Printing with LIGHT

Ultrafast printing technology for flexible electronics

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What we do/offer:

Ultrafast printing technology for flexible electronics:

- **Broad range of materials:** (non)conductive ink and paste, conductive adhesive, solder paste, die attach

animation of process  
real process video
Ultra high Printing speed

- printing of a **conductive adhesives**
- **22,500 dots** (200 µm size, 0.5 mm spacing), printed in **less than 1 second**
- (.... thereby beating any other jetting technology)
- using commercial budget pulsed laser
Printing for component interconnects

- LIFT is a **non-contact** technology → allows for printing on **curved / 3D surfaces/over a component**
- printing conductors on curved surface: **1 cm step height, 1 cm printing distance**
- printing of **adaptive interconnect circuitry**, directly on **component bond pads**
- correct for assembly misalignments, ‘personalization’ of circuits
LIFT printing at Holst in a nutshell

• Ultrafast printing technology
  – 40k dots per second is demonstrated

• Broad range of materials
  – (non)conductive ink and paste, conductive adhesive and solder paste

• Noncontact and digital
  – printing gap up to 1cm

• Donor material recycling
  – Demonstrated continuous printing for over 5 hours

• Strong patent portfolio
  – 6 published, 3 pending
What are we looking for:

• Cooperation with institutions/companies interested in high-throughput integration of microcomponents

• Seeking for the new use cases for LIFT in the field of integrated photonics