

# Spring Probe AOI Machine

*An AI-Enabled AOI Machine of the Next*

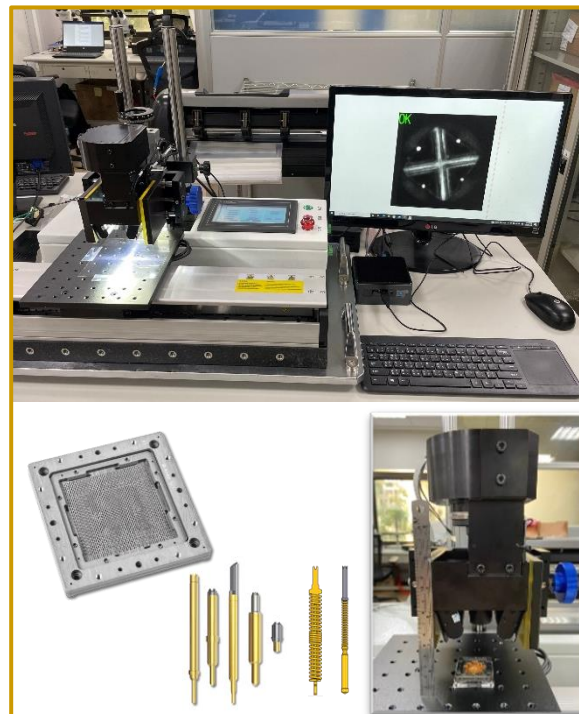
## INTRODUCTION

A world-first AOI machine for spring probes in IC test sockets by leveraging AIoT as enabling technology.

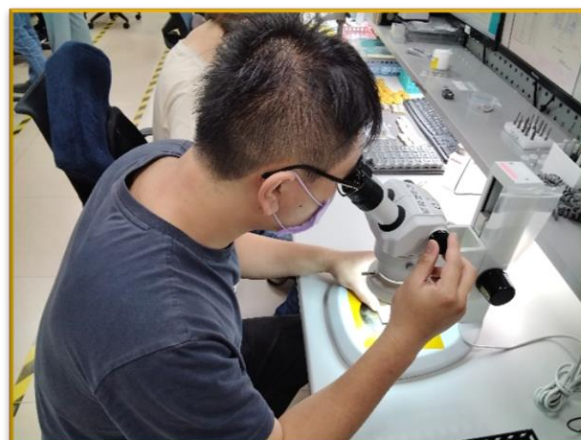
Together with MegAAOI's AOI peculiar line scan module for image capturing, the AOI machine can now serve as a turn-key solution to meet customers' R&D and IQC requirements.

The machine is capable to perform 1) measurement for probe tip abrasion and 2) inspection of damage and debris by using DL CNN as the single enabling technology to replace laser measurement and rule base AOI nowadays.

An advanced version featured with "real-time inference while scanning" will be available in Q4 2023 for the production line to fulfill OQC requirements.



