POMEAS
普密斯

Laser Focus | 3-D imaging | Precision Measurement

Digital Microscope MICRO IMAGE3

- One device for all analytical needs
- All-in-one design

- Ultra High-Detail Observation
- Ultra-high-resolution 4K CMOS
- Stereoscopic sense comparable to SEM
- Advanced optical shadow effect mode
- Easy and intuitive operation
- New operating system

150X/0.90 high-resolution objective lens realizes 1x to 8000x magnification in a single unit, and 1X/0.025 large-field objective lens.

PRODUCTS

DIGITAL MICROSCOPE MICRO IMAGE3

Customization based on analytical work

CUSTOMIZATION

A wide variety of measurement needs can be met by the user

Automatic Reproduction Of Identical Jobs

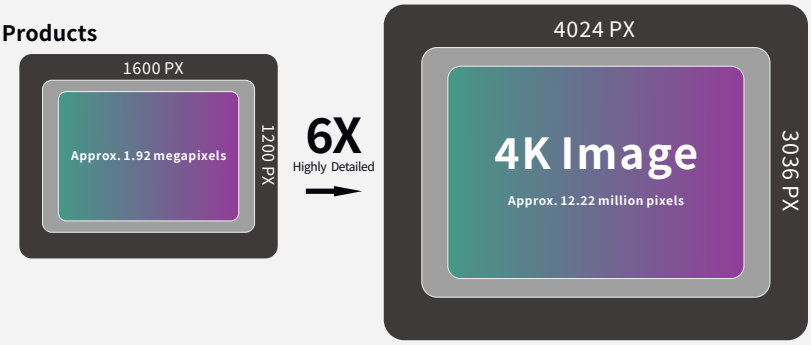
Fast Replay

Analyzes Several Times The Range Of Conventional Products

300mm large platform

Support For Metallographic Microscopy

High resolution F200 full achromatic APO lens



■ Fully achromatic APO microscope objective lens F200 with high resolution

A new exclusive lens for digital microscopy systems that combines high resolution with 4K image quality, and realizes fast, real-time large depth of field with POMEAS Z-Stack fly-by technology.

