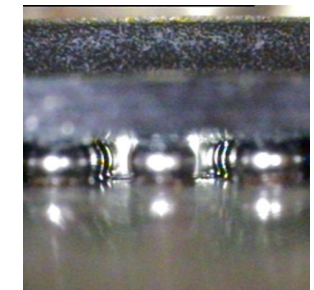
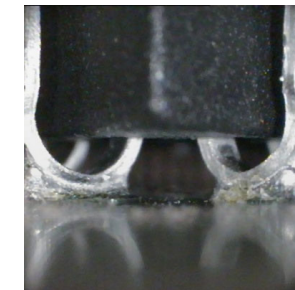
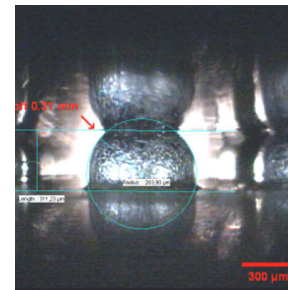
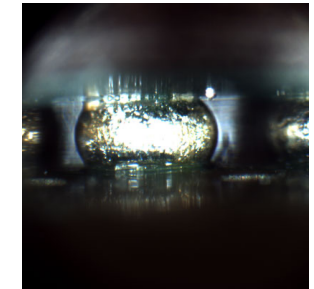
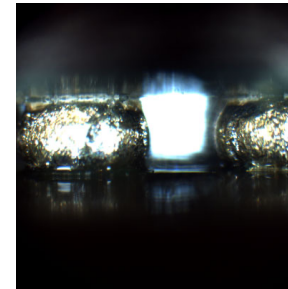
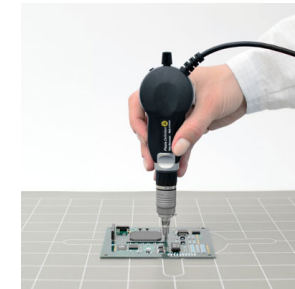
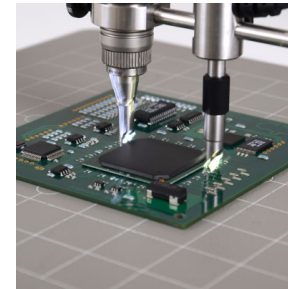


