

# FLIP-CHIP

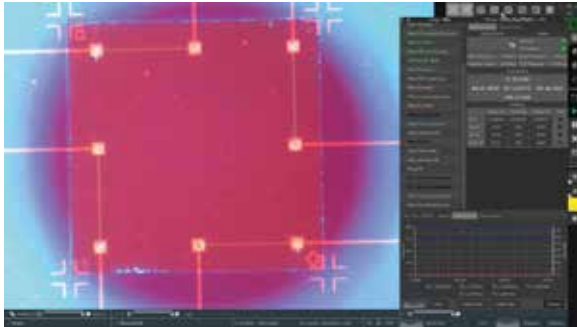
FLIP - CHIP OPTICS

Tresky's **FLIP-CHIP** module for the **T-5000** Series is a high-resolution placement unit with beam splitter, for ultra-precise Multi Point Alignment at sub-micron resolution. The beam splitter optics, which allows a simultaneous view of two objects by an optical overlay (superposition) on the monitor.

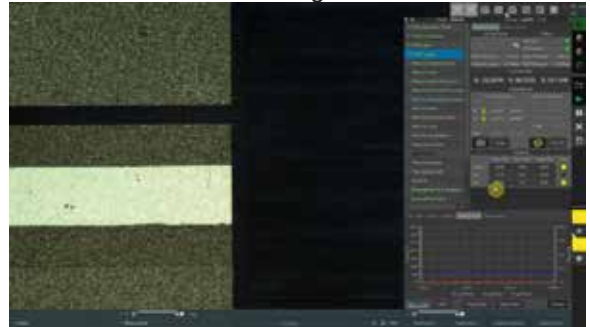
The Flip-Chip optics has a built-in Ultra HD camera with digital magnification as well as integrated LED lights for optimal illumination of various substrates and components. In combination with the high magnification, the XY-Table Micrometer positioning facility and the Tresky's True Vertical Technology™ a high accuracy alignment can be reached. With the easy to use software T-Suits all the necessary camera parameters, up-, down-, coax-light can be set for each position as well as measurements, saving images for documentation, additional layouts overlaid and much more.

MICRO ASSEMBLY

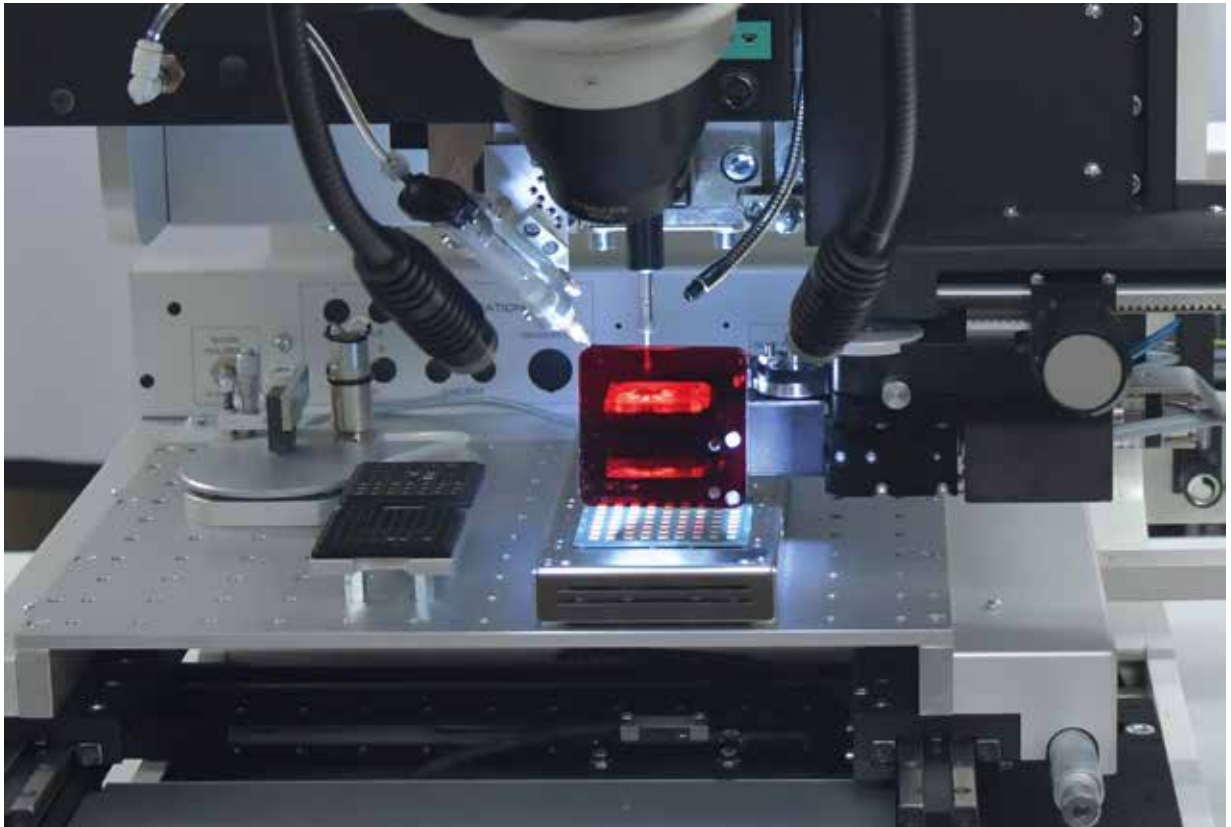
E.g.: Flip-Chip with stud bumps and corresponding substrate



