

MPI Optical Solutions

MPI is working closely with leading optical suppliers to develop and optimize dedicated microscope solutions. This provides leading edge on-wafer observation and navigation. The selected optics are a perfect fit to the specific requirements of accurate probe placement on DC/CV, RF and mmW pads.

Single tube solution provide a large working distance at high magnification. Small form factors are ideal for RF, mmW and load-pull applications due to space restrictions inherent with the integration of test heads/tuners requiring shortest distance to DUT.

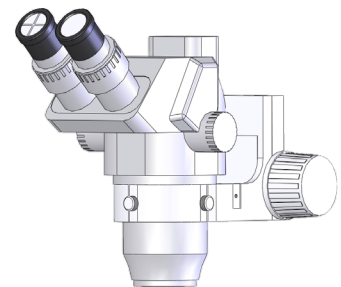
MPI is also offers state of the art high-power microscopes such as Motic PSM-1000 and Mitutoyo FS70 configured to address internal-node probing or Failure Analysis application requirements.

All optics include TV ports for being used with a number of 1080p HDMI cameras. Images are displayed on the monitor without additional computer requirements:

- Image can be captured directly onto the built-in mini SD card of the 5.0 MP camera
- Remote control and/or direct camera buttons for various settings
- All required cables are included

MPI Stereo Microscope ST45

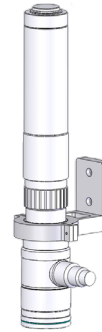
- Entry level stereo microscope
- 25x eyepiece for max. magnification
- TV port – standard c-mount
- 50 mm focus block (for pivot or tilt mount)
- Dedicated for DC/CV measurements
- A TV port for higher magnification or other optics is recommended for RF measurements



Trinocular head	45° inclined
Zoom objective lense	0.67x - 4.5x (6.7:1)
Eyepiece	25x
Auxiliary lens	1.0x
Optical magnification	16.8x - 112.5x
FOV	13.4 - 2.0 mm
WD	100 mm
TV port (C-mount)	1x
LED ring illumination	72 pcs., 4 independent sectors selectable
Power supply	100 - 240 V, 7.2 W, CE
Dimensions (W x D x H)	45 x 85.5 x 269 mm
Weight	550 g

MPI SuperZoom SZ10

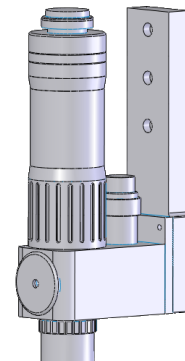
- 10x zoom single tube microscope
- Incredible 95 mm working distance for stress-free probe replacement and test heads/tuner integration
- 2.5 μ m optical resolution for small pads probing and accurate placement on calibration standards
- TV port – standard c-mount
- 50 mm focus block with fine and fast movement
- Dedicated for all DC/CV, RF, mmW and load pull measurements



Optical magnification	1.0x - 10.0x
WD	95 mm
Resolution	8.8 - 2.5 μ m
DOF	1.1 - 0.03 mm
N.A.	0.038 - 0.136
FOV 1/3" camera	3.6 x 4.8 - 0.4 x 0.5 mm
FOV 1/2" camera	4.8 x 6.4 - 0.5 x 0.6 mm
TV distortion (max.)	0.19 - 0.01 %
LED coaxial illumination	5 W
Power supply	110 V / 220 V, 8 W, CE, manually dimmable
Dimensions (W x D x H)	46 x 55 x 408 mm
Weight	940 g

MPI MegaZoom MZ12

- The non-plus-mega 12x zoom single tube microscope
- Unique combination of large field of view and extremely high magnification
- 46.2 mm working distance for stress-free probe replacement, cable and different RF probe reconfiguration
- 2.5 μ m optical resolution for excellent small pads probing and accurate placement on calibration standards
- TV port – standard c-mount
- 50 mm focus block with fine and fast movement
- Dedicated for all DC/CV, RF, mmW and load pull measurements



Optical magnification	1.25x - 15x
WD	46.2 mm
Resolution	11.18 - 1.68 μ m
DOF	0.6 - 0.0138 mm
N.A.	0.03 - 0.2
FOV 1/3" camera	3.5 x 2.63 - 0.29 x 0.22 mm
FOV 1/2" camera	5.38 x 4.04 - 0.45 x 0.34 mm
LED coaxial illumination	5 W
Power supply	110 V / 220 V, 8 W, CE, manually dimmable, On/Off remote control
Dimensions (W x D x H)	45 x 85.5 x 269 mm
Weight	1050 g

Digital HDMI Cameras

ST-HD2MP

- Small form factor 1080p HDMI camera
- No requirement of a computer for standard operation
- 2 m HDMI cable included
- Wired control for white balance and other settings



Moticam580

- Versatile 1080p HDMI camera
- Does not require a computer for standard operation
- Image can be captured directly onto the build-in mini SD card at 5.0 MP resolution – ideal for documentation on the MPI manual probe systems series
- USB 2.0 interface allows using the provided software: includes measurement, annotation and reporting tools
- Remote control and direct camera buttons for various settings
- All cables included



MPI Product Name	ST-HD2MP	MOTICAM580
Sensor type	CMOS	CMOS
Sensor size	1/2.8 in	1/2.5 in
Active resolution (Total pixel)	1920 x 1080 (2 MP)	2592 x 1944 (5 MP)
Pixel Size	2.8 x 2.8 µm	2.2 x 2.2 µm
Video output	HDMI (1080p)	HDMI (1080p) SD (5.0 MP) USB2.0 (800 x 600) Analog Video
Frame rates	60 fps	50 fps
White balance	Automatic	Automatic, manual
Power supply	DC 12 V AC Adapter, 110/220 V, CE	DC 12 V AC Adapter, 110/220 V, CE
Remote control	Wired option?? (RC-HD133)	Included
Software	N/A	Motic Image plus for PC and Mac
Computer requirements	N/A	Win 2000/XP/Vista/7 Mac OS x G4 or higher 1 GHz or higher, USB 2.0 port, CD-ROM drive
Dimensions (W x D x H)	40 x 40 x 48.9 mm	80 x 88.8 x 61.8 mm
Weight	Approx. 120 g	Approx. 1000 g

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