 Ada • Storage: M.2 2280 PCIe Gen3x4 SSD 1TB