KoPa®

4K Zoom Video Microscope

Wi Fi 6E

AF
AUTO FOCUS

AUTO EDOF

4K ULTRA HD

4K 15.6inch Display

OS

100% Adobe RGB Color gamut

XLSX

PPT

W
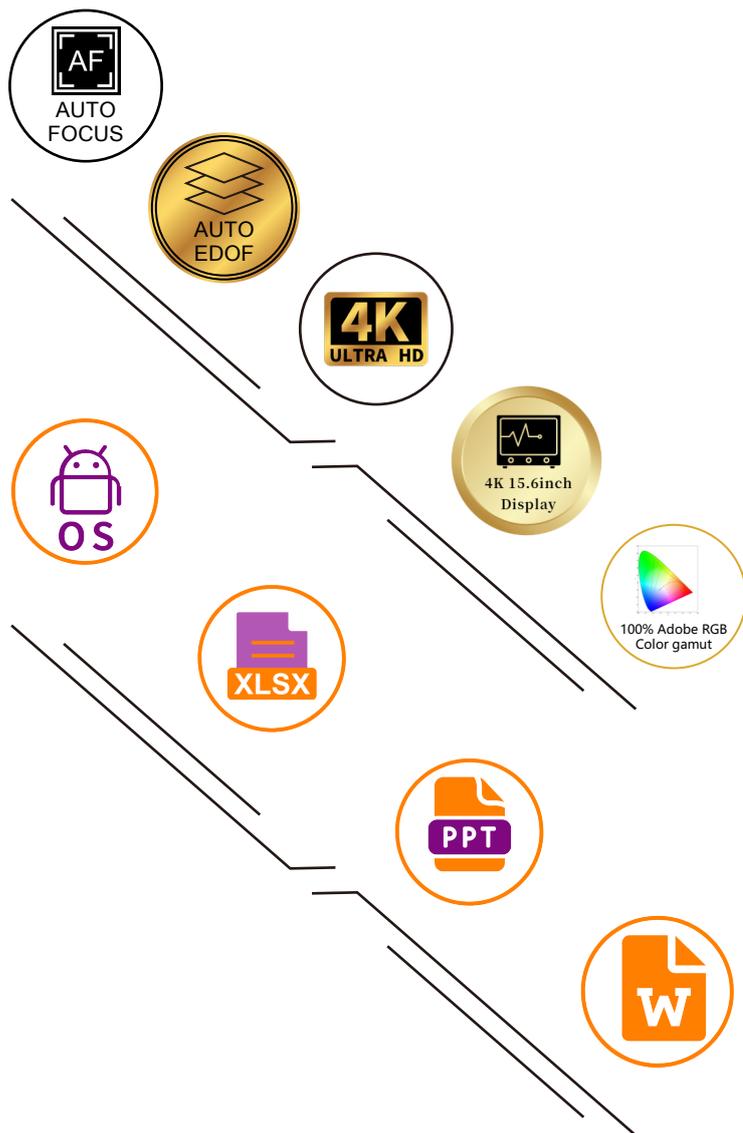