## APPLICATIONS

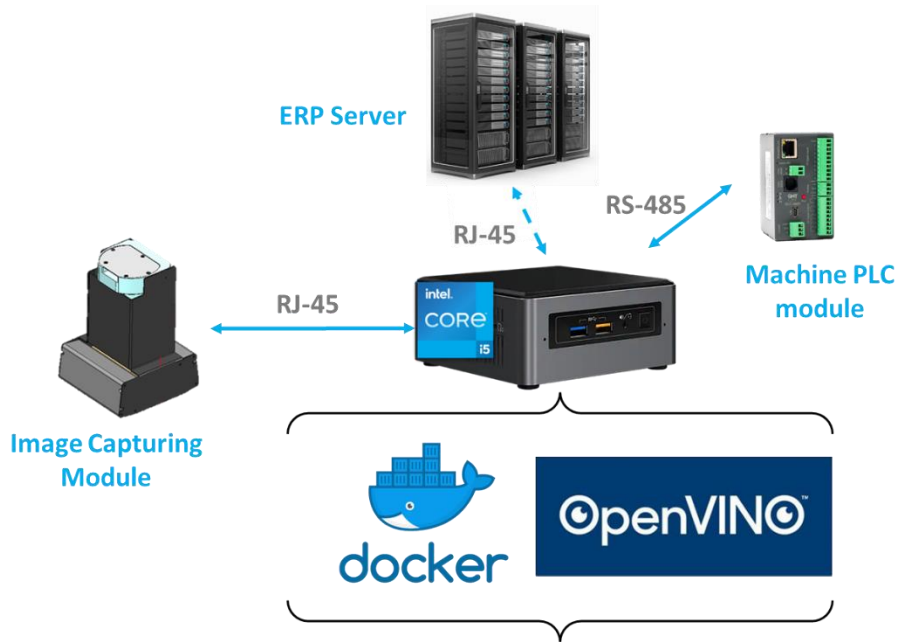


- Support R&D and IQC of the spring probes of IC test socket

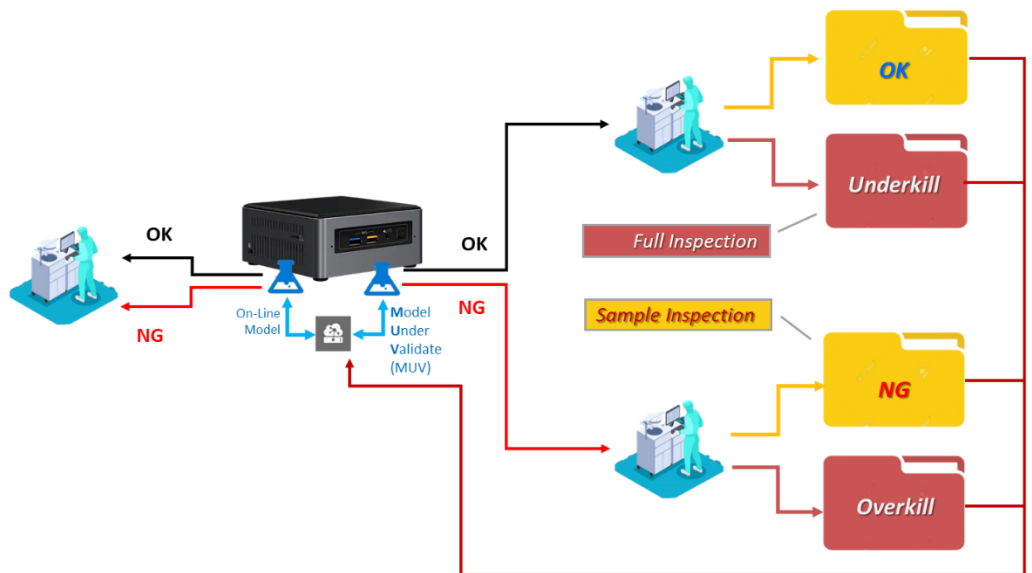
## SPECIFICATIONS

- AOI Machine for R&D and IQC
- Capable to inspect the tip abrasion, damaged, foreign particles of spring probes
- Probe diameter:  $\geq 0.1\text{mm}$
- Leveling of probe in socket:  $< 80\mu\text{m}$ ,  $\pm 10\mu\text{m}$
- Inspection range and speed: X axis: at least 10 probes; Y axis: 2.3mm/sec; Z axis: manual adjustment
- Machine Spec:
  - x/y axis: servo motor plus ball screw
  - Z axis: manual adjustment
  - PLC w UI
  - Manual load/unload UUT
- AI edge inference after human labelling of scanned image
- AI-enabled system architecture:
- AI edge computer with IoT connectivity

## SYSTEM ARCHITECTURE



## HOW THE AOI MACHINE WORKS



### SALES CONTACT

For more information on our products, please email to: [sales@megaaoi.com](mailto:sales@megaaoi.com)

# MegAAOI