PRODUCTS

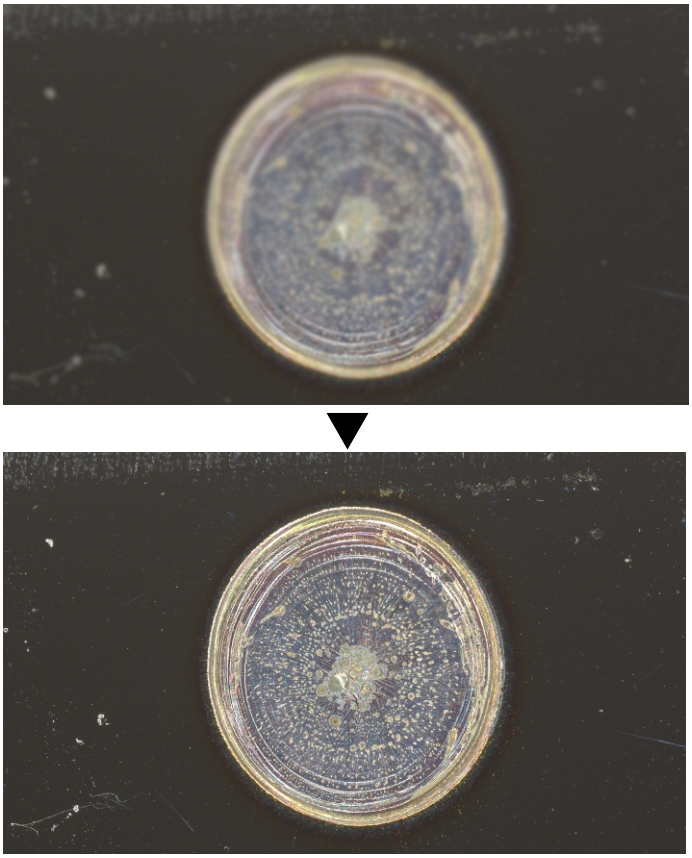
DIGITAL MICROSCOPE MICRO IMAGE3

One Device
INCORPORATION
Various analytical needs can be realized

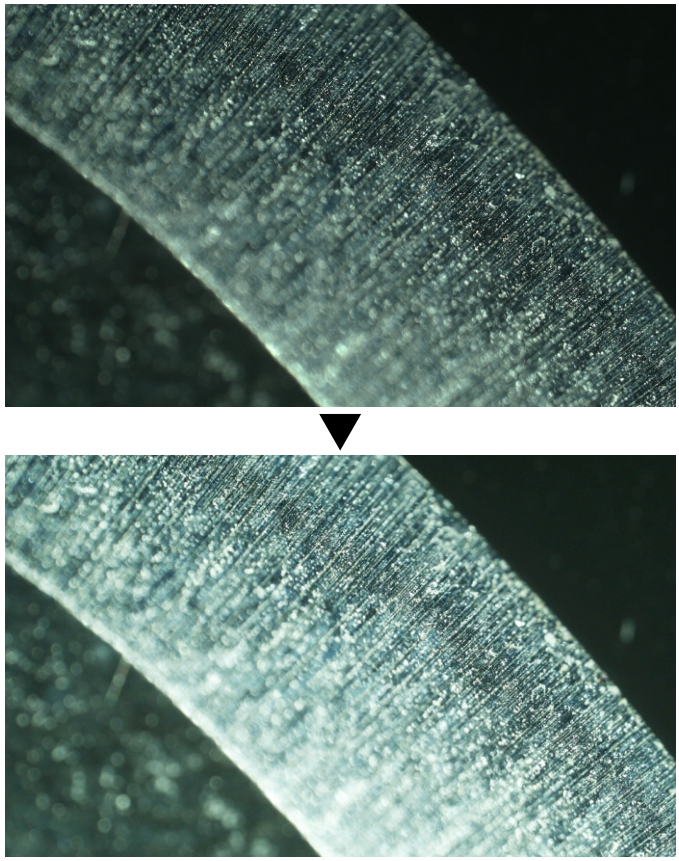
■ Easy And Intuitive Operation

By placing the target on the platform, it can be operated by the controller at hand for positioning, focusing, magnification conversion, and other operations, and the observation of the target position can be realized intuitively.

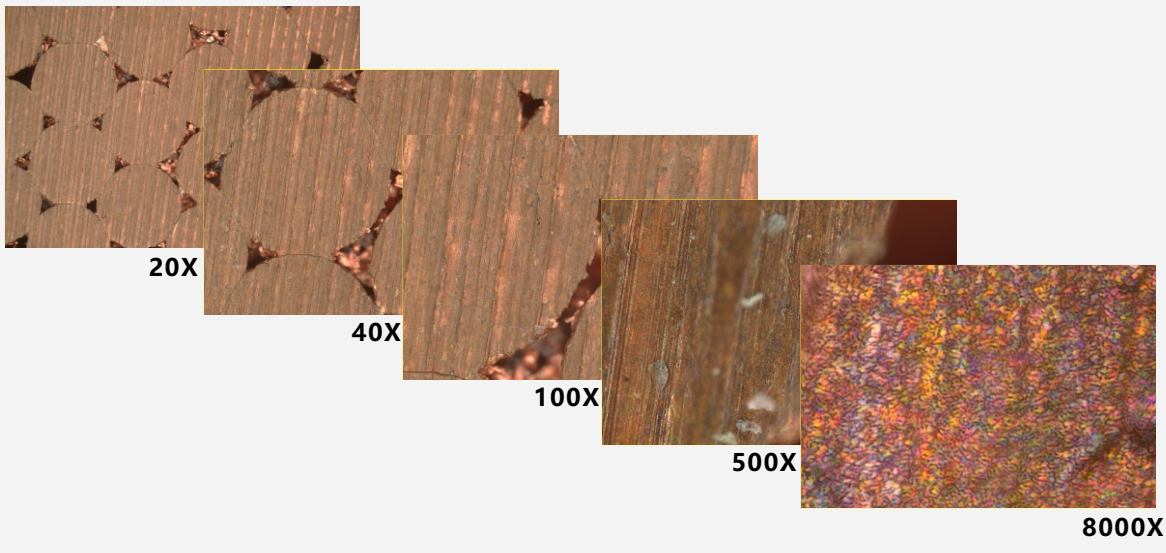
Focus Confirm The Lens And Target At The Same Time For Easy Focusing