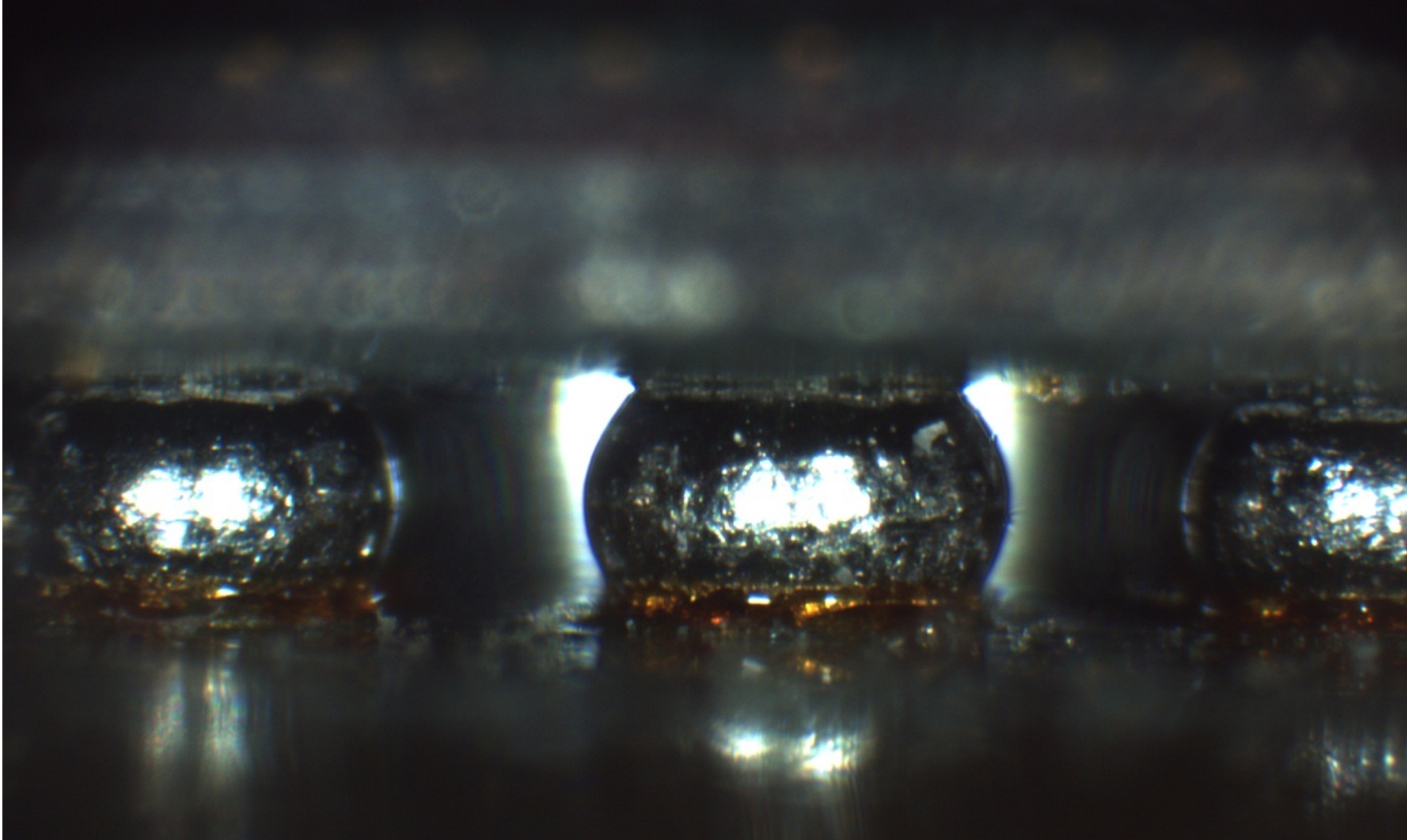
OPTICAL INSPECTION SYSTEMS — BGA/FLEXIA



Flexible BGA and handoperated
inspection



DOANT LEXIA INSPECTION SYSTEMS — SAMPLE



BGA/FLEXIA INSPECTION SYSTEMS

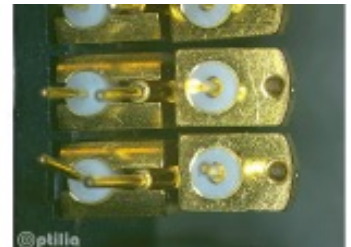
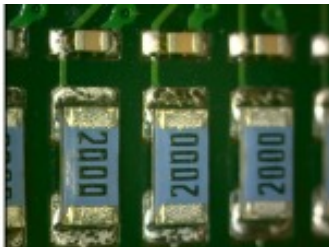
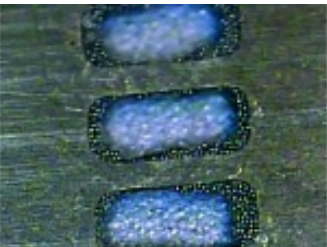
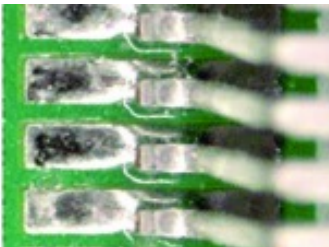
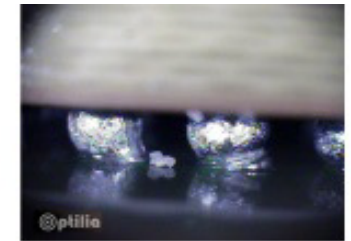
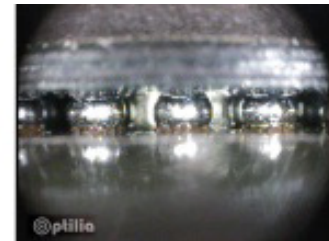
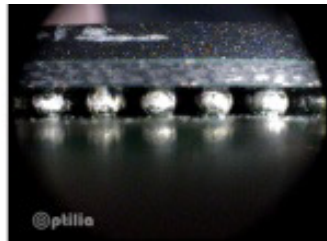
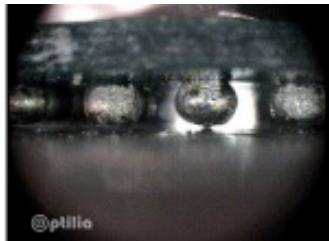
BGA	Optical Inspection	X-ray Inspection
Placement	✓	✓
Bridging	✓	✓
Cold Solder Joints	✓	✓
Reflow Problems	✓	✓
Excess Flux	✓	✗
Contamination	✓	✗
Ball Shape	✓	✓
Voids	✗	✓

