

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	47.50 +/- 2.50 mm	Wafer Vendor
	4.0	Secondary Flat Orientation	none	
	5.0	Overall Thickness	627.00 +/- 5.00 μ m	ADE, 100%
	6.0	Total Thickness Variation (TTV)	<5.00 μ m	Guaranteed by Process
	6.5	Flatness (SBIR)	<1.00 μ m	20mm x 20mm, no partials, b/side ref, 100% UA
	7.0	Bow	<60.00 μ m	ADE to ASTM F534
	8.0	Warp	<60.00 μ m	ADE to ASTM F657
	9.0	Edge Chips	0	Bright Light, 100% (note 2)
HandleSilicon	10.0	Edge Exclusion	3mm	
	11.0	Handle Growth Method	CZ	Wafer Vendor
	11.5	Handle Oxygen Concentration	6.5e17 atcm-3 - 8.5e17 atcm-3 new ASTM	wafer vendor
	11.6	Handle Carbon Concentration	< 2e16 atcm-3 new ASTM	wafer vendor
	12.0	Handle Orientation	{100} +/- 0.5 degree	Wafer Vendor
	13.0	Handle Thickness	570.00 +/- 5.00 μ m	ADE, 100%
	14.0	Handle Doping Type	N	Wafer Vendor
	15.0	Handle Dopant	Phosphorous	Wafer Vendor
BuriedOxide	16.0	Handle Resistivity	1.5 - 6.5 Ohmcm	Wafer Vendor
	17.0	Backside Finish	Lapped and Etched with 2 μ m oxide and lasermark (see lasermark spec below)	Wafer Vendor
	18.0	Oxide Type	Thermal	
DeviceSilicon	19.0	Oxide Thickness	20,000.00 +/- 1,000.00 A	Nanospec centre point, 4%
	19.5	Oxide formed on	Handle Wafer	
DeviceSilicon	20.0	Device Growth Method	FZ	Wafer Vendor
	20.5	Oxygen Concentration	n/a	wafer vendor
	20.6	Carbon Concentration	< 2e16 atcm-3 new ASTM	wafer vendor
	21.0	Device Orientation	{100} +/- 0.5 degree	Wafer Vendor
	22.0	Nominal Thickness	55.00 +/- 1.00 μ m	FTIR, 100% 9-Pt (note3)
	23.0	Distance to device silicon edge from wafer edge	<= 2mm	Typical by Process
	24.0	Device Doping Type	N	Wafer Vendor
	25.0	Device Dopant	Phosphorous	Wafer Vendor
	26.0	Device Resistivity	31.5 - 38.5 Ohm-cm	Wafer Vendor
	27.0	Buried Layer Implant	Species = As, Dose = 3e15, Energy = 100keV	Implant Vendor - 24nm screen oxide used
28.0	Voids	0	Bright Light, 100% (note 2)	

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DeviceSilicon	29.0 Scratches	none	Bright Light, 100% (note 2)
	30.0 Haze	none	Bright Light, 100% (note 2)

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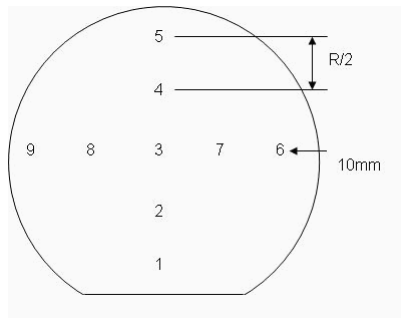
Shipping Details	Wafer per box :	Max 25
	Packaging :	Taped Polypropylene Wafer Box Empak, Ultrapak, 150.00mm Antistatic Double Bagging
	Lot Shipment Data	Device Thickness Bow / Warp Data Handle and SOI Thickness



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