Illumination Observations Can Be Made Using A Variety Of Lighting And Light Levels



Multiplier Change Capable Of Seamless Observation From Low To High Magnification



PRODUCTS

DIGITAL MICROSCOPE MICRO IMAGE3

Customization based on analytical work

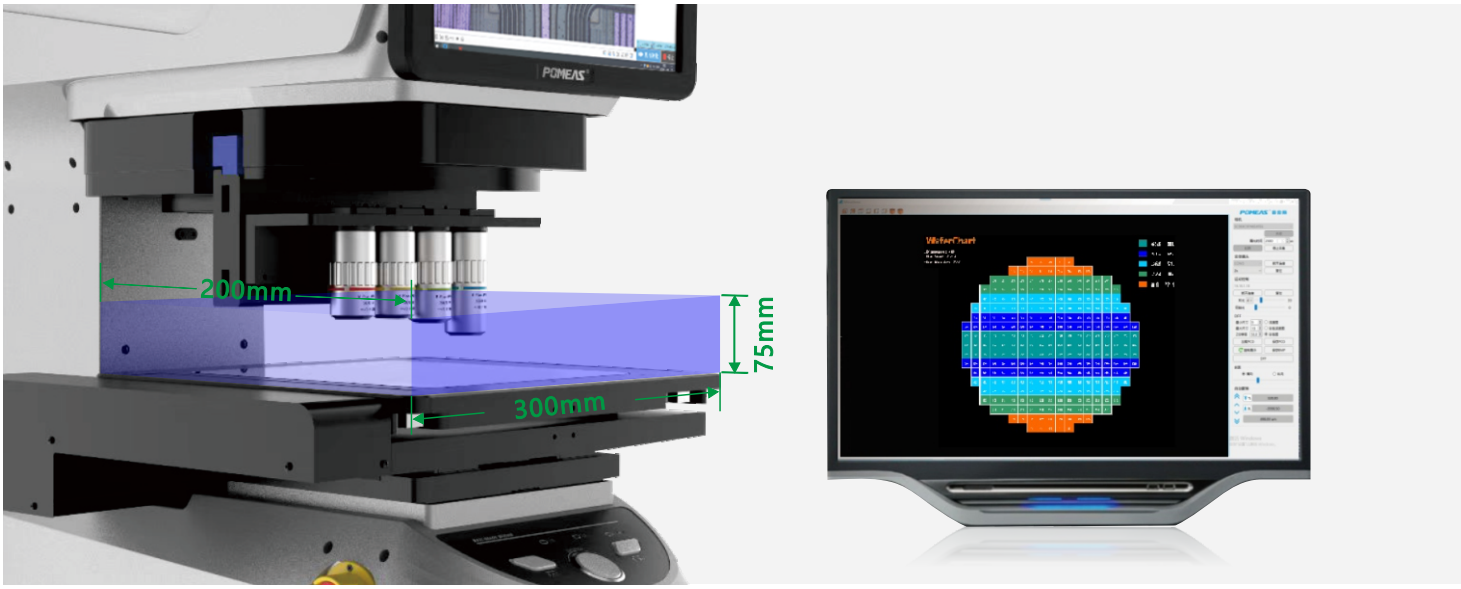
CUSTOMIZATION

A wide variety of measurement needs can be met by the user

■ Fully Automated Digital Microscope

Customized according to the analytical work, one unit is equivalent to the following multiple testing instruments.

