

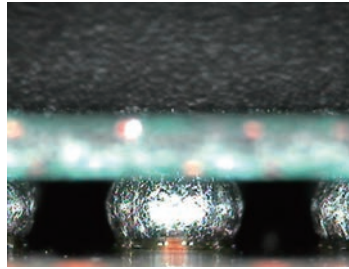
BGA Microscope

BGA-100 Series

Accurate and Speedy Visual Inspection of BGA Soldering and QFP Lead Sections

BGA (Ball-Grid Array) Inspection
With this microscope, you can perform a visible check of the soldered points and surface.

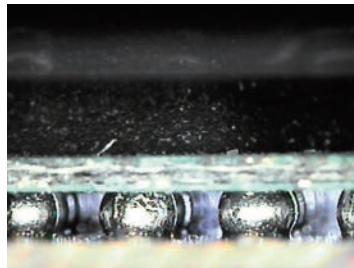
Thus, you can obtain highly reliable inspection and analysis results.



BGA Package Interior Inspection

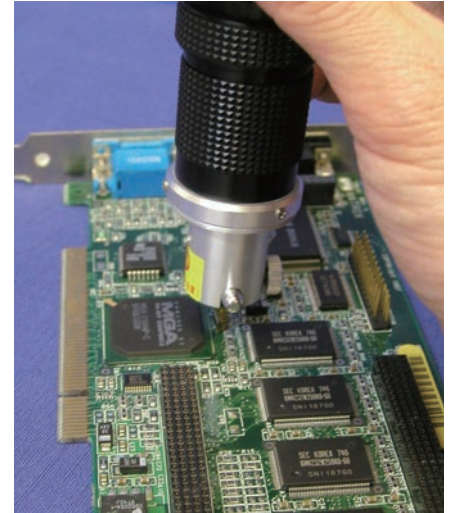
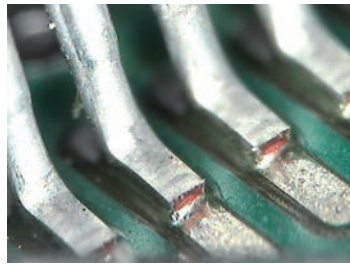
You can also inspect the interior section of the package by using the backlight system.

(The backlight system is an option.)



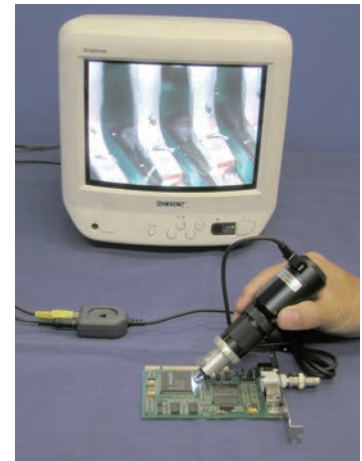
QFP, Assembly Parts Inspection
This microscope enables you to visually inspect the lead section of a QFP from the side.

You can also inspect other parts of a package freely as if using a pen.



For Use with PC or TV

You can connect the microscope to either a notebook PC or to a TV.



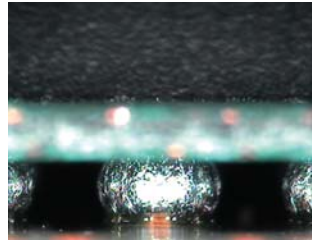
• *Three Models Available*

You can select a model from the following three models to fit your work needs.

