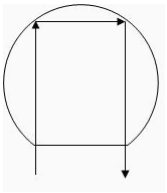
Part Number	Customer

Category		Parameter	Specification	Measurement Method
OverallWafer	1.0	Silicon Supplier	Topsil GW or WaferWorks	Material Supplier
	2.0	Diameter	100.00 +/- 0.50 mm	
	3.0	Primary Flat Orientation	{110} +/- 1 deg	Wafer Vendor
	4.0	Primary Flat Length	32.50 +/- 2.50 mm	Wafer Vendor
	5.0	Secondary Flat Orientation	none	Wafer Vendor
	6.0	Overall Thickness	527.80 +/- 7.50 µm	ADE, 100%
	7.0	Total Thickness Variation (TTV)	<5.00µm	Guaranteed by Process
	8.0	Bow	<60.00µm	ADE to ASTM F534, 20%
	9.0	Warp	<60.00µm	ADE to ASTM F657, 20%
	10.0	Edge Chips	0	Bright Light, 100% (note 2)
	11.0	Edge Exclusion	5mm	
HandleSilicon	12.0	Handle Growth Method	CZ	Wafer Vendor- Topsil GW or WaferWorks
	13.0	Handle Orientation	{111} off 2.5 +/- 1 degree	Wafer Vendor
	14.0	Handle Thickness	350.00 +/- 5.00 µm	ADE, 100%
	15.0	Handle Doping Type	N	Wafer Vendor
	16.0	Handle Dopant	Arsenic	Wafer Vendor
	17.0	Handle Resistivity	<0.0025 Ohm cm	Wafer Vendor
	18.0	Handle Aluminium Level	<1E13 Atoms/cm3 Aluminium guaranteed by SIMS.	Wafer Vendor
	19.0	Handle Boron Level	<1E14 The Boron content is checked on frequent basis and guaranteed by technology repeatability.	Wafer Vendor
	20.0	Backside Finish	Lapped and etched with no oxide & laser ID marking	Wafer Vendor
DeviceSilicon	21.0	Device Growth Method	FZ	Wafer Vendor- Topsil GW or WaferWorks
	22.0	Device Orientation	{111} off 3.5 +/- 1 degree	Wafer Vendor
	23.0	Nominal Thickness	177.80 +/- 2.50 µm	ADE single point 100%
	24.0	Distance to device silicon edge from wafer edge	<= 3mm	Typical by Process
	25.0	Device Doping Type	N	Wafer Vendor
	26.0	Device Dopant	Phosphorous	Wafer Vendor
	27.0	Device Resistivity	> 5000 Ohm-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)

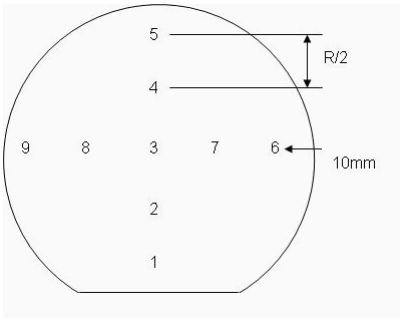
Part Number	Customer

Category	Parameter	Specification	Measurement Method
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