Digital Microscope = Stereo Microscope + 3D Profiler + Metallographic Microscope + Tool Microscope



■ With the ability of rapid full scanning of wafers

High-precision motion platform, stable and powerful electronic control system, to achieve all sizes of wafers flying shooting and scanning splicing;

■ With 100x100mm, 200x200mm, 300x200mm, and customized 300x300mm all reach the repeatability of 1um of the moving platform

Thanks to decades of experience in the measurement field, POMEAS has mastered the design and assembly of sub-micron moving accuracy for tabletop microscopy systems;

■ With an additional 75mm of expansion space

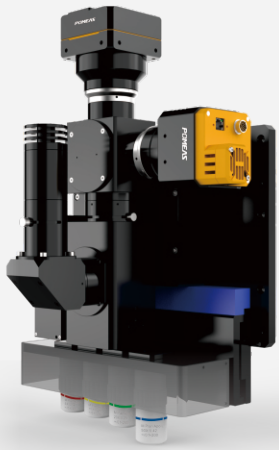
Extra large travel design, within the original 30mm autofocus travel, there is still room for 75mm customized sample height, flexible to meet the expansion of semiconductor fixtures;

PRODUCTS

CORE MODULE INTRODUCTION

Laser Sensor Modulethe
“Focus X” System Consists Of

- Industrial Cameras
- Microscope Tube Modules
- Laser Sensor Module
- Objective Focus Module
- Objective Lens Mounting Module
- APO Objective Lenses



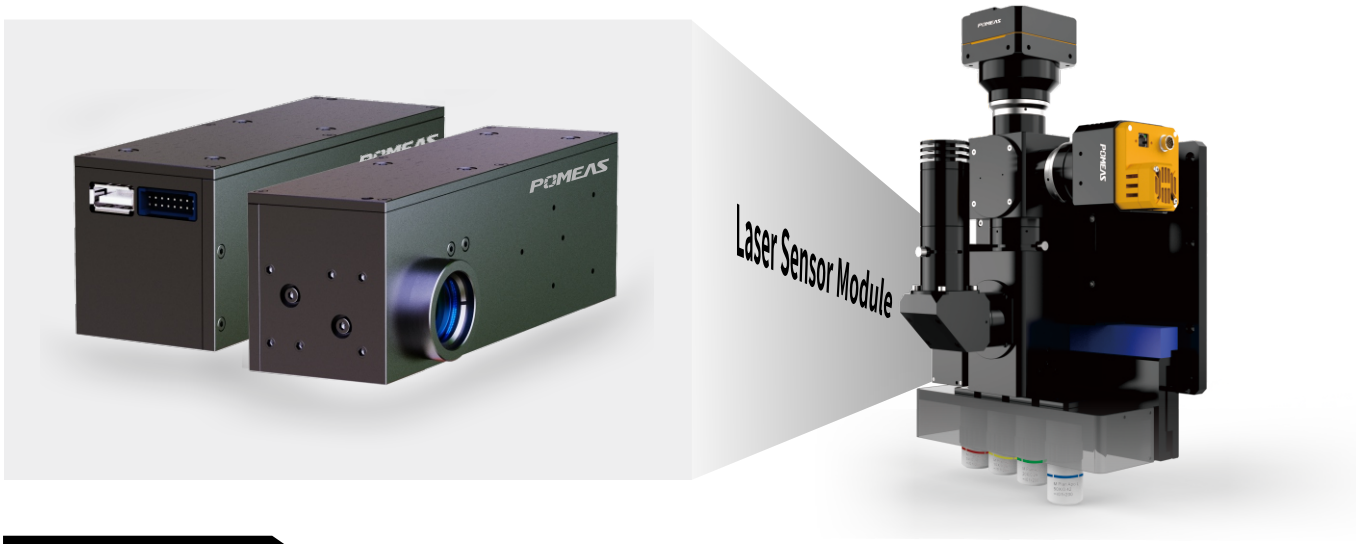
Focus X

Ultra Clear 4k Microscopic Images

Derived from self-developed core optical system

Simple interface - easy to operate - fast and accurate

8 objective lens switching (Max)
Fast autofocus (0.1ms)



