



## TEST CONCEPT

### QS – INCOMING GOODS INSPECTION

- Keyence IM-8000 measuring projector for inspecting printed circuit boards and parts based on drawings

### VISUAL INSPECTION

- 100% inspection of all solder joints
- SMD solder joints are inspected using automatic optical inspection (AOI). The following defects are identified:
  - defective solder joints
  - Components with reversed polarity
  - Component misalignment relative to the pad geometry
  - Additional option (component-dependent): OCR (optical character recognition) for component markings
- THT solder joints are inspected using manual optical inspection (MOI).

### FIRST ARTICLE & SAMPLING INSPECTION

- Inspection and verification of assembled components using EFA SmartSuite
- Verification against the bill of materials and assembly layout

### X-RAY INSPECTION

- X-ray inspection of unassembled components and soldered assemblies using the YXLON Cheetah



## PROGRAMMING

- Programming of individual components, assemblies, and devices with custom firmware
- Procurement of programmed components

## ICT (IN-CIRCUIT-TEST)

- Reinhardt test systems with assembly-specific needle bed adapters
- Testing of electrical assemblies for specific electrical characteristics of individual passive, discrete components (resistors, capacitors, diodes, inductors) or clusters (circuit blocks)
- Verification of electrical connections (short circuits or open circuits)
- Test points for adapting the probes must be provided by the customer in the layout
- Programming of components directly in the ICT tester is possible

## FUNCTIONAL TEST

- Testing the functionality of electronic assemblies and devices according to customer specifications
- Versatile testing capabilities, ranging from quick LED tests to comprehensive end-of-line testing
- Preliminary testing of the basic functions of subassemblies prior to final assembly
- Conducting high-voltage tests to verify voltage withstand capability

## TEST EQUIPMENT MANUFACTURING

- In-house drilling and milling equipment for manufacturing pin-bed adapters for ICT and functional testing
- Development of test software for ICT and functional testing according to customer specifications
- Design and construction of test equipment according to customer specifications
- Reproduction and maintenance of existing test equipment