PCB	Optical Inspection	X-ray Inspection
Top Inspection	✓	✗
Assembly and Rework	✓	✗

BGA/FLEXIA INSPECTION SYSTEMS

- BGA
- μ BGA as low as 40 microns stand-off
- CSP
- Flip-Chip

- SMD Solder Joints
- Printed Solder Paste
- Assembled PCBs
- Stencil Apertures
- Components, pad, scores, connectors, cables



BGA/FLEXIA INSPECTION SYSTEMS

Lenses and Illumination options for Flexia Definition 5.0MP Digital & Analogue Video Microscopes

Flexia Video Microscopes



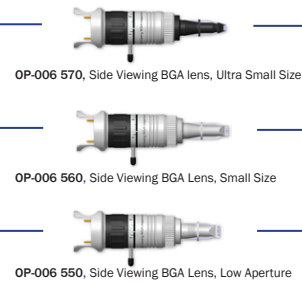
OP-019 197, Flexia Definition Digital 5Mp camera, HM
 OP-019 191, Flexia Definition Digital 5.0Mp camera
 OP-019 152, Flexia Definition Analogue PAL, HM
 OP-019 001, Flexia Definition Analogue PAL

100x lens is always included in Flexia Definition

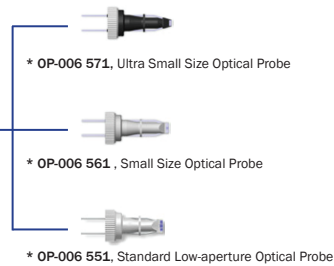


Fixed focal length Objective lenses replace 100x lens in order to achieve higher magnification

