

# CASE STUDY

# SONY

Sony, Japan

Semicase-07 Date: 04.11.2020



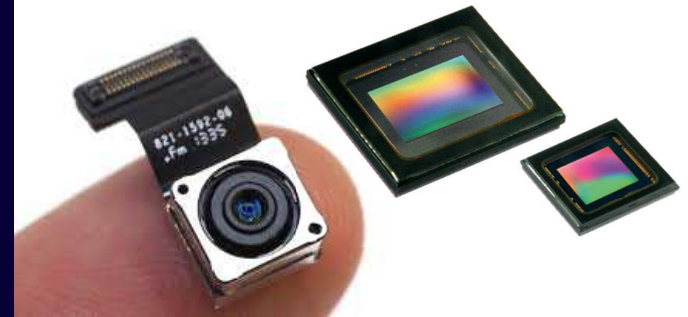
SYNOVA S.A.  
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## PRODUCT

### CMOS Image Sensors for Camera & Smartphone

CMOS image sensors, also called "electronic eyes", are a semiconductor core component that converts light into electronic information. They are known for their use in smartphone cameras but are also widely used in various areas such as security cameras, automatic driving of vehicles, industrial applications such as factory automation and medical applications.

- LMJ used for:
- Edge trimming
  - Down-sizing



## CHALLENGE

### Beat the diamond blade productivity

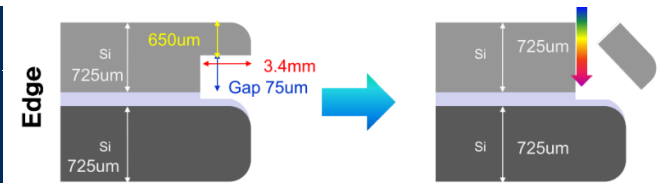
Perfect control on depth and clean processing.

Main processing criteria:

- No chipping
- No HAZ
- Low tolerances
- No burrs
- Perfect verticality
- High speed
- Suitable for high volume production

Machining technologies able to reach these criteria:

- Diamond blade sawing
- Laser MicroJet (LMJ) - water jet guided laser technology



## SOLUTION

### No HAZ, production-proven, better ROI

LMJ advantages versus EDM:

- Significantly higher quality
- No chipping
- Low consumables
- High stability

Installed machine type:

- 1 x LDS 300
- 100 W green laser

LDS 300