Module Introduction

Compact structure, the semiconductor laser, optical system, high-speed signal processing module, laser control, motion control, and software algorithms in one focusing mode using co-axial focusing mode, effectively solve the problem of blocking when focusing;Focusing accuracy μm level, focusing speed up to 6.5khz level, with high focusing accuracy, focusing speed, product performance is stable and reliable, can be widely used in complex applications and environments.

Static Or Dynamic Focus

The combination of laser optics and an integrated microprocessor allows the POMEAS laser sensor to focus on static, stationary surfaces as well as those that are dynamically moving.

High Speed And Precision

An internal update rate of 10kHz and an output rate of up to 6.5kHz.
auto-tuning, advanced processing, and on-board algorithms allow the laser sensor to maintain this focus even when moving at high speeds over complex surfaces.

Easy To Integrate And Implement

Ease of integration and implementation are key features of laser sensors.
Analog and digital output variants are available.
A number of controller options are also available including those that require interfacing with a number of third party stepping, linear and Z motion systems.
progressive, linear and Z-motion systems.

Maximum Flexibility

The sensors can operate on many surfaces including unpatterned, patterned, rough and diffuse surfaces.
The laser sensor adapts to a variety of reflective surfaces by automatically sensing and adjusting.
The sensor is compatible with 1X to 150X objectives.

Module Characteristics

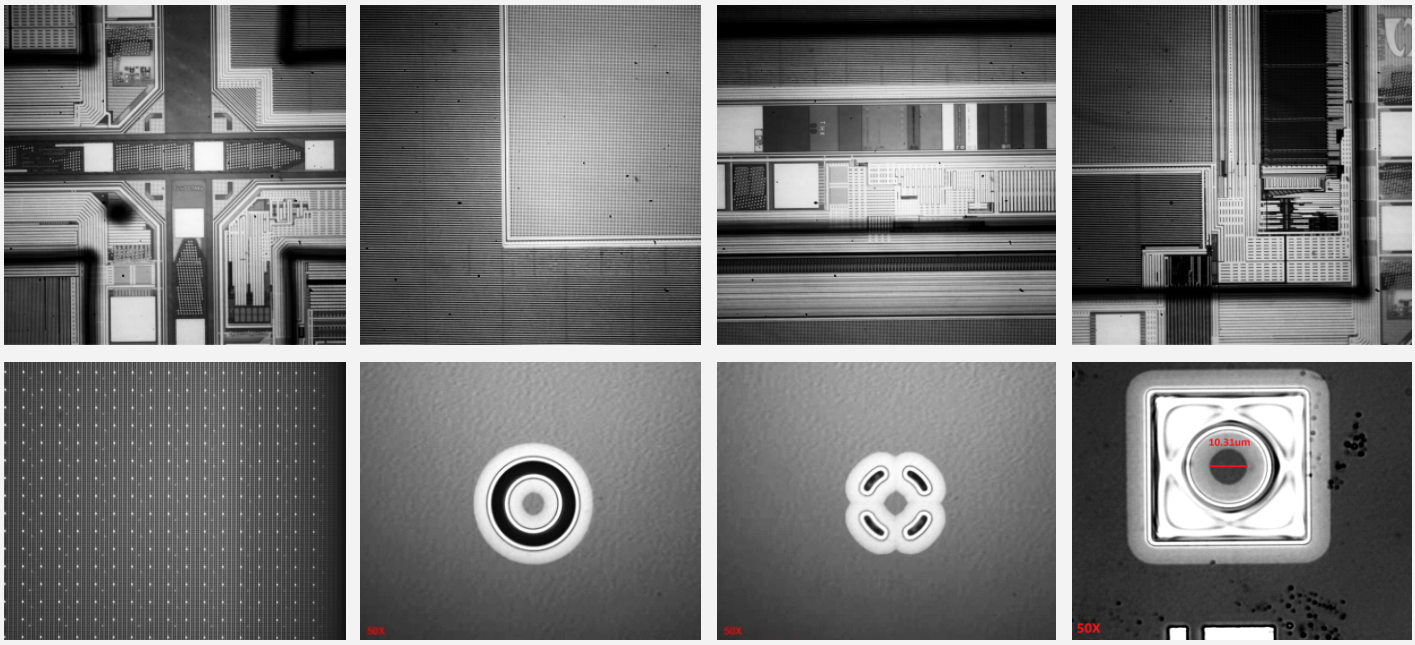
High Accuracy And Efficiency Support Integration Into Existing Customer Microscope Systems:
To meet the needs of each application, several sensor models are available, each with different options depending on specific needs.
They are also widely used for real-time focusing for microscopic observation, precision laser welding, and precision laser cutting.