BGA-100



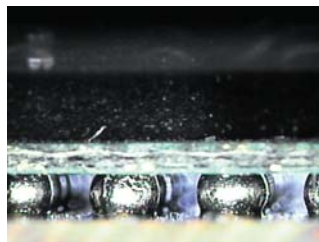
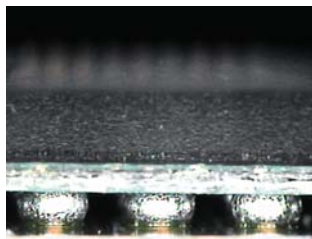
This model is fit for inspecting the first row of the BGA package and the lead section of the QFP. It is also fit for CSP inspection. magnification:x140 on 14inch TV



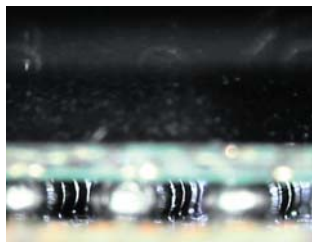
BGA-200



This model is fit for inspecting the BGA and QFP from a wide angle. You can also use it to view the interior section of a BGA package using the backlight system. Magnification:x70 on 14inch TV



Focus on the first row.



Focus on the third row.



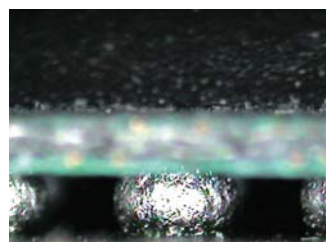
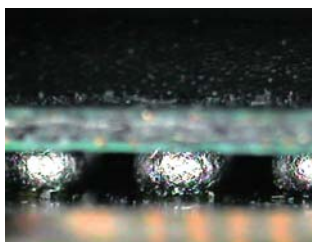
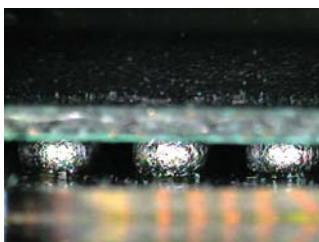
Focus after the third row.

BGA-300

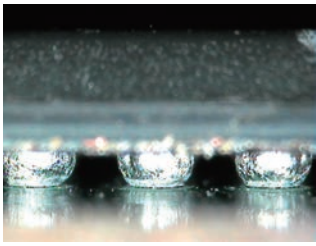


You can adjust the magnification continuously between 70 and 140 times. This microscope is useful when you want to view a particular spot at wide angle and at high magnification.

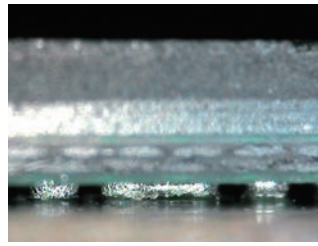
The picture below shows the change in magnification from 70x to 140x.