E.g.: Laser-Bar aligned with the substrate edge or with defined overhang

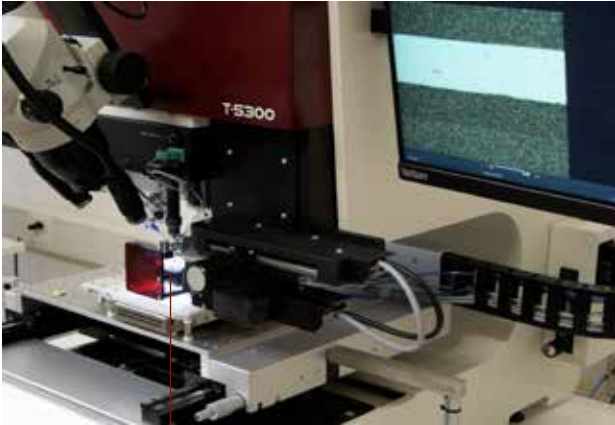


OPTION



# TRESKY

Beam Splitter active



Beam Splitter in park position



↔ 50 x 50mm Multi-Point Alignment in X and Y for high accuracy and large devices.

**FLIP-CHIP 2X AUTOMATIC**

only for T-5300 Series

XYZ motorized / programmable version of the standard Flip-Chip option. It increases the user friendliness and is dedicated for high accuracy alignment on different heights (e.g.: Stacking). Therefore it can be used easily for tool alignment before pick-up on wafer or dispensing needle / stamping tool to substrate. On top it is equipped with high power RGBW-LED illumination.



**TECHNICAL SPECIFICATION:**

**Flip-Chip MPA 5000-M 1x** (Manual for 5000Series)

- High prec. beam splitter with 1x high resolution optic
- 400x digital zoom Ultra HD camera
- 50mm x 50mm Multi-Point Alignment for high accuracy
- Optical Resolution of 1.25µm
- Field of view 1,2x0.9mm – 6,5x4.9mm
- White-LED illumination (up, down and coax)

**Flip-Chip MPA 5000-M 2x** (Manual for 5000Series)

- High prec. beam splitter with 2x high resolution optic
- 400x digital zoom Ultra HD camera
- 50mm x 50mm Multi-Point Alignment for high accuracy
- Optical Resolution of 0.625µm
- Field of view 0,6x0.5mm – 3,3x2.5mm
- White-LED illumination (up, down and coax)

**Flip-Chip MPA 5000-A 2x** (Automatic for 5300Series)

- High prec. beam splitter with 2x high resolution optic
- 400x digital zoom Ultra HD camera
- 50mm x 50mm Multi-Point Alignment for high accuracy
- Optical Resolution of 0.625µm
- Field of view 0,6x0.5mm – 3,3x2.5mm
- RGBW-LED illumination (up, down and coax)

Note: All specifications are subject to change without notice

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