

# 1. Service Regulations and Pricing

- (1) Sample Size: From chip samples (must be larger than 2cm × 2cm) to 8-inch wafers.
- (2) Allowed Substrates: Only Si and glass are allowed. Approved materials include Si, Ge, SiO<sub>x</sub>, SiN<sub>x</sub>, and SiC. Organic thin films (e.g., polymer) are strictly prohibited. For other materials, please consult the machine operator.
- (3) Pricing: Chip samples: 30 minutes per sample/Full wafer: 60 minutes per wafer, Billing is based on the number of samples processed.
- (4) Special processing requests: The applicant must be present at all times and must have completed the TSRI occupational safety training with a valid certificate.
- (5) Processing request form: Please use cleanroom paper and provide processing conditions. If picking up samples in person, please indicate this on the form.

# 2. Sample Quantity for Contract Processing

- (1) Full wafers (e.g., 6-inch or 8-inch): Each wafer can have up to 2 different laser power settings.
- (2) Chip samples (larger than 2cm × 2cm): Each sample is limited to 1 laser power setting.
- (3) Per service request form:

- Different laser power settings: Maximum of 3 power settings and 12 samples.
- Same laser power setting: Maximum of 25 samples per form.

(4) Processing turnaround time:

- Three-day delivery for 5 full 8" /6" wafers (extended if holidays occur) or 12 chip samples.

(5) MES service request requirements:

- The laser type
- Crystallization (C) or Activation (A)
- Power level
- Material used
- CO<sub>2</sub> laser heating temperature / no heating
- Requests without this information will be rejected.

Example: GLA 3W Si/SiO<sub>2</sub>/a-Si: green laser annealing

Crystallization (C) vs. Activation (A) Difference:

- Crystallization: Laser step interval 0.35 mm
- Activation: Laser step interval 0.8 mm

### 3. Laser Power Range for Contract Processing *(For other power ranges, please consult the engineer)*

- Blue Laser Power: 1 W ~ 3.0 W, in 0.25 W increments
- Green Laser Power: 1 W ~ 10 W, in 0.5 W increments
- CO2 Laser Power: 70 W ~ 130 W, in 10 W increments
- CO2 Laser Requests: Please specify heating temperature or no heating in the service request form. Standard activation process temperature: 350 °C