# **MPI T52000–IFE Series** 200 mm Automated Probe Systems

The Dedicated System for mmW, Load-pull, SiPH and Product Engineering

## **MicroPositioners and High Power Probes**

- Supports up to 4 RF and 10 DC MicroPositioner
- Wide range of MicroPositioners available, including large area for mmW applications
- Dedicated Coax, Triax and Kelvin probe arms

## **IceFreeEnvironment**<sup>™</sup>

- For probing at negative temperatures in an open environment
- Using MicroPositioners and probe cards simultaneously

#### **Probe Platen**

- Stable and rigid design
- Rectangular adjustments for RF positioners
- Integrated air-cooling for maximum thermal stability
- · Unique access for maintenance and service

#### **RF** Calibration

- 2 auxiliary chucks for calibration substrates
- Built-in ceramic for accurate calibration
- 1 µm flatness for consistent contact quality

# Probe Hover Control<sup>™</sup> (PHC)

- Manual control of probes to wafer contact & separation
- Visual feedback down to 1 μm accuracy in SENTIO<sup>®</sup>

## **Active Vibration Isolation**

- Incorporates a high performance vibration isolation platform
- Optimized total footprint
- Optional instrument shelf reduces cable lengths and increases measurement dynamic and directivity

# WaferWallet® MAX Option

- Supports one 100, 150 or 200 mm SEMI standard cassette
- Four color programmable signal light tower
- Including pre-aligner and cassette scanner
- Optional top or bottom Wafer ID Reader
- Easy field upgradable

# **THZ-Selection Option**

- Conversion into a dedicated, mmW and THz probe station
- Incorporates MPI's innovative design of frequency extender's integration which hovers over the entire 200 mm wafer
- Minimizing the distance to the DUT to a minimum, providing best possible measurement directivity and accuracy

# \*\*\*Further Options\*\*\*

- Off-Axis Wafer Alignment
  DarkBox
- Off-Axis Probe-To-Pad-Alignment ShielDCap™



WaferWallet® MAX



## **Microscope and Optics Options**

- Stable microscope bridge mount with 50 x 50 x 140 mm program mable movement
- Various optics options available such as MPI iMAG<sup>®</sup> the digital microscope or MPI AMZ12 with up to 12x optical zoom
- High Power microscopes FS70 / PSM-1000

## Modular Chucks

- Various non-thermal or thermal chucks
- Choice of Triaxial or Coaxial connection
- Wide range of temperature from -60 °C up to 300 °C
- Chiller integrated within the system's footprint
- Field upgradable for reduced cost of ownership

# **Software Suite SENTIO**<sup>®</sup>

- Simple and intuitive operation by revolutionary, multitouch software control saves significant training time
- Scroll, Zoom, Move commands mimic modern smart mobile devices and allows to become an expert in just minutes
- Switching between the active application and the rest of the APPs is just matter of a simple finger sweep
- MPI RF calibration software program QAlibria<sup>®</sup> is fully integrated with SENTIO<sup>®</sup> – for ease of use by following a single operational concept methodology

# **Thermal Control**

- Thermal chuck can be operated by using the fully integrated touch-screen display
- Placed at convenient location in front of the operator for fast
  operation and immediate feedback

## Integrated Hardware Control Panel

- Provide faster, safer and convenient system control and test operation
- The keyboard and mouse are strategically located to control the software if necessary and will also control the Windows<sup>®</sup> based instrumentation

# mDrive<sup>™</sup> Option

- Provides a truly intuitive, manual operation of all existing programmable stages, such as chuck, scope or MicroPositioners
- X- and Y-axis fine control for the selected stage
- Z safety function requires additional enabling

# Vertical Controlled Environment<sup>™</sup> (VCE) Option

- Side view of the probe tips The VCE<sup>™</sup> allows contact position automation independent of the probe card tip-drop
- It enables safe working with probe cards or single RF and DC probes

# **Silicon Photonics Upgrade Option**

- Integrates the fiber alignment equipment into the footprint of the probe station
- Optimized probe platen design for maximum stability
- Comfortable operation by full integration into SENTIO<sup>®</sup> software



MPI TS2000-IFE