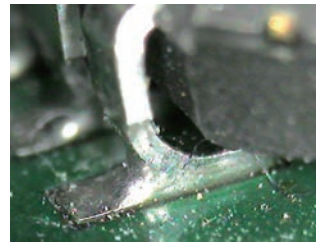
o Other Screen Samples



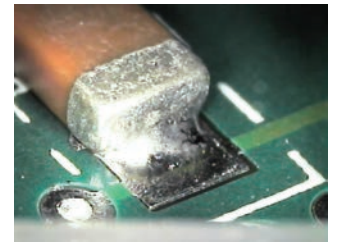
Pitch P=08 Crack



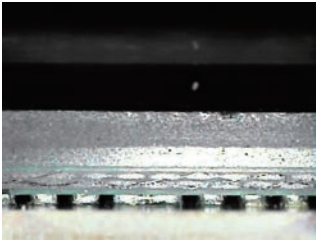
P=0.5 Bridge



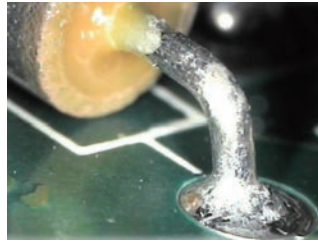
Soldered Joint



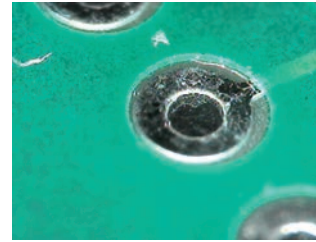
Part



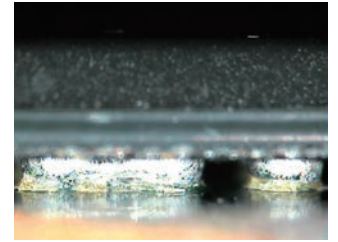
P=0.5 Bridge



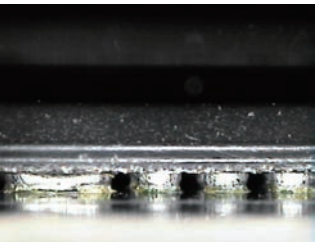
Soldered Joint



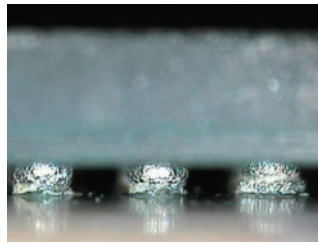
Through Hole



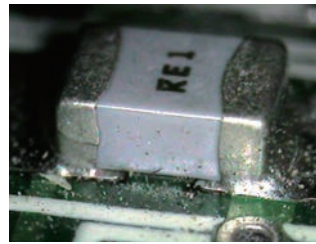
P=08 Bridge



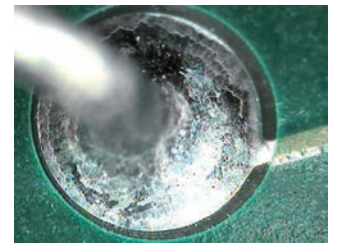
P=08 Bridge



P=08 Unsoldered Joint



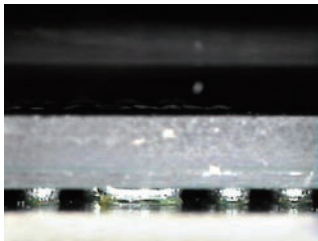
Part



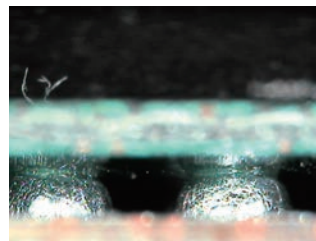
Soldered Joint



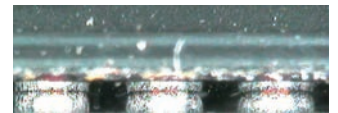
QFP



P=0.5 Bridge



P=1.27 Upper Parts



P=0.8 Upper Parts

• Specifications

Model	Magnification (Approx.)	Focus Distance (Approx.)	Resolution (TV)	Resolution (PC)
BGA-100	140x	6mm	410K pixels	VGA(640X480)
BGA-200	70x	12mm	410K pixels	VGA(640X480)
BGA-300	70x~140x	5mm	410K pixels	VGA(640X480)

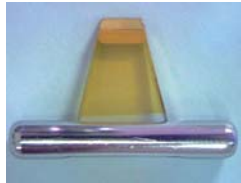
Prism for BGA Inspection

BGA-100

PR-ST2(Prism thickness 2mm)

PR-ST3(Prism thickness 1mm)

PR-ST5(Prism thickness 0.5mm)



Prism for QFP and Package Parts Inspection

BGA-100

PR-S1



• Operating Environment When Connected to the PC

Standards :	USB2.0 compliant	
Display input :	Color camera for NTSC or PAL	
PC operating environment :	Hardware :	DOS/V AT compatible with USB2.0 interface,
	CPU :	Pentium III 800Mhz or above
	Note :	Not compliant to Expanded USB (PCI and CardBUS)
	Operating system :	Windows XP, VISTA , 7
Display size :	640 x 480 dots (VGA)	
Frame rate :	30 frames/second	
Operating humidity :	Under 80% (without dew)	
Cable length :	USB interface cable : approx. 1.2 meters, USB cable: approx. 1.8 meters	

• Standard Shipped Parts

Microscope body
BGA prism (thickness 2mm)
QFP prism
Camera cable
AC adapter
RCA cable



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■ For details, contact the following: