



Part Number :		Date:	26 August 2005
Customer:		STD:	Y
Customer Specification/ Reference:			

Category	Parameter	Specification	Measurement Method
<i>Overall</i>			
<i>Wafer</i>			
1.1	Diameter	150mm +/- 0.2	Wafer Vendor
1.2	Primary Flat Orientation	{110}+/- 1°	Wafer Vendor
1.3	Primary Flat Length	57.5 +/- 2.5	Wafer Vendor
1.4	Secondary Flat Orientation	None	
1.5	Thickness	625 µm +/- 15um	ADE, 100%
1.6	Total Thickness Variation(TTV)	< 5µm	Guaranteed by Process
1.7	Site Flatness (STIR)	<1.0um	20mm*20mm site, no partials, ADE 100%
1.8	Bow	< 40 µm	ADE to ASTM F534, 100%
1.9	Warp	< 40 µm	ADE to ASTM F657, 100%
1.10	Edge Chips	0	Bright Light, 100% ¹
1.12	Edge Exclusion	3 mm	
1.13	Surface Metal Contamination	<1 e11 cm-2	VPD ICPMS (Na, K, Ca, Al, Fe, Cr, Ni, Zn)
<i>Handle</i>			
<i>Silicon</i>			
2.1	Growth Method	CZ	Wafer Vendor
2.2	Oxygen Concentration	6.5 – 8.5e17 cm-3	Wafer Vendor
2.3	Carbon Concentration	<2.0 e16 cm-3	Wafer Vendor
2.3	Orientation	{100}+/- 1°	Wafer Vendor
2.4	Thickness	617µm +/- 5µm	ADE, 100%
2.5	Doping type	P	Wafer Vendor
2.6	Dopant	Boron	Wafer Vendor
2.7	Resistivity	1-5 Ω-cm	Wafer Vendor
2.8	Radial resistivity variation	<20%	Wafer vendor
2.9	Backside Finish	Lapped / Etched with backside damage	Wafer Vendor

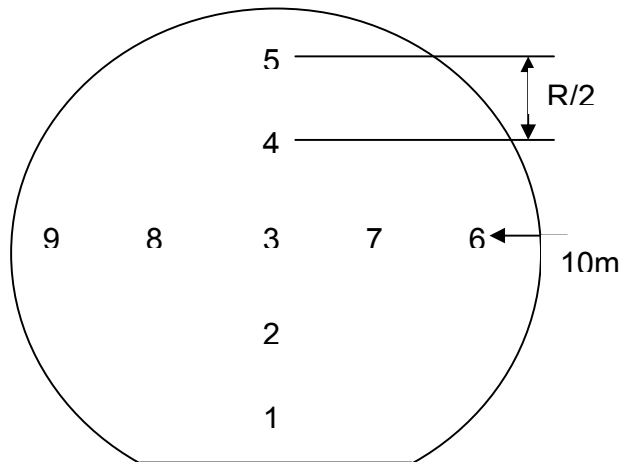
Category	Parameter	Specification	Measurement Method
<i>Buried</i>			
<i>Oxide</i>			
3.1	Oxide Type	Thermal	
3.2	Oxide Thickness	1100 nm +/- 25nm	Nanospec centre point, 4%
3.3	Oxide formed on	Handle Wafer	
<i>Device Silicon</i>			
4.1	Growth Method	CZ	Wafer Vendor
4.2	Oxygen Concentration	6.5 – 8.5e17 cm-3	Wafer Vendor
4.3	Carbon Concentration	<2.0e16 cm-3	Wafer Vendor
4.3	Orientation	{100}+/- 1°	Wafer Vendor
4.4	Nominal Thickness	7.5µm	FTIR, 100%
4.5	Thickness Variation	+/- 1µm	FTIR, 100% 9-Pt ²
4.6	Distance to device silicon		
	edge from wafer edge	<3mm	Typical by process
4.7	Doping Type	N	Wafer Vendor
4.8	Dopant	Phosphorous	Wafer Vendor
4.9	Resistivity	15 - 25 Ω-cm	Wafer Vendor
4.10	Radial resistivity variation	<10%	Wafer vendor
4.11	Voids	0	Bright Light, 100% ¹
4.12	Scratches , visual defects	None	Bright Light, 100% ¹
4.13	Haze	None	Bright Light, 100% ¹
4.14	Light Point Defects	<30 particles >0.3um	Tencor 6220 surfscan

*Shipping
Details*

Wafers per box	25
Packaging	Taped Polypropylene Wafer Box Empak, Ultrapak, 150mm Antistatic Double Bagging
Lot Shipment Data :	SOI wafer Device layer Silicon Thickness SOI wafer Bow & warp SOI wafer TTV, Flatness data Handle & Device wafer data for – type, dopant, thickness, resistivity, RRV, Oxygen content, carbon content

Explanatory Notes

1. All bright light inspections performed exclude all wafer area outside the edge exclusion defined in 1.10. High intensity bright lamp inspection as per ASTM F523.
2. 9 point measurement is centre and 4 points 10mm from edge of wafer.



Approvals:	Quality:	Engineering:
	Marketing:	TRB:

HARD COPIES OF THIS DOCUMENT ARE UNCONTROLLED