







OPTILIA Flexia BGA Inspection System





BGA lens matrix:







OPTILIA Flexia BGA Specifications

State of the art optical inspection system with 5.0 MP digital camera and tiny high resolution side-viewing optical probes for fast and crisp inspection of solder joints of BGA, mBGA, CSP and Flip-Chip SMDs. Exchange the BGA Lens with the 1-100x Varifocal Lens and convert your system to a high resolution Video Microscope for top-side Inspection of assembled PCBs, solders, pads, scores, components, etc.

ESD-PROTECTION

Flexia video and digital microscopes are designed to comply with the requirements of electronics manufacturer regarding flexibility, image quality, time and cost effectiveness. Flexia is ESD-protected and EPA approved according to EN and IEC standards.

MOBILE AND STATIONARY CONFIGURABLE

Flexia BGA is compact, modular and ergonomically designed. The equipment weights only 200 gram including its BGA lens and the built-in LED illumination. Optilia BGA microscopescan be operated mobile in one-hand or be mounted on Standardsize or XL size XYZ-system stands. A wide range of extra accessories are available to meet your specific optical Inspection requirements and needs.

MODULAR OPTICAL SYSTEM

Flexia BGA Inspection Systems are modular and configurable. Standard BGA system contains Flexia Definition 5.0 MP camera microscope with software, side viewing BGA lens with small size optical probe, built-in front and background LED illumination with electronic dimmer, 1-100x varifical top inspection lens and specially designed focusing stand.



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BGA Optical Probes	Low Apreture	Small Size	Ultra Small Size
Magnification*	~ 280x – 5x	~ 350x – 25x	~ 350x – 25x
Focusing range	~ 0.5 – 100 mm	~ 0.3 – 40 mm	~ 0.2 – 40 mm
Field of View	~ 1.2 – 50 mm	~ 1.0 – 20 mm	~ 1.0 – 20 mm
Required free Working Area**	~ 1.2 - 2.2 mm	~ 1.0 - 1.5 mm	~ 0.6 - 0.8 mm
Thickness of optical probe	2.2 mm	1.5 mm	0.8 mm
Width of optical probe	7.1 mm	6.0 mm	3.4 mm
Foot print of optical probe	O.8x7.1 mm	O.8x6.0 mm	0.4x3.4 mm
Weight	10 gr	10 gr	10 gr
	* Attached to Flexia Definition HM	** Minimum required free area depends on surrounding com- ponent heights	
Digital Video Microscope			
Image Sensor	Colour 5.0 mega pixel 2592(H) x1944 (V) USB2.0 interface		

Storage environment Operating environment

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-10° to +60° C, Max 98% RH, non-condensing
0° to +45° C, Max 95% RH, non-condensing
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Optipix Lite, image view, capture and basic on-screen measurement software

By focusing on user friendliness, Optilia has developed this basic software to enable users to document and capture images. The software is Microsoft Windows based and takes little resources from the hosting computer. Different camera systems and microscopes can be connected and defined. Such device can easily be chosen and images be captured. Location of storage of results is defined by the user accordning to his/her preference.



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