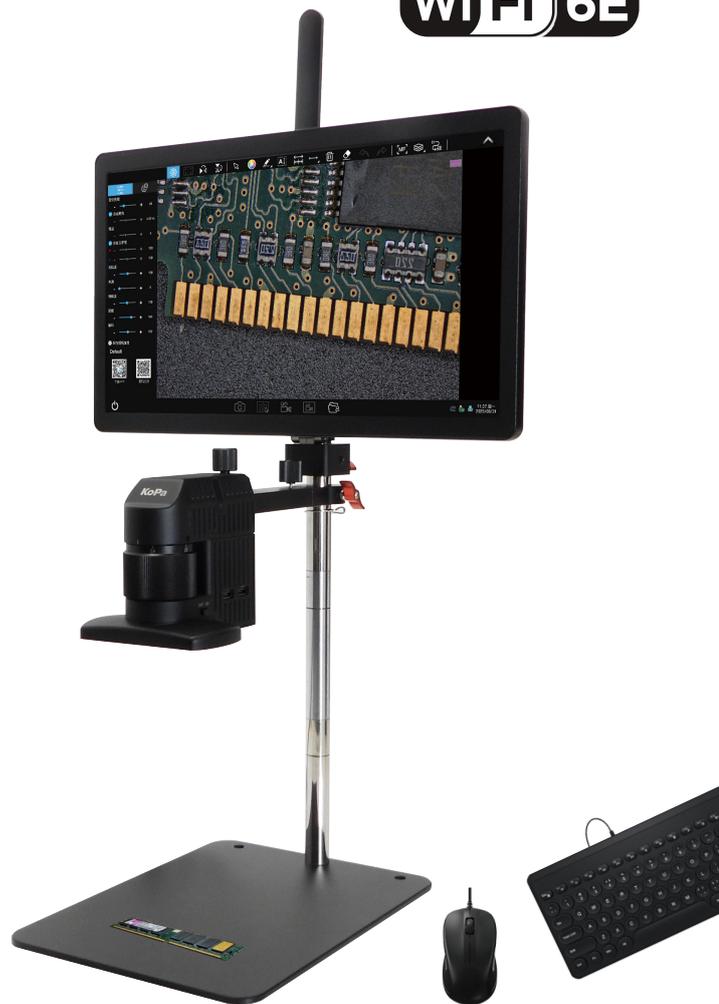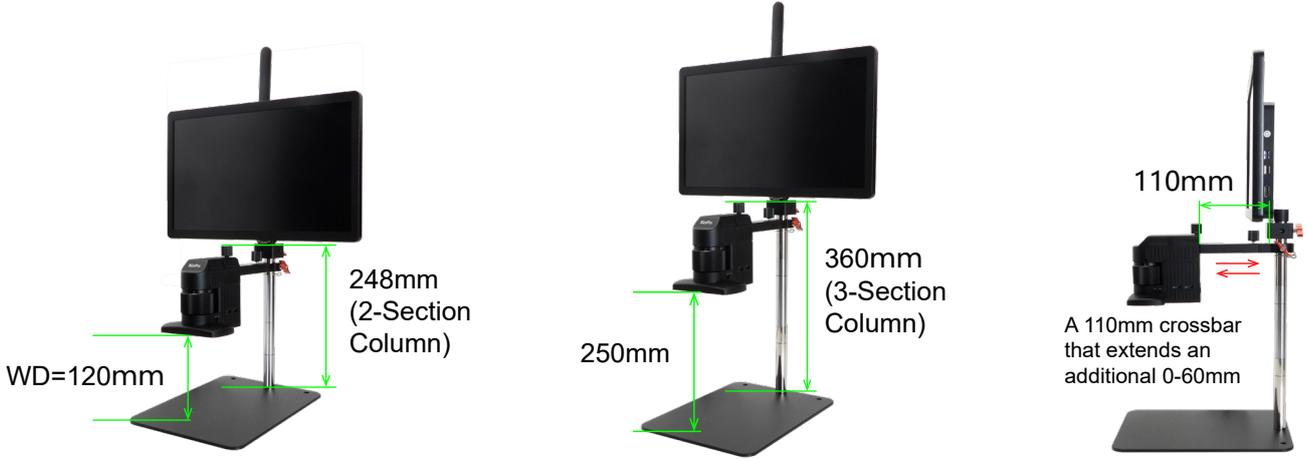
CE210T Series   Option C
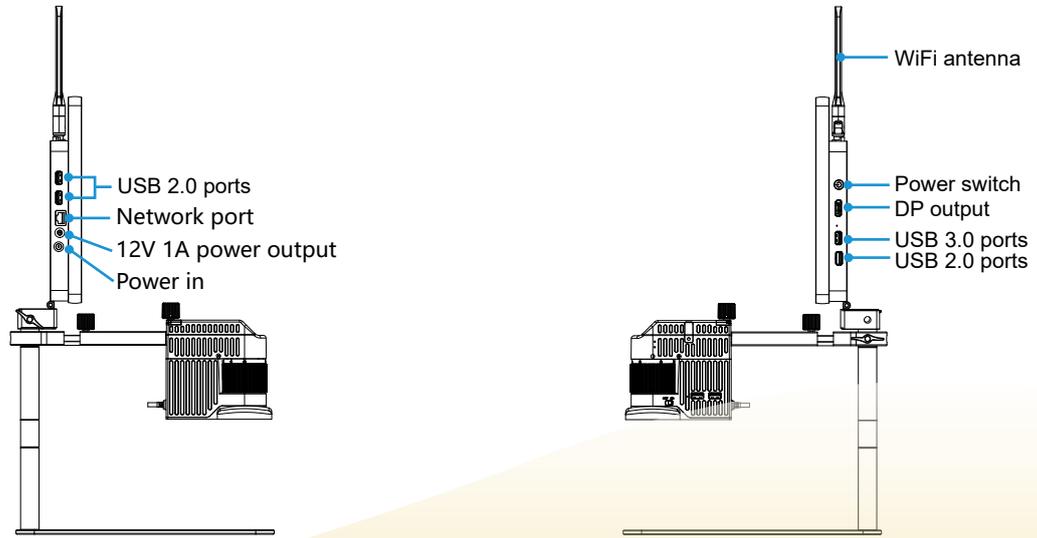
Model: CE210T   Category: CJ-08

