STUDY HRL Laboratories – CA, USA

Sem - US04 Date: 19.09.2020

Semiconductor Foundry Services; Assembly and Packaging

Semiconductor Wafer Fabrication & Assembly:

- Advanced Materials such as GaN
- Non-Silicon Wafers (SiC, Diamond)

LMJ used for:

- Wafer Dicing
- Device Singulation

Advanced Die Singulation (Wafer dicing) ш G

High-Quality wafer dicing

Main processing criteria: Ш

- Small kerf dicing
- No chipping

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ທ • Contamination-free

Machining technologies able to reach these criteria:

- Standard Dicing Saw
- Laser MicroJet (LMJ) water jet guided laser technology with breakthrough sensing

No heat-related stress, contactless

LMJ advantages versus Dicing Saw:

- Eliminates the high operational costs for blades
- High quality
- High stability

Installed machine type:

- 1 x LDS 300
- 100 W green laser









