Investigation of Laser Based Processes for MEMS Assembly and Packaging

(WP4 Joint Project)

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Project Partners

Heriot Watt University

IMEC

Lancaster University

Objectives

- Investigation of MEMS encapsulation processes using localised laser heating effect
- Identification and evaluation of laser joining processes for MEMS packaging and encapsulation

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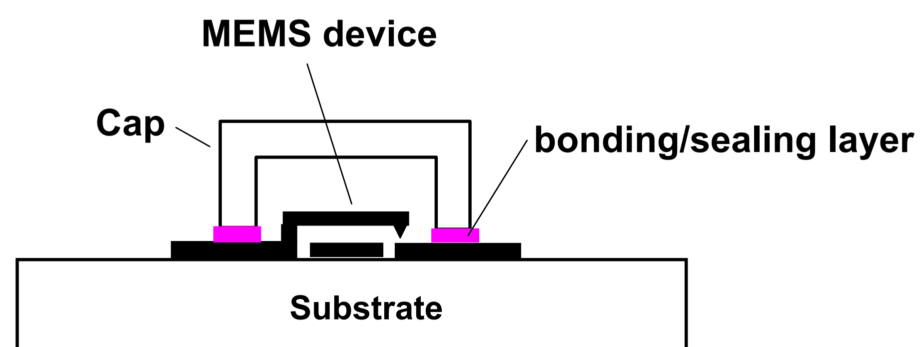
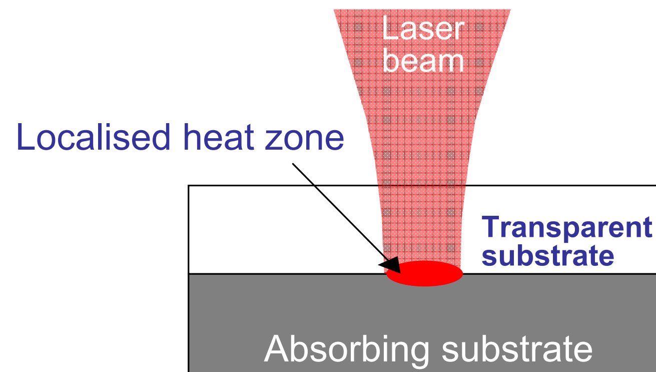
MEMS Encapsulation



- **Device protection (contamination, corrosion, damage)**
- **Stable environment for reliable operation**

Localised Laser Heating Effect



Benefits of Localised Laser Heating for MEMS Encapsulation

- Localised laser heating – temperature at the device location may be substantially lower than at the joining site
- Suitable for devices with low temperature budget
- No need to put the entire board/module/substrate through a thermal process for MEMS package joining/sealing
- Suitable for chip to chip and chip to wafer MEMS packaging - flexibility

Contact Details for Further Information

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