01 Compact footprint, generous workspace

Flexibly adapts to your task. The standard 3-section column and an extendable crossbar create a versatile workspace.

WD=120mm

248mm
(2-Section Column)

250mm

360mm
(3-Section Column)

110mm

A 110mm crossbar that extends an additional 0-60mm

02 Built-in smart OS & high-speed connectivity

The CE210T Option C features deep integration of a customized Android OS and is equipped with a high-performance WiFi 6E module (compliant with IEEE 802.11ax standard, supporting frequencies: 5.1GHz ~ 7.1GHz).
Core Specs of Android System: CPU: Quad-core, GPU: Quad-core, DDR4 Memory: 8GB, EMMC Storage: 64GB (support USB disk for additional capacity)

USB 2.0 ports
Network port
12V 1A power output
Power in

WiFi antenna

Power switch
DP output
USB 3.0 ports
USB 2.0 ports

Real-time Wireless Sharing

Wirelessly stream microscope images to mobile phones or tablets, facilitating real-time viewing and collaborative discussion among multiple users.

Robust App Ecosystem & Remote Collaboration

Supports installation of a wide range of Android applications. When connected to the internet, it enables use of remote video conferencing software (e.g., Tencent Meeting, Zoom, Teams) to share microscope images in real time with clients, facilitating joint problem analysis and remote teamwork.

Local WiFi Connection

Internet Connection

Integrated Office & Reporting Capabilities

The system comes preloaded with the Office suite (Word, Excel, PowerPoint), allowing users to edit documents, process data, and generate reports directly on the device in one seamless workflow.

Experience Ultra-Crisp Visuals

This monitor features a sharp 3840×2160 4K resolution for extraordinary detail. With 100% Adobe RGB color gamut coverage, it accurately reproduces critical hues and delivers exceptional color accuracy.

15.6-inch Display Specifications

Pixel Quantity	3840 (horizontal) × 2160 (vertical)
Pixel Arrangement	RGB vertical stripe
Color Gamut	100% Adobe RGB (Equivalent to 135%sRGB)
Color Gamut Coverage	100% Adobe RGB
Number of Colors	16.7M (8Bit)
Surface Treatment	Anti-glare
Surface Hardness	3H
Viewing Angles	Horizontal 170°, Vertical 170°
Contrast Ratio	1500：1
Brightness	1000 cd/m² (5-point average)

*Keywords: High Brightness, Wide Color Gamut and Blue Light Filtered.

03 Advanced illumination system

Control everything with software: adjust brightness, switch between four independent zones, and toggle diffused/near-coaxial light. Experience vibrant, accurate color (CRI≥95, R9≥92, 6500K color temperature) that reduces eye strain, powered by long-life 20,000+ hour LEDs.