BGA lenses

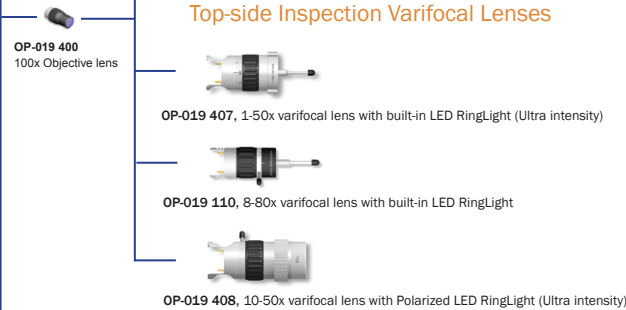


Optical Probes for BGA Lenses

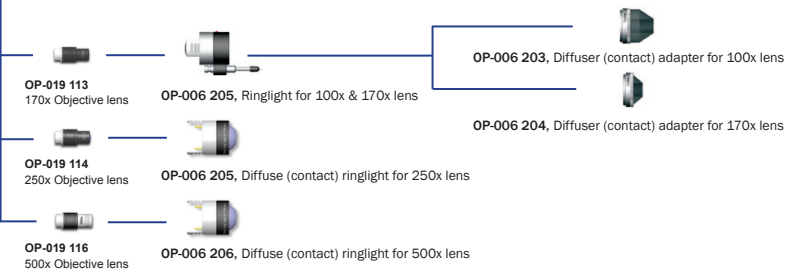


* Items can also be ordered as spare parts

Top-side Inspection Varifocal Lenses



Fixed focal length Objective Lenses and RingLights



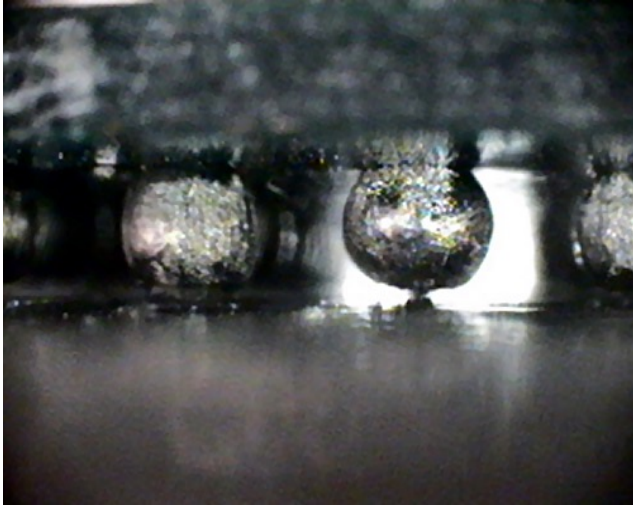
TR0743, RevF, November-13

Optilia Instruments AB
 Djupdalsvägen 22, SE-192 51 Sollentuna, Sweden.
 Phone: +46 8 35 33 60
 Email: info@optilia.eu
 Web: www.optilia.eu

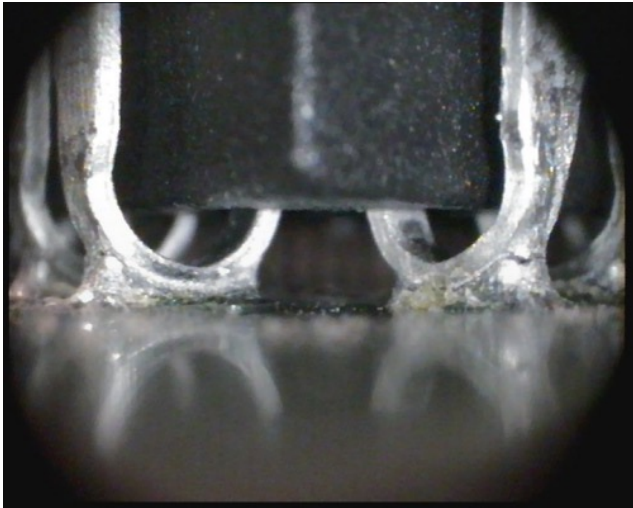
optilia
 Empowering your Vision!



BGA/FLEXIA INSPECTION SYSTEMS — SAMPLE IMAGE



Connection failure, BGA component.



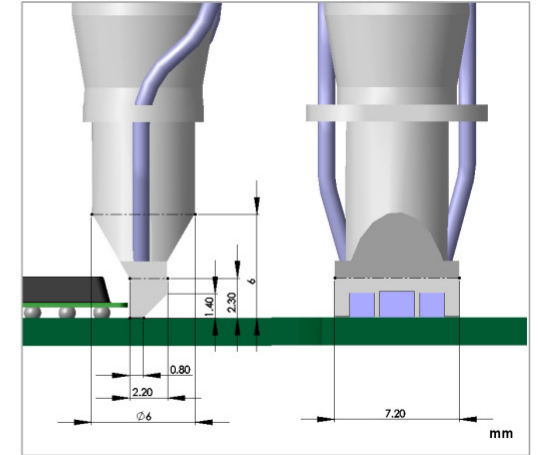
Crack on lead solders, JLCC component.

BGA/FLEXIA INSPECTION SYSTEMS

- 40 microns BGA stand-off inspection capability
- Exchangeable Optical Probe (spare part)
- Magnification Up to 280x on a 24" Monitor
- Built-in LED illumination

