

Part Number

Customer

| Category      | Parameter | Specification                                   | Measurement Method   |   |
|---------------|-----------|---|--|---|
| OverallWafer  | 1.0       | Diameter  | 150.00 +/- 0.20 mm   |   |
|               | 2.0       | Primary Flat Orientation                        | {110} +/- 0.5 degree   | Wafer Vendor  |
|               | 3.0       | Primary Flat Length                             | 57.50 +/- 2.50 mm  | Wafer Vendor  |
|               | 4.0       | Secondary Flat Orientation                      | none   |   |
|               | 5.0       | Overall Thickness                               | 677.00 +/- 26.10 µm  | ADE, 100%   |
|               | 6.0       | Total Thickness Variation (TTV)                 | <5.00µm  | Guaranteed by Process   |
|               | 7.0       | Bow   | <60.00µm   | ADE to ASTM F534, 20%   |
|               | 8.0       | Warp  | <60.00µm   | ADE to ASTM F657, 20%   |
|               | 9.0       | Edge Chips                                      | 0  | Bright Light, 100% (note 2)   |
|               | 10.0      | Edge Exclusion                                  | 3mm  |   |
| HandleSilicon | 11.0      | Handle Growth Method                            | CZ   | Wafer Vendor  |
|               | 12.0      | Handle Orientation                              | {100} +/- 0.5 degree   | Wafer Vendor  |
|               | 13.0      | Handle Thickness                                | 525.00 +/- 25.00 µm  | ADE, 100%   |
|               | 14.0      | Handle Doping Type                              | N  | Wafer Vendor  |
|               | 15.0      | Handle Dopant                                   | Phosphorous  | Wafer Vendor  |
|               | 16.0      | Handle Resistivity                              | 1 - 50 Ohmcm   | Wafer Vendor  |
|               | 17.0      | Backside Finish                                 | Polished with oxide and lasermark                                  | Wafer Vendor  |
| BuriedOxide   | 18.0      | Oxide Type                                      | Thermal  |   |
|               | 19.0      | Oxide Thickness                                 | 20,000.00 +/- 1,000.00 A   | Nanospec centre point, 4%   |
|               | 20.0      | Oxide formed on                                 | Handle and Device Wafer  |   |
| DeviceSilicon | 21.0      | Device Growth Method                            | CZ   | Wafer Vendor  |
|               | 22.0      | Device Orientation                              | {100} +/- 0.5 degree   | Wafer Vendor  |
|               | 23.0      | Nominal Thickness                               | 150.00 +/- 1.00 µm   | FTIR, 100% 9-Pt (note3)   |
|               | 24.0      | Distance to device silicon edge from wafer edge | <= 2.0mm   | Guaranteed by process   |
|               | 25.0      | Device Doping Type                              | N  | Wafer Vendor  |
|               | 26.0      | Device Dopant                                   | Phosphorous  | Wafer Vendor  |
|               | 27.0      | Device Resistivity                              | 1 - 10 Ohm-cm  | Wafer Vendor  |
|               | 28.0      | Oxygen Concentration                            | <12.60ppma   | Wafer Supplier  |
|               | 29.0      | Buried Layer Implant                            | none   | implant vendor  |
|               | 30.0      | Voids   | All wafers scanned for voids by Scanning Acoustic Microscope (SAM) | SAM & Bright Light, 100% (note 2). Void spec as per comments below. |
|               | 31.0      | Scratches                                       | 0  | Bright Light, 100% (note 2)   |
| 32.0          | Haze      | none  | Bright Light, 100% (note 2)  |   |

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|                  |                   |   |
|------------------|-------------------|---|
| Shipping Details | Wafer per box :   | Max 25  |
|                  | Packaging :       | Taped Polypropylene Wafer Box<br>Empak, Ultrapak, 150.00mm<br>Antistatic Double Bagging |
|                  | Lot Shipment Data | Device Thickness<br>Bow / Warp Data<br>Handle and SOI Thickness                         |



Explanatory Notes 1. Microscope inspection performed using microscope scan as below. 5x objective.

2. All bright light inspections performed exclude all wafer area outside the edge exclusion defined in Overall Wafer, Edge Exclusion. High intensity bright lamp inspection as per ASTM F523.

3. 9 point measurement are as shown in the diagram below:



Additional Information