Decoupled software-switch
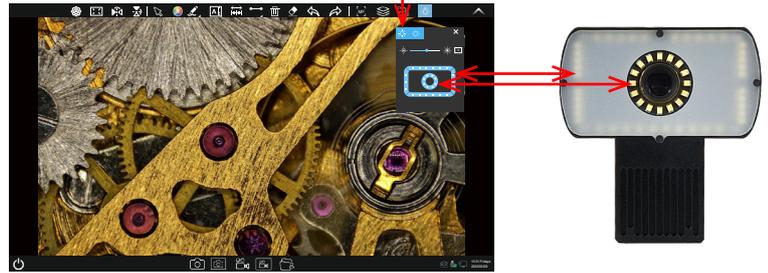
● Near-coaxial light

Power	< 1.5W
Input voltage	DC 5V
Dimming method	Dedicated LED driver IC with DC dimming
Center illuminance	410–2240 Lx (at WD 120mm)
LED quantity	16 pcs narrow-angle high-brightness LEDs
Color temperature	6500K
Adjustment method	Software-switch

● Quad-zone diffused lighting

Power	< 3W
Input voltage	DC 5V
Dimming method	Dedicated LED driver IC with DC dimming
Center illuminance	190~7430Lx (at WD120mm)
LED quantity	40 pcs wide-angle high-brightness LEDs
Color temperature	6500K
Adjustment method	software-switch

*Combined maximum illuminance (Near-coaxial + Quad-zone diffused): 10020 Lx.
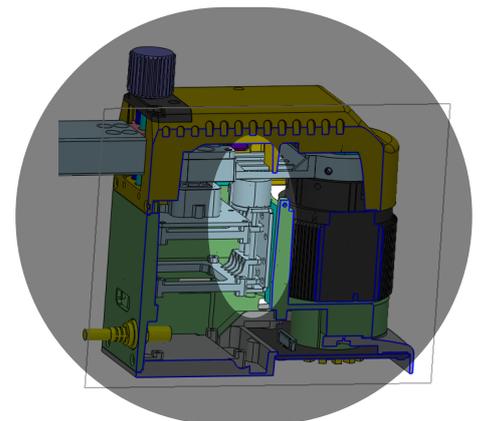
04 Precision rear fine-focus

A gentle turn of the rear knob provides 15mm of smooth micro-adjustment, capturing fine sample details with accuracy and ease.

05 Steady, silent, strong

Featuring a precision stepper motor that runs quietly and smoothly without compromise, enabling you to tackle high-frequency tasks efficiently and consistently.

● Optical Specifications

Optical Magnification	Working Distance (WD)	Camera Field of View (L × W)
0.3-1.8X	120mm	26.5×14.9mm (at 0.3X)
		4.2×2.4mm (at 1.8X)

*Total system magnification (on 27" 4K display): 23–140X (optical + display pixel array, i.e., displayed length / actual object length)

● Camera Specifications

Physical Resolution	8.3MP
Sensor Model	SONY IMX678 CMOS
Exposure Mode	Rolling shutter
Max. Resolution	3840×2160 (8,294,400 pixels)
ISO Sensitivity	Equivalent to 100–12800
Sensor Size	1/1.8"
Pixel Size	2µm×2µm
Spectral Response	380-650nm
Exposure Control	Real-time auto / manual
Exposure Time	10us~10s
White Balance	Real-time auto / manual (R/B adjust)
Preview Resolution	3840×2160 60fps
Power Input	DC 5V 3A
A/D Bit Depth	12bit
APP	Embedded APP：KoPa WiFi Lab AO， Mobile APP：KoPa WiFi Lab

06 Accessories

● Standard Accessories

①Wired mouse and keyboard　　②Power adapter (DC 12V 5A)　　③Extension columns×2
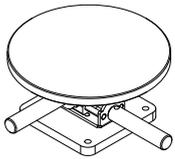　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　(120 mm each)

①Precision polarization module
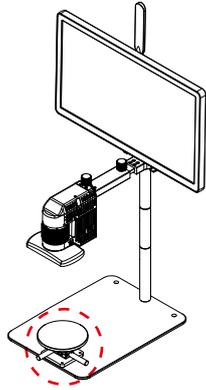
A compact unit featuring a 1000:1 extinction ratio with adjustable polarization angle.

