# STUDY HRL Laboratories – CA, USA

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## 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