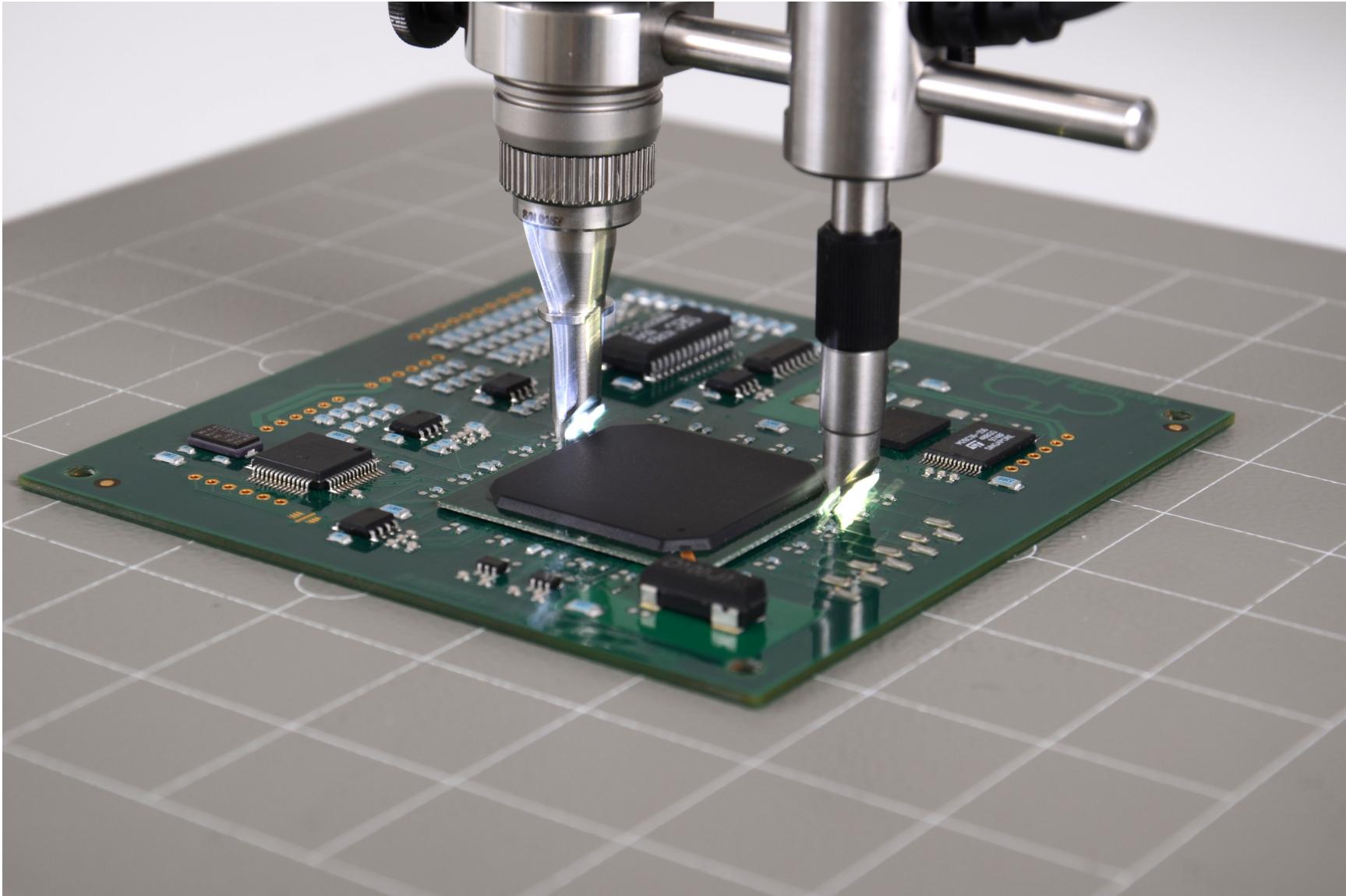


OP-006 550



OP-006 551

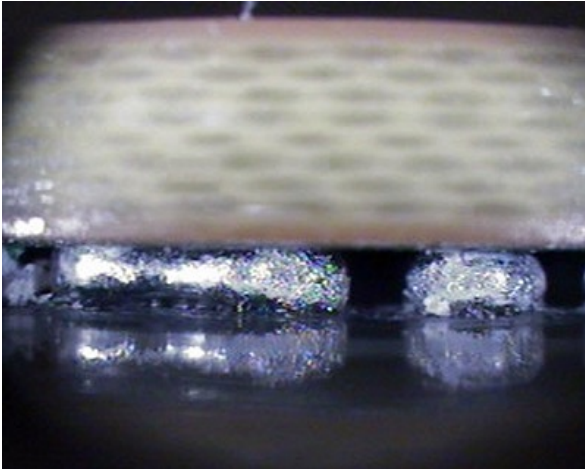
BGA/FLEXIA INSPECTION SYSTEMS — SAMPLE IMAGE