Analyzer

Polarizer

②XY stage

Effective Travel Range:
X=25mm
Y=25mm

Installation schematic

01 Image attribute adjustment for true color reproduction

As the core control unit of the camera imaging system, image attribute adjustment works in deep synergy with the sensor and signal processing chip. It converts imaging capabilities into intuitive adjustable parameters, enabling precise optimization of image quality.

Preference Settings

Users can configure preferences including language, brightness, video duration and scale bar, as well as back up files to a USB drive and restore factory settings. The panel also allows direct access to the internet or system desktop.
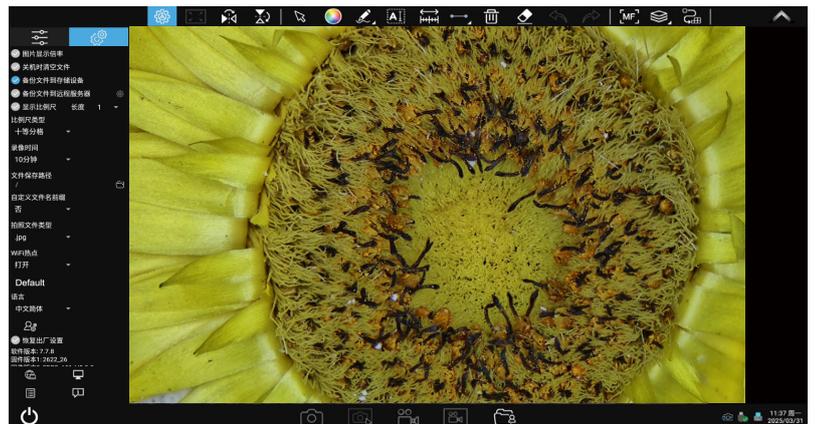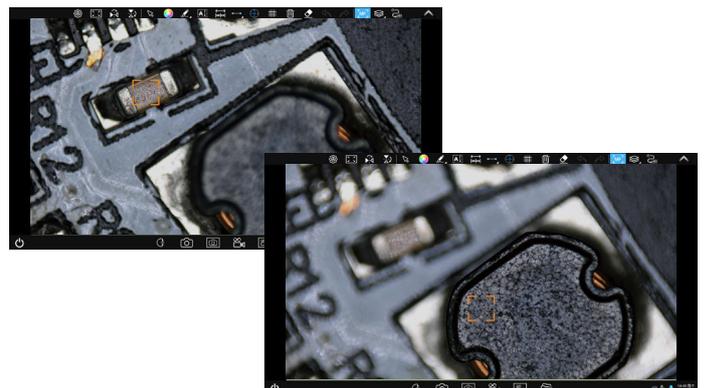

02 Smart focus, precision assured

Manual focus

Scroll the mouse wheel to focus effortlessly on complex surfaces—uneven, reflective, or multi-layered (e.g., solder joints, coatings, fine cracks).
Mouse sensitivity is 6 level adjustable to suit different needs.

Single auto focus

Click the area you want to observe. The motor automatically searches until the sharpest focus is achieved at that location.

Live auto focus

Similar to Single Auto-Focus, click the target area and the motor begins searching. If the image changes, it instantly retriggers a focus cycle quickly locking onto clear imaging and significantly reducing inspection time.

Manual focus
Single auto focus
Live auto focus
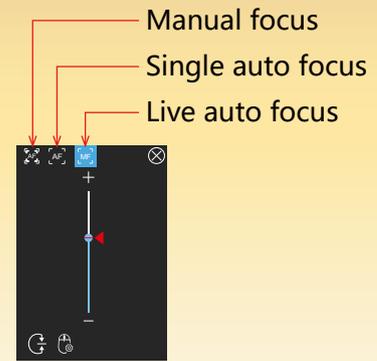
03 Soft-Touch lighting control, detail perfected

Software-controlled illumination

The CE210T series features a quad-zone lighting system, with all light sources (near-coaxial and diffused) fully adjustable via the *KoPa View*.

Decoupled software-switch

Flexible zoning

Each of the four zones can be independently adjusted. Mix and match brightness across different areas to reveal multilayer details of your sample.

