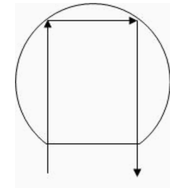
Part Number Customer

Category		**Parameter**	**Specification**	**Measurement Method**
OverallWafer	1.0	Diameter	150.00 +/- 0.50 mm	Wafer Vendor
	2.0	Primary Flat Length	57.50 +/- 2.50 mm	Wafer Vendor
	3.0	Primary Flat Orientation	{110} +/- 1 degree	Wafer Vendor
	4.0	Secondary Flat Orientation	None	Wafer Vendor
	5.0	Overall Thickness	503.50 +/- 12.00 µm	ADE, 100%
	6.0	Total Thickness Variation (TTV)	<5.00µm	Guaranteed by Process
	7.0	Bow	<80.00µm	ADE 100%, SEMI MF1530
	8.0	Warp	<80.00µm	ADE 100%, SEMI MF1530
	9.0	Edge Chips	None	Bright Light, 100%
	10.0	Edge Exclusion	5mm	
HandleSilicon	11.0	Handle Growth Method	CZ	Wafer Vendor
	12.0	Handle Orientation	{100} +/- 1 degree	Wafer Vendor
	13.0	Handle Thickness	500.00 +/- 10.00 µm	ADE, 100%
	14.0	Handle Doping Type	P	Wafer Vendor
	15.0	Handle Dopant	Boron	Wafer Vendor
	16.0	Handle Resistivity	0.1- 100 Ohm-cm	Wafer Vendor
	17.0	Backside Finish	Polished with oxide and laser mark	Guaranteed by process
BuriedOxide	18.0	Oxide Type	Thermal	
	19.0	Oxide Thickness	10,000.00 +/- 500.00 A	Nanospec centre point, 4%
	20.0	Oxide formed on	Handle and/or Device Wafer	
DeviceSilicon	21.0	Device Orientation	{100} +/- 1 degree	Wafer Vendor
	22.0	Nominal Thickness	2.50 +/- 1.00 µm	Filmetrics, 100% 9-Pt (note3)
	23.0	Distance to device silicon edge from wafer edge	<= 2.0mm	Typical by Process
	24.0	Device Doping Type	N	Wafer Vendor
	25.0	Device Dopant	Phosphorus	Wafer Vendor
	26.0	Device Growth Method	FZ	Wafer Vendor
	27.0	Device Resistivity	>/=3000 Ohm-cm	Wafer Vendor
	28.0	Voids	None	Bright Light, 100% (note 2)
	29.0	Scratches	Frontside - no scratches allowed. Backside - light handling marks	Bright Light, 100% (note 2)
	30.0	Haze	None	Bright Light, 100% (note 2)

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	

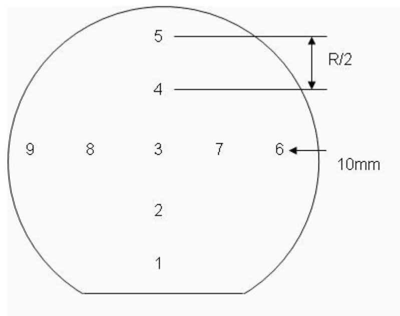
Explanatory Notes

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