DOVT LEXIA INSPECTION SYSTEMS – SAMPLE



Fibres between BGA balls



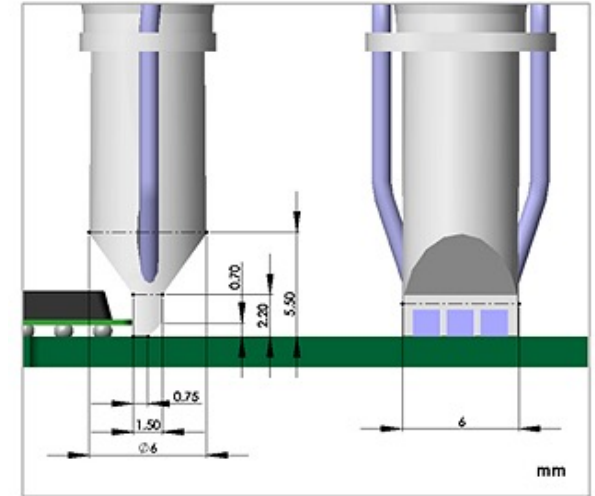
Bridge between solder points

BGA/FLEXIA INSPECTION SYSTEMS

- 40 microns BGA stand-off inspection capability
- < 1.5 mm thin optical head (0.8 mm foot print)
- Exchangeable Optical Probe (spare part)
- Magnification Up to 350x on a 24" Monitor



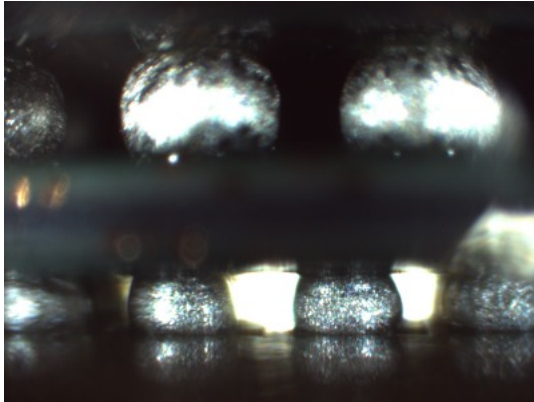
OP-006 560



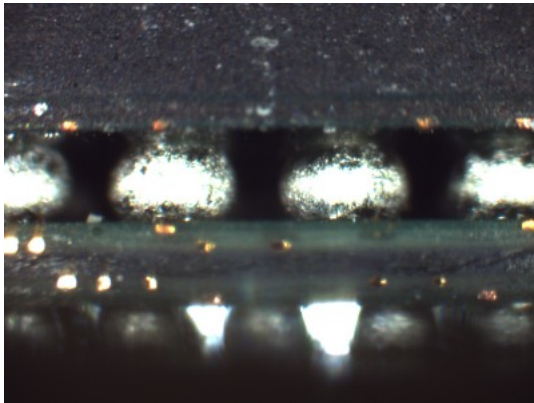
OP-006 561



BGA/FLEXIA INSPECTION SYSTEMS - SAMPLE IMAGES



Flip-chip component - BOTTOM



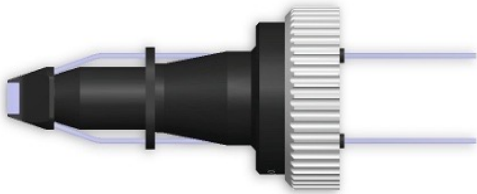
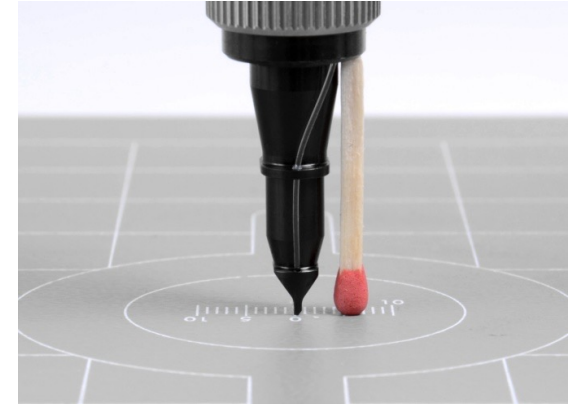
Flip-chip component - TOP