30 step brightness adjustment

Whether dealing with highly reflective or low reflectance materials, optimize imaging with soft-switch dimming across 30 precise brightness levels.
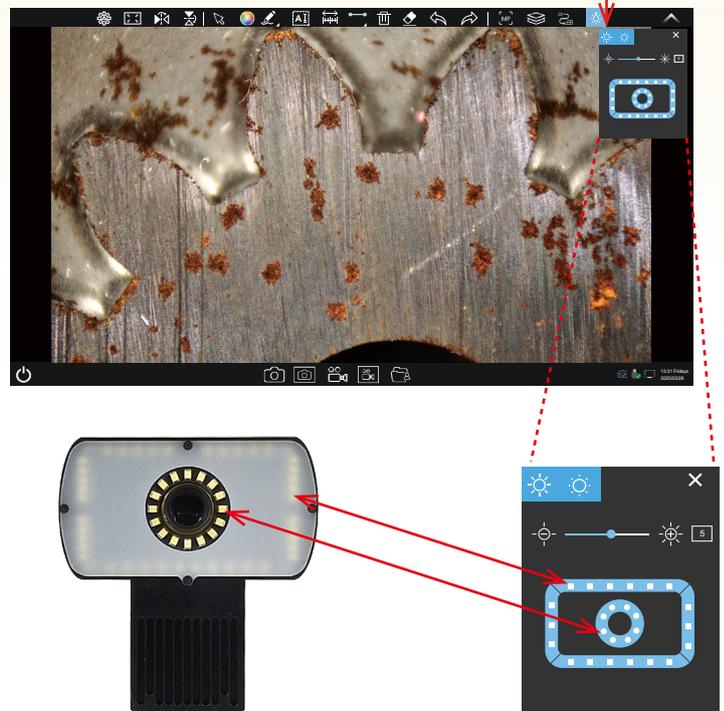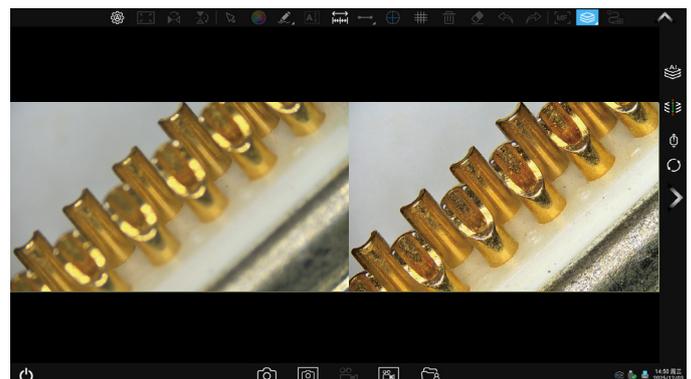
04 Focus stacking (EDOF)

Manual Focus Stacking

Scroll the mouse wheel to define the scanning range, capturing and merging multiple focus planes across your area of interest.

Auto Focus Stacking

Automatically identifies the sharpest areas in each frame and performs scanning and fusion.

Custom-Range Focus Stacking

Set the upper and lower limits of the motor travel,
then scan and merge within this defined zone.

Return to preset par-focal position

05   Precision measurement & annotation

Professional measurement tools paired with intelligent aids deliver reliable data for industrial inspection and scientific analysis.

### Comprehensive Measurement Toolkit

Includes: line, circle, rectangle, angle, parallel distance, arc, 3-point perpendicular, 4 point angle, ellipse, concentric circle, and more—covering everyday checks to complex analytical needs.

Calibration & Data Management

Calibrate once—ready anytime. The system saves calibration data automatically, even after power off. Restart without re-calibration, ensuring consistency and saving time.Quickly enable scale bars, crosshairs and other visual aids to support positioning and measurement.