PRODUCTS

DIGITAL MICROSCOPE MICRO IMAGE3

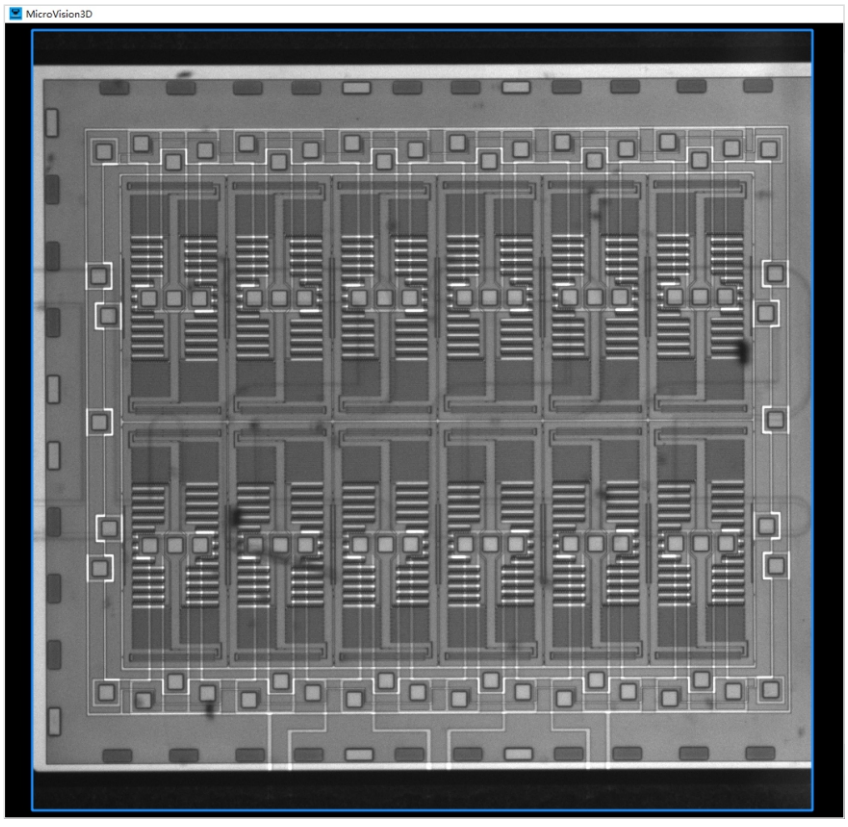
First AOI Microscope System To Realize Laser Focusing For Infrared Non-destructive Penetration Of Wafers

