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	410.00 +/- 7.00 µm	ADE, 100%
	6.0	Total Thickness Variation (TTV)	<5.00µm	Guaranteed by Process
	6.5	Flatness (SBIR)	<1.00um	20mm x 20mm, no partials, b/side ref, 100% UA
	7.0	Bow	<60.00µm	ADE to ASTM F534
	8.0	Warp	<60.00µm	ADE to ASTM F657
	9.0	Edge Chips	0	Bright Light, 100% (note 2)
	10.0	Edge Exclusion	5mm	
HandleSilicon	11.0	Handle Growth Method	CZ	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	380.00 +/- 5.00 µm	ADE, 100%
	14.0	Handle Doping Type	N	Wafer Vendor
	15.0	Handle Dopant	Phosphorous	Wafer Vendor
	16.0	Handle Resistivity	2 - 10 Ohmcm	Wafer Vendor
	17.0	Backside Finish	Lapped and Etched with oxide and lasermark (see lasermark spec below)	Wafer Vendor
BuriedOxide	18.0	Oxide Type	Thermal	
	19.0	Oxide Thickness	6,000.00 +/- 300.00 A	Nanospec centre point, 4%
	19.5	Oxide formed on	3000 A on Handle Wafer and 3000 A on Device Wafer	
DeviceSilicon	20.0	Device Growth Method	CZ	Wafer Vendor
	20.5	Oxygen Concentration	< 8 e17 at/cm3 new ASTM	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	30.00 +/- 1.00 µm	FTIR, 100% 9-Pt (note3)
	23.0	Distance to device silicon edge from wafer edge	<= 1.5mm	Typical by Process
	24.0	Device Doping Type	P	Wafer Vendor
	25.0	Device Dopant	Boron	Wafer Vendor
	26.0	Device Resistivity	0.05 - 0.1Ohm-cm	Wafer Vendor
	28.0	Voids	0	Bright Light, 100% (note 2)
	29.0	Scratches	< 25mm Total Length	Bright Light, 100% (note 2)
	30.0	Haze	none	Bright Light, 100% (note 2)

Part Number	Customer

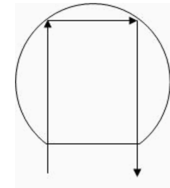
Category		Parameter	Specification	Measurement Method
BuriedOxide	31.0	Buried Oxide Defects	No buried oxide defects revealed after KOH etch	Guaranteed by Process
OverallWafer	32.0	Bond Process	Reduced Bond Pin Pressure	Guaranteed by process
	33.0	Bond Anneal cycle	BOND ANNEAL CONDITIONS: 1150oC, 3hour. Dry.	Guaranteed by process

Part Number	Customer

Category	**Parameter**	**Specification**	**Measurement Method**
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	

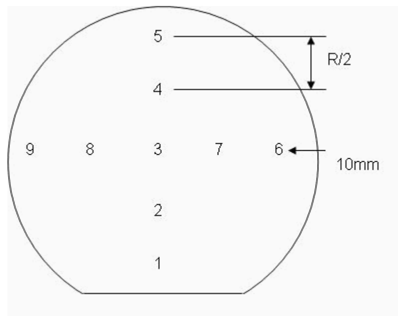
Explanatory Notes

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