Efficient Annotation & Markup

Annotate measurements directly onto the live image for instant clarity. All notes and marks are editable and savable, streamlining report generation and data traceability.
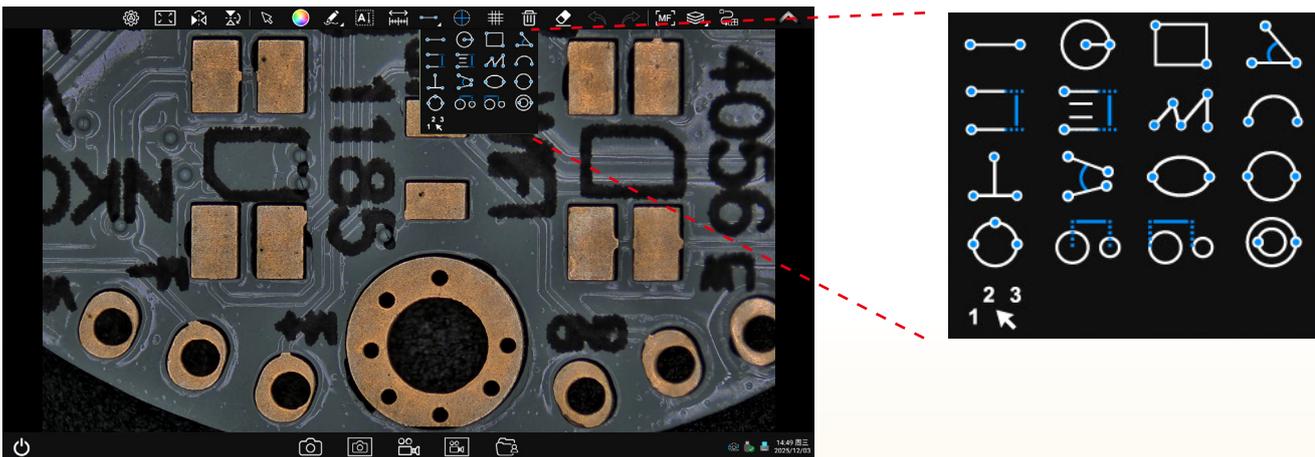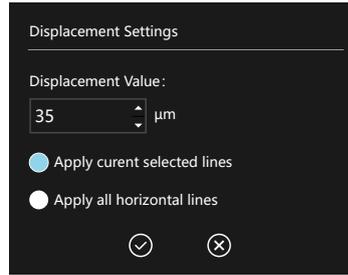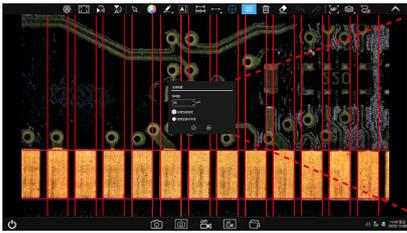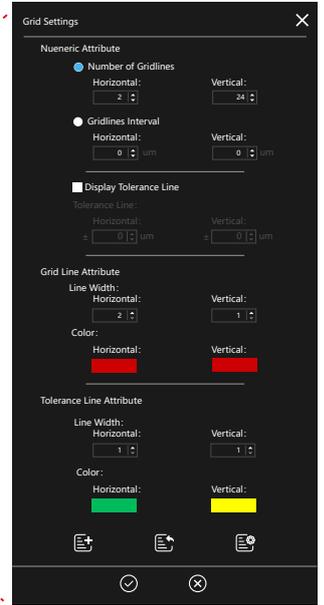
⊞ Grid Overlay & Measurement Tools

Grid Overlay & Measurement Tools
Customizable Grids

- Freely set the number of lines and spacing
- Customize line width and color
- Show or hide tolerance lines

Grid Settings ✕

Nueneric Attribute
- Number of Gridlines
  - Horizontal: 2
  - Vertical: 24
- Gridlines Interval
  - Horizontal: 0 um
  - Vertical: 0 um

☐ Display Tolerance Line

Tolerance Line:
- Horizontal: ± 0 um
- Vertical: ± 0 um

Grid Line Attribute
Line Width:
- Horizontal: 2
- Vertical: 1

Color:
- Horizontal: [red]
- Vertical: [red]

Tolerance Line Attribute
Line Width:
- Horizontal: 1
- Vertical: 1

Color:
- Horizontal: [green]
- Vertical: [yellow]

Displacement Settings

Displacement Value:

35 μm

- Apply curent selected lines
- Apply all horizontal lines