Micromanipulator offers a variety of manipulators, probe card holders and probes (see reverse). Our manipulators, from the economical model 110 manipulator to the multi-versatile WAVE manipulator, all feature direct leadscREW-leadnut drives, ergonomic design and the highest stability.

**Model 110/210: Mini-arc style**
- Resolution 32 Threads per inch (TPI) = 2.2 µm
- 10 mm (0.4”) max travel each axis

**Model 450/550 and 2450/2550: Mini-arc style**
- Resolution 100 TPI =0.7 µm (450/550)  200 TPI =0.35 µm (2450/2550)
- 6.4 mm (0.25”) max travel each axis

**Model 525 and 2525: Recti-linear style**
- Resolution 100 TPI =0.7 µm (525)  200 TPI =0.35 µm (2525)
- 12.7mm (0.5”) max travel each axis

**Wave manipulators**
“Wave” series manipulators feature X-Y and Z leadscREW-leadnut control plus theta and planarity controls (1) for alignment of microwave, multi-probe or mini-probe cards (such as Celadon's “Versa Tile”)
- Resolution 40 TPI =1.7 µm
- 12.7mm (0.5”) max travel each axis
- Theta and Planarity range 4 degrees
- Height of PLF / PLS Link arm adjustable up to 3” (75 mm)

(1) Theta and Planarity provided through PLF and PLS Link arms - purchased separately
**Probe Card Holders:**

**9000 series Probe Card Holder**
- Top load style
- Probe card planarity and theta controls
- Available in version to support P300 series "top hats"
- For 4.5 " wide cards

**8800 series Probe Card Holders**
- Front or Back load style (reversible)
- Probe card planarity and theta controls
- Available for 4.5 and 6" wide rectangular cards and 8" round mother / daughter boards

**Probe Holders**

**79 series probe holders**
- Available in Triaxial single wire, Triaxial Kelvin (dual wire single tip) or Coaxial configurations
- Available in standard or high temperature versions
- Femto ampere resolution, leakage and noise (triaxial)
- Accept disposable series 7 probe tips

**44 series probes**
The 44 series DC-3GHz coaxial probes feature an integrated probe tip (2 micron radius, not disposable) and are available in many configurations:
- Single tip / single wire or full dual tip / dual wire Kelvin
- Single tip plus ground tip (50 mil (0.050") separation standard, 10 minimum 100 maximum)
- UMC or SMA connectors
- Cables available UMC-UMC, UMC-BNC, UMC-SMA, SMA-SMA
- Capacitance 2.5 pf per inch (probe = 3-6 pf typical)
- Available with series or terminating resistors

**Many other probe holders are available including**
- Model 75 single wire - general purpose probe holder
- Model 72 single wire - malleable shaft probe holders

See our full probe and probe holder catalog for more detail.