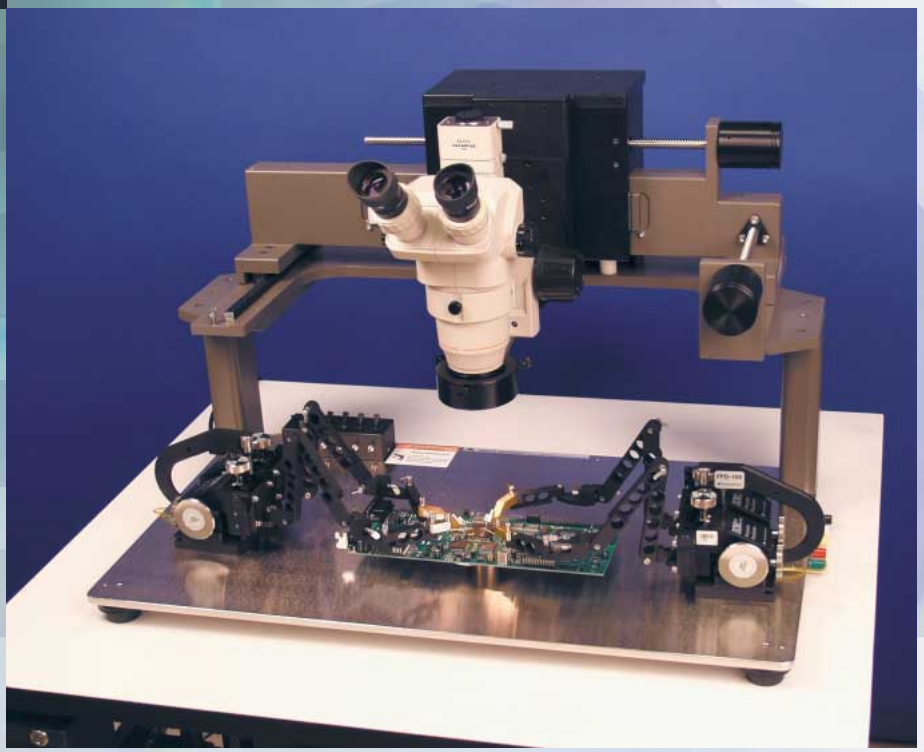




Ideal for characterization & troubleshooting high-speed, high-density microcircuits

Faster, denser technologies present new testing problems for troubleshooting and characterization tasks, especially as narrow pitches (<5 mils at speeds of >100 MHz) make hand-held oscilloscope probing troublesome. The MTS-2000 Series Fine Pitch Probing System solves these difficulties by enabling direct probing of fine line structures on SMT, MCM and other high-density technologies.

CASCADE® MICROTECH

Innovating Test Technologies

Features

- Complete benchtop setup for probing fine-pitch assemblies
- Accommodates FPD-100 Fine-Pitch Dual Positioners for individual and concurrent ground-signal probe placement
- Rigid, orthogonal microscope bridge mount with (5 in. x 6 in.) 127 x 152 mm X-Y travel
- 5 to 40x Olympus microscope
- Simple, single-user measurements
- Convenient vacuum manifold

Applications

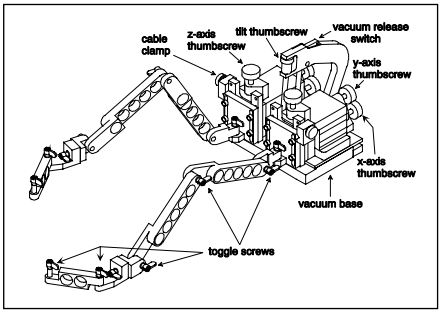
- Timing skew characterization
- Noise margin measurements
- Trace impedance measurements
- Substrate characterization
- Failure analysis
- Circuit troubleshooting
- Signal integrity

Types of design

- Notebook computers
- Mother/daughter cards
- High-speed computers
- Communications modules
- HDTV modules

Specifications

Microscope stage:
X-translation range: 152 mm (6 in.)
Y-translation range: 127 mm (5 in.)
Z-axis planarity: ±1 mil full travel
Optics: Olympus Zoom Stereo 60 Microscope (5x to 40x) with 10x eyepieces and 0.5x objective
Lift repeatability: 1 micron
Fine-Pitch Dual Positioners:
Travel: x, y, z axes, 127 mm (0.5 in.)
Articulating arms:
Angular rotation: ±120°
Length: 5 cm (2 in.) and 10 cm (4 in.)
Electrically isolated from base
Vacuum hold-down with vacuum release for each dual positioner
Tilt thumbscrew (lifts both arms concurrently)



The MTS-2200's Fine Pitch Dual Positioners configure quickly by using toggle screws that lock arms into place as probes are positioned. X,Y, and Z-axis thumbscrews provide fine-positioning capability.

Dimensions

Base plate: 40.6 x 71 x 0.65 cm (16.0 x 28.0 x 0.375 in.)
Height to eyepieces: 43 cm (17 in.)
Weight: net 53 kg (116 lb.); shipping 59 kg (130 lb.)
Operating temp: 10°C to +35°C
Storage temp: -20°C to +60°C

Product details

MTS-2000 Fine-Pitch Probe System

Includes the following:
1 MTS-200 Base Plate Assembly
1 Olympus video-ready microscope with fiber-optic, ring illuminator
1 Bridge mount for microscope
1 Station ground connector
4 Vibration isolation feet
1 DUT mounting kit (with gel pak kit for small DUTs and four magnetic mounts that bolt to large modules or circuit boards)
1 Vacuum pump (vacuum hold-down provided in base plate)
1 Vacuum manifold (5 valved outlets)
1 Assembly tools and hardware
1 User manual

MTS-2000 Ordering Information

110V, 60 Hz MTS-2000
230V, 50 Hz MTS-2000E

MTS-2200 Fine-Pitch Probe System

Includes the following:
Items in MTS-2000, plus:
2 FPD-100 Fine-Pitch Dual Positioner kits with 2 articulating arms, 1 vacuum base and 2 common-mount positioners
2 FPM-XXX Probe Kits: (Specify any 2 probes from 1x, 10x, 20x, 100x models as no-charge line items.)

MTS-2200 Ordering Information

110V, 60 Hz MTS-2200
230V, 50 Hz MTS-2200E

FPD-100 kits include:

2 articlulating arms, 1 vacuum base, 2 common-mount positioners

FPM-XXX probe kits include:

1 Fine-Pitch Probe (where - xxx denotes attenuation)
1 ground needle kit w/brush contacts
1 ground needle kit with low inductance wire
1 SMA (female) to BNC (male) adapter
1 DC-20 GHz coax cable with elbow

Recommended Accessories

2.5 GHz Fine-Pitch Active Probe with dual positioner FPA-200
6 GHz Resistive-Divider Probe with dual positioner FPR-200
Additional Fine-Pitch Dual Positioner. FPD-100
Color Camera & Cables VVC-02/O
[Includes high resolution video camera, cables and power supply for 100-240V, 50/60 Hz.]
14 in. Color Video Monitor (100-240V, 50/60 Hz). . BVM-0113
20 in. Color Video Monitor (100-240V, 50/60 Hz) 104-457
Vacuum pump 120V 60 Hz 104-103
Vacuum pump 240V 50 Hz 104-103E

CASCADE MICROTECH

Innovating Test Technologies for better measurements faster

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