EPS150FA

A dedicated 150 mm manual probing solution for failure analysis



BENEFITS

Make everyone a failure analysis expert

Best-known methods for verification, localization and debug

Minimize time to data

Quickest transition from wafer, to chip, to package

Ensure contact stability down to sub-µm levels

Precise mechanics, rigid components and vibration damping design

Protect your investment for the future

Re-configure and efficiently upgrade, e.g. thermography and laser cutting

Minimize training efforts

Designed for convenience and ease of use

The EPS150FA is a dedicated probing solution that comes with everything you need to achieve accurate measurement results in the shortest time, with maximum confidence. The system incorporates best-known methods for electrical failure verification, localization and debug with the ability to probe features smaller than 1 μ m.

The EPS150FA minimizes 'time-to-data' through providing flexibility to adapt from wafer-to-chip-to-package investigation in a matter of seconds.

Contact stability down to sub- μ m levels is ensured through a very stable system platform design with a vibration-isolation solution to protect contact quality over measurement time. Optimized high-magnification optics on a rigid microscope bridge, backlash-free X-Y-Z movement of high-precision positioners, vacuum-operated positioner bases, and a contact separation drive with 1 μ m repeatability, enable quick, precise probe placement comparable to semi-automatic systems. The EPS150FA enables simultaneous use of cantilever probe cards and individual probes for enhanced internal-node probing.

An intuitive operation workflow with pull-out chuck, single-handed chuck adjustment, and a highly-planar chuck surface and movement, ensures ease of operation for both the novice and the expert user.

Designed for upgradability and extendable with multiple options such as laser-cutting, liquid crystal thermography, and high-impedance probing, the EPS150FA system can be easily reconfigured to meet your future project requirements.



EPS150FA

Four high-precision positioners with coaxial probe arms

- Designed for internal node probing
- Vacuum base for precise adjustment
- Compatible with PTT probes (included)

High-quality coaxial cables

 Integrated with probe arms for optimized signal path

Universal probe platen

- · Rigid and stable design
- Compatible with probe card

40 mm platen drive

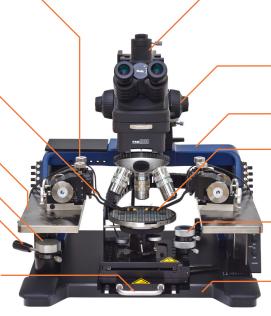
 Flexibility for wafer-level and package test

Unique 200 µm platen contact/ separation stroke

- < ±1 μm accuracy for repeatable contact quality
- · Convenient and easy to use

Chuck stage with 90 mm roll out

• Risk-free wafer loading when both probe card and positioners are used



High-resolution microscope

- Enables internal node probing on µm features
- LED illumination for excellent image contrast and long lifetime
- Compatible with laser cutter, polarizer and C-mount camera

Quick scope height adjustment

Easy re-configuration for wafer and DUT-board applications

Stable microscope bridge

• Enables high-magnification microscopy

Coaxial chuck

- $< \pm 3 \mu m$ planarity for consistent overtravel across the wafer
- Supports single chip and wafers
- Designed for device biasing

Chuck X/Y movement

- Precise X/Y positioning with < 5 µm resolution
- Independent axis locks for easy linear navigation

Vibration-isolation solution

• Ensures accurate contact and minimizes pad damage

ORDERING INFORMATION

Part Number Description

EPS150FA 150 mm manual probing solution* for failure analysis

EPS-ACC-150-PCA Probe card adapter option

EPS-UG-TC150-200C Triaxial/coaxial/RF chuck upgrade, 30°C to 200°C, including two AUX chucks

EPS-ACC-HDTV Digital high-definition TV option for EPS packages containing C-mount HDTV camera, cables,

power supply and monitor, with crosshair overlay

EPS-ACC-TV Analog TV option for EPS packages containing C-mount PAL TV camera, cables, power supply and

TV monitor

115405 Vibration isolation table VIT801 138121 SE1000 shield enclosure 119585 Adaption VIT801 to SE1000 157-842 PCB DUT board holder

157-712 Triax chuck

* The EPS150FA manual probing solution includes: MPS150 probe station with a 150 mm chuck stage, universal platen with 40 mm platen drive, microscope bridge with 50 mm x 50 mm movement and pneumatic tilt lift, universal scope mount with adjustable height, high-resolution microscope with 20x - 400x magnification, laser cutter ready, camera ready with LED illumination, vibration-isolation solution, universal chuck with 360° theta movement, four DPP220-V-S positioners, vacuum supply, four coaxial probe arms with 2 m cable, ten cat-whisker PTT probe tips with 0.5 µm tip radius, tweezers and all tools for setup and operation.

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