Part Number	Customer

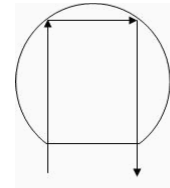
Category		Parameter	Specification	Measurement Method
OverallWafer	1.0	Diameter	100.00 +/- 0.50 mm	
	2.0	Primary Flat Orientation	{110} +/- 1 deg	Wafer Vendor
	3.0	Primary Flat Length	32.50 +/- 2.50 mm	Wafer Vendor
	4.0	Secondary Flat Orientation	semi std or none	Wafer Vendor
	5.0	Overall Thickness	511.00 +/- 5.00 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	5mm	
HandleSilicon	11.0	Handle Growth Method	CZ	Wafer Vendor
	12.0	Handle Orientation	{100} +/- 0.5 degree	Wafer Vendor
	12.1	Handle Carbon Concentration	< 1e15 at/cm3	Wafer Vendor
	12.2	Handle Oxygen Concentration	< 1e18 at/cm3	Wafer Vendor
	13.0	Handle Thickness	475.00 +/- 5.00 µm	ADE, 100%
	14.0	Handle Doping Type	N	Wafer Vendor
	15.0	Handle Dopant	Arsenic	Wafer Vendor
	16.0	Handle Resistivity	< 0.005 Ohm cm	Wafer Vendor
	17.0	Backside Finish	Lapped/etched w/ lasermark	Wafer Vendor
DeviceSilicon	20.0	Device Growth Method	FZ	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	<= 2mm	Typical by Process
	24.0	Device Doping Type	N	Wafer Vendor
	25.0	Device Dopant	Phosphorous	Wafer Vendor
	26.0	Device Resistivity	2500 - 5500 Ohm-cm	Wafer Vendor
	26.5	Buried Layer Implant	none	implant 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)
	31.0	Device Field Oxidation	0.00 +/- 0.00	

Part Number	Customer

Category	Parameter	Specification	Measurement Method
Shipping Details	Wafer per box :	Max 25	
	Packaging :	Taped Polypropylene Wafer Box Empak, Ultrapak, 100.00mm Antistatic Double Bagging	
	Lot Shipment Data	Device Thickness Bow / Warp Data Handle and SOI Thickness	

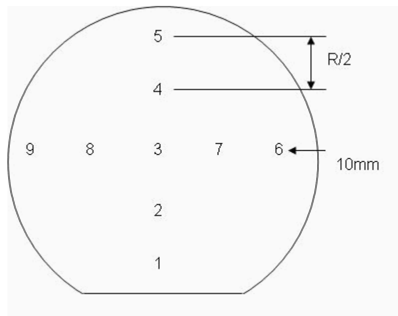
Explanatory Notes

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