

GANKIBAN: CN50MM

GaN Wafers

GaN wafers enable "GaN-on-GaN" structure of GaN-based optoelectronic and electronic devices such as blue/green laser diodes, light emitting diodes, high-power switching transistors, and RF transistors. GANKIBAN CN50MM is an n-type wafer produced by SixPoint's proprietary NEAT (near equilibrium ammonothermal) method. It is suitable for vertical devices including edge-emitting laser diodes, vertical high-power pn diodes and vertical high-power transistors.

Applications

GaN-based devices using homoepitaxy

Specifications

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|---------------------|--|
| Wafer size | 50 mm diameter, with m-plane primary flat, a-plane secondary flat |
| Wafer thickness | 300 ~ 450 micron |
| Orientation | c plane Miscut angle $0 \pm 0.15^\circ$ (a-direction), $0.4 \pm 0.15^\circ$ (m-direction) |
| Surface finish | Ga-face --- CMP N-face --- as processed (CMP optional) |
| XRD FWHM from (002) | A grade < 100 arcsec, B grade < 200 arcsec |
| Conduction type | n-type ($n > 1 \times 10^{18} \text{ cm}^{-3}$) |