BGA/FLEXIA INSPECTION SYSTEMS

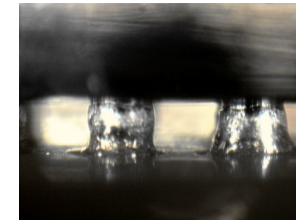
- Tiniest BGA probe in the market (0.4x3.4 mm foot print)
- 40 microns BGA stand-off inspection capability
- Exchangeable Optical Probe (spare part)
- Magnification Up to 350x on a 24" Monitor



OP-006 570



OP-006 571

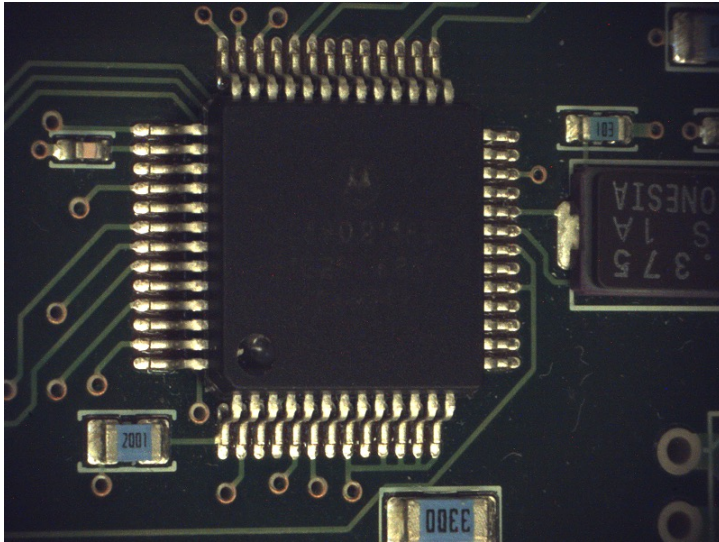


DAVT LEXIA INSPECTION SYSTEMS – TOP



1-100x varifocal lens with built-in LED RingLight, **OP-019 407**

Built-in LED Light