4"/6"/8"/12" wafer or wafer bonding non-destructive penetration cases:



POMEAS super depth of field software MicroVision 3D:

Combining observation, shooting, and measurement, it has observation performance beyond that of the naked eye.
It also has a powerful measurement capability for various analyses. The large memory can store tens of millions of images and is easy to operate.
A variety of measurement functions are integrated into one unit, allowing you to perform planar and 3D measurements by simply operating the mouse.
In addition, roughness measurement, cleanliness measurement, crystalline particle size measurement, and rapid AI inspection of wafers can also be accomplished with just this one device.



PRODUCTS

DIGITAL MICROSCOPE MICRO IMAGE3

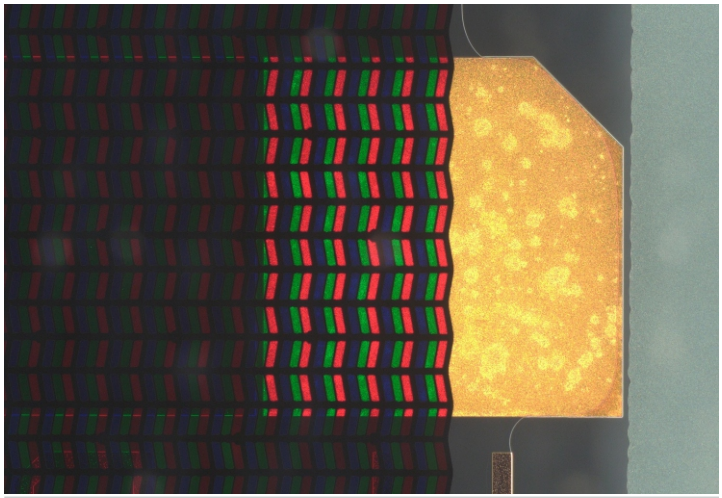
Product Parameter Table		
Products	Digital Magnification	1x-8000x
	Objective lens magnification range	1x-150x
	Maximum Working Distance	22mm
	AMS Functions	Auto Measurement System Function
Integrated Control System		Pms 5-axis Control System
High Precision Frames	Z-axis Autofocus Distance	30mm
	Z-axis Maximum Resolution	0.1μm
	Z-axis Expandable Maximum Height	75mm
	Ambient Temperature	10°c To 40°c (non-condensing)
	Relative Humidity	Less Than 80% (no Condensation)
	Dimensions (mm)/weight	273(w) ×467.1(h)×444(d) /8kg
Digital System	Visible Light Camera Unit 1	1-inch 20-megapixel Image Sensor
	Shutter Mode	Roll-up Shutter
	Visible Light Camera Unit 2	2/3-inch 5-megapixel Image Sensor
	Shutter Mode	Global Shutter
	Infrared Light Camera Unit 1	1.25-inch 4-megapixel Image Sensor
	Shutter Mode	Roll-up Shutter
	Infrared Light Camera Unit 2	1/1.4-inch 5-megapixel Ingaas Image Sensor
Motorized Z-axis	Course	30mm
	Resolution	0.1 Mm
	Repeatability	1μm
	Dimensions(mm)/weight	Module: 60(w)×158(h)×42(d)/1.6kg
Motorized Control Platforms		2d Image Stitching
		3d Image Stitching
	Course	100(x)×100(y)mm Standard
	Driving Method	Motorized
	Corresponding Product Size	4 Inch, 6 Inch, 8 Inch, 12 Inch
		3d Display Function
		3d Contour Correction Function
Manual Control Platform	Driving method	Manually Operated
	Sizes	8 Inch
	Course	104(x)× 102(y)mm
Lighting Sources	LED	5v 1a High Brightness Led
	LED Lifetime	Greater Than 20,000 Hours
	Color Temperature	5650k

