

■ DoSi - Diamond on Silicon Wafers

| Product Code | UNCD Product | Wafer Size (mm) | Wafer Type | Oxide Layer (μm SiO ₂) | UNCD Film Thickness (μm) |
|---------------|--------------|-----------------|------------|------------------------------------------------|---------------------------------------|
| UA25-100-0-p1 | Aqua 25 | 100 | DoSi | - | 0.1 |
| UA25-100-0-p2 | Aqua 25 | 100 | DoSi | - | 0.2 |
| UA25-100-0-p3 | Aqua 25 | 100 | DoSi | - | 0.3 |
| UA25-100-0-1 | Aqua 25 | 100 | DoSi | - | 1 |
| UA25-100-0-2 | Aqua 25 | 100 | DoSi | - | 2 |
| UA100-100-0-1 | Aqua 100 | 100 | DoSi | - | 1 |

■ DOI - Diamond on Oxide Wafers

| Product Code | UNCD Product | Wafer Size (mm) | Wafer Type | Oxide Layer (μm SiO ₂) | UNCD Film Thickness (μm) |
|---------------|--------------|-----------------|------------|------------------------------------------------|---------------------------------------|
| UA25-100-1-p1 | Aqua 25 | 100 | DOI | 1 | 0.1 |
| UA25-100-1-p2 | Aqua 25 | 100 | DOI | 1 | 0.2 |
| UA25-100-1-p3 | Aqua 25 | 100 | DOI | 1 | 0.3 |
| UA25-100-1-1 | Aqua 25 | 100 | DOI | 1 | 1 |
| UA25-100-1-2 | Aqua 25 | 100 | DOI | 1 | 2 |
| UA100-100-1-1 | Aqua 100 | 100 | DOI | 1 | 1 |

■ UNCD Lightning - Conductive diamond wafers

| Product Code | UNCD Product | Wafer Size (mm) | Wafer Type | Oxide Layer (μm SiO ₂) | UNCD Film Thickness (μm) |
|---------------|--------------|-----------------|------------|------------------------------------------------|---------------------------------------|
| UL25-100-1-p1 | Lightning 25 | 100 | DOI | 1 | 0.1 |
| UL25-100-1-p3 | Lightning 25 | 100 | DOI | 1 | 0.3 |
| UL25-100-1-p5 | Lightning 25 | 100 | DOI | 1 | 0.5 |
| UL25-100-1-1 | Lightning 25 | 100 | DOI | 1 | 1 |
| UL25-100-1-2 | Lightning 25 | 100 | DOI | 1 | 2 |

■ UNCD Horizon - UNCD with a surface roughness less than 1 nm

| Product Code | UNCD Product | Wafer Size (mm) | Wafer Type | Oxide Layer (μm SiO ₂) | UNCD Film Thickness (μm) |
|---------------|--------------|-----------------------|------------|------------------------------------------------|---------------------------------------|
| HA25-001-0-1 | Aqua 25 | Die-1 cm ² | DoSi | - | 1 |
| HA25-001-0-2 | Aqua 25 | Die-1 cm ² | DoSi | - | 2 |
| HA25-100-0-p3 | Aqua 25 | 100 | DoSi | - | 0.3 |
| HA25-100-0-1 | Aqua 25 | 100 | DoSi | - | 2 |

***UNCD Diamond Thin Film Specifications:**

- Thickness: $\pm 20\%$
- Thickness uniformity: $< 10\%$
- Surface roughness Aqua 25: $< 10\text{nm rms}$ (Aqua 100 is $< 50\text{ nm}$)
- Electrical resistivity of Lightning 25: $< 1\text{ ohm-cm}$

Base wafer specifications:

- Prime grade $<100>$ Si wafer base
- Thickness: $500\ \mu\text{m} \pm 50\ \mu\text{m}$
- DOI contain $1\ \mu\text{m}$ of thermal SiO_x on whole wafer, back and front side