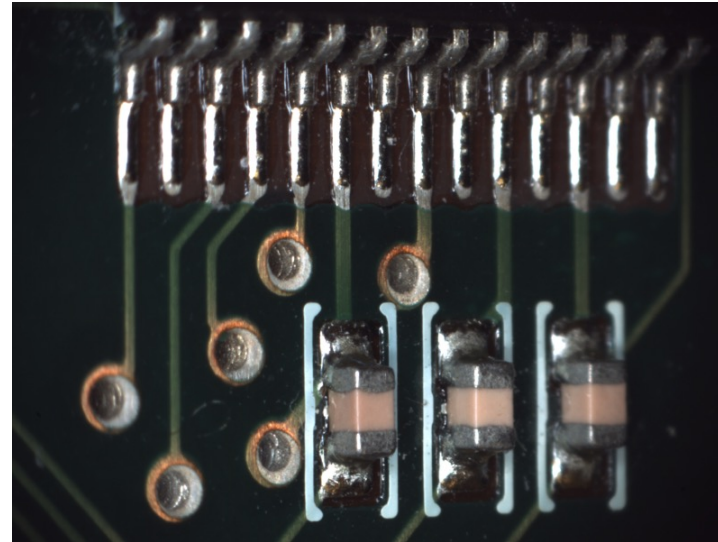


10x magnification, built-in RingLight



10-50x varifocal lens with Polarized LED RingLight, **OP-019 408**

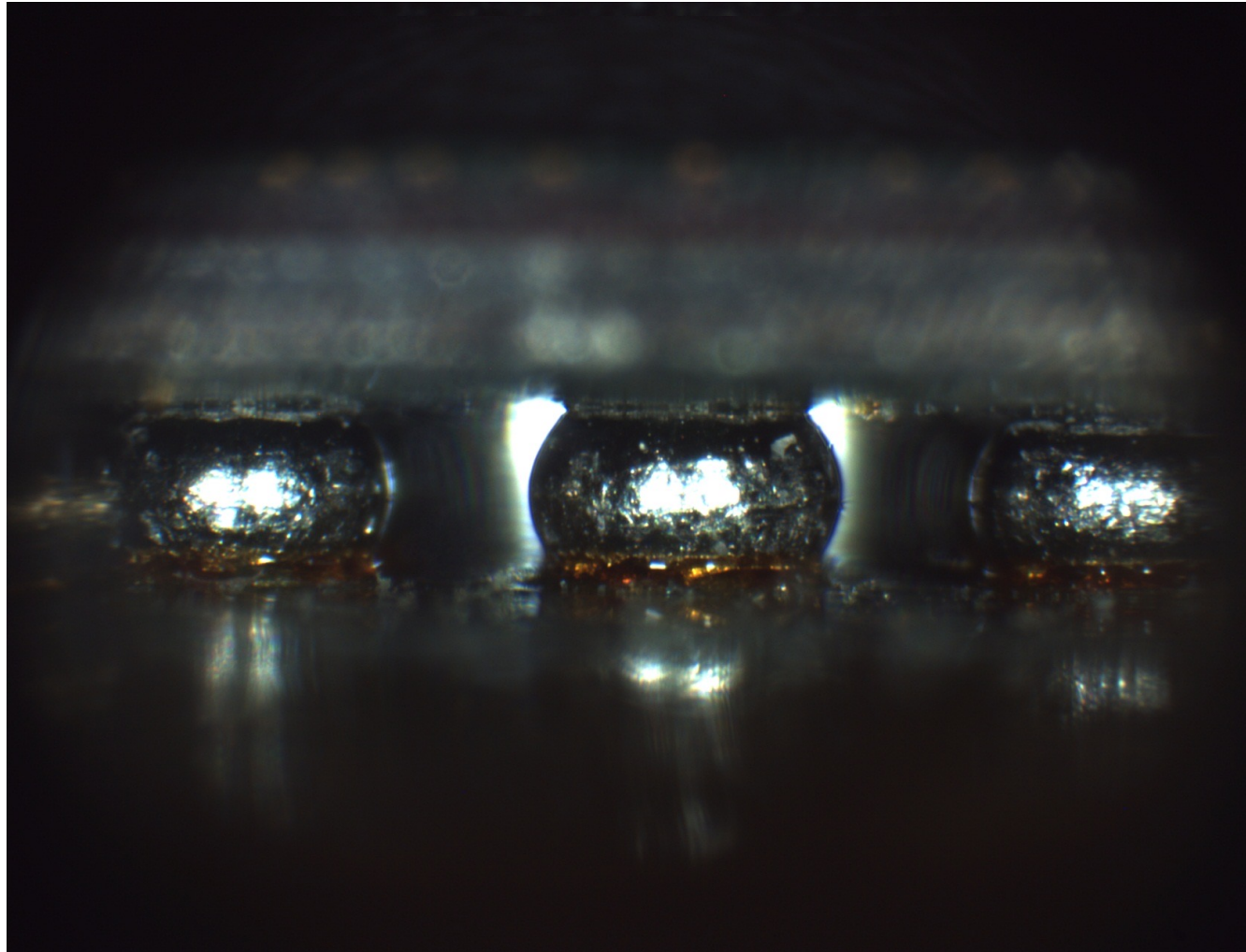
Polarized LED Light



50x magnification, built-in RingLight

BGA/FLEXIA INSPECTION SYSTEMS

Adjustable Focus for imaging up to 20 Rows for BGA



BGA/FLEXIA INSPECTION SYSTEMS

- Free hand operation
- Stand mount with background light and XY-translation
- XL-configuration with PCB holder for large size PCBs