PRODUCTS

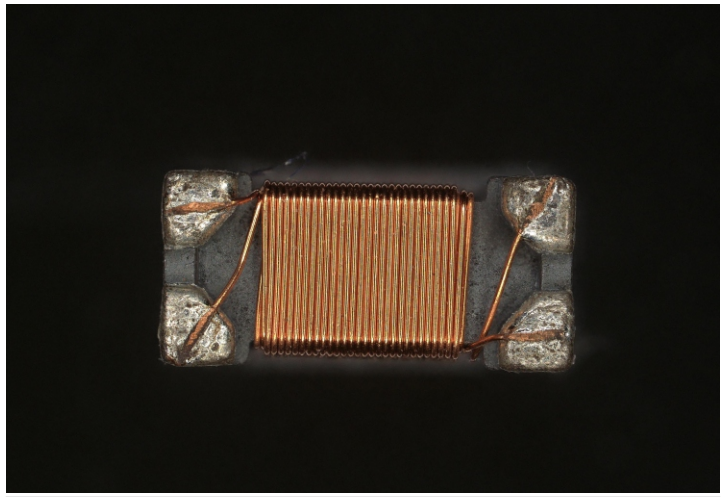
DIGITAL MICROSCOPE MICRO IMAGE3

- 3C Electronics/Cell Phone/Watch/Cell/Eyeglasses/Charger/Camera
- New Energy Battery/Auto/Solar
- Disk Manufacturing & Testing
- 5G Manufacturing and Testing

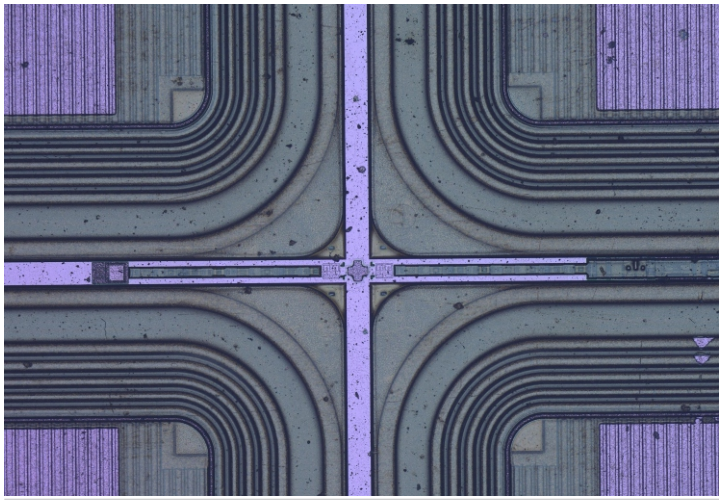
Product Cases



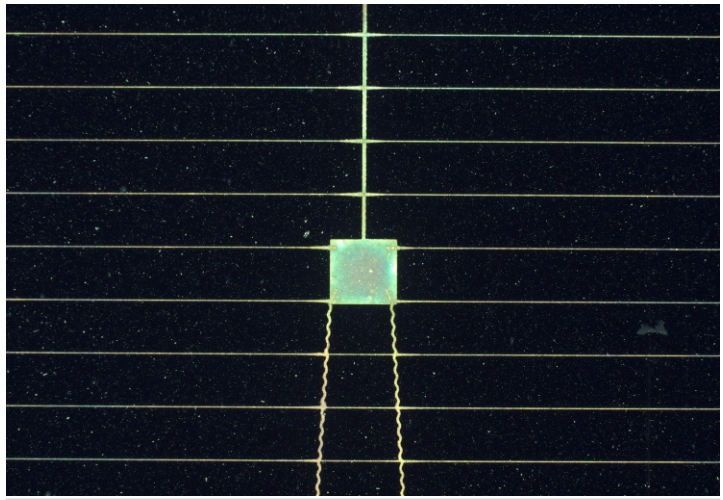
Liquid Crystal Screen Inspection



Miniature Inductors



Wafer Etching



Solar Wafer

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