Icemos Technology Ltd **Product Specification** **1000.116501** Issue Date 02 July 2007 01:40:1

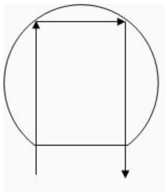
Part Number Customer

Category		Parameter	Specification	Measurement Method
OverallWafer	1.0	Diameter	100.00 +/- 0.50 mm	
	2.0	Primary Flat Orientation	{110}+/-1 degree	Wafer Vendor
	3.0	Primary Flat Length	32.50 +/- 2.50 mm	Wafer Vendor
	4.0	Secondary Flat Orientation	semi std	
	5.0	Overall Thickness	395.00 +/- 6.00 µm	ADE, 100%
	6.0	Total Thickness Variation (TTV)	<3.00	ADE to ASTM F657
	7.0	Bow	<120.00µm	ADE to ASTM F534, 20%
	8.0	Warp	<120.00µm	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
	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	1 - 5 Ohmcm	Wafer Vendor
	17.0	Backside Finish	Polished with no oxide and lasermarking	Wafer Vendor
BuriedOxide	18.0	Oxide Type	Thermal	
	19.0	Oxide Thickness	4,000.00 +/- 200.00 A	Nanospec centre point, 4%
	20.0	Oxide formed on	Handle Wafer	
DeviceSilicon	21.0	Device Growth Method	CZ	Wafer Vendor
	22.0	Device Orientation	{100} +/- 0.5 degree	Wafer Vendor
	23.0	Nominal Thickness	15.00 +/- 1.00 µm	FTIR, 100% 9-Pt (note3)
	24.0	Distance to device silicon edge from wafer edge	<= 1.5mm	Typical by Process
	25.0	Device Doping Type	N	Wafer Vendor
	26.0	Device Dopant	Phosphorous	Wafer Vendor
	27.0	Device Resistivity	2 - 3 Ohmcm	Wafer Vendor
	41.0	Voids	none	Wafer Vendor
	42.0	Scratches	0 front and back surfaces	Bright Light, 100% (note 2)
	43.0	Haze	none	Bright Light, 100% (note 2)

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	

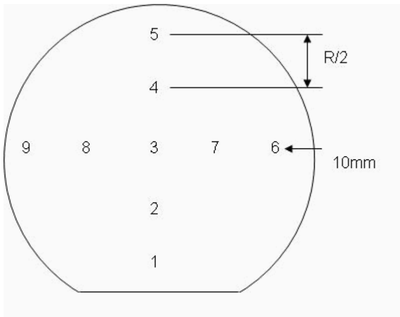
Explanatory Notes

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