Icemos Technology Ltd **Product Specification** **1000.273404** Issue Date 10 June 2014 11:45:2

Part Number	Customer

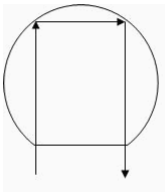
Category		Parameter	Specification	Measurement Method
OverallWafer	1.0	Diameter	100.00 +/- 0.50 mm	WaferVendor
	2.0	Primary Flat Orientation	<110> +/- 1 degree	Wafer Vendor
	3.0	Primary Flat Length	32.50 +/- 2.50 mm	Wafer Vendor
	4.0	Secondary Flat Orientation	none/semi	Wafer Vendor
	5.0	Overall Thickness	400.00 +/- 6.00 um	Guaranteed by Process
	6.0	Total Thickness Variation (TTV)	<5.00um	Guaranteed by Process
	7.0	Bow	<40.00um	Guaranteed by Process
	8.0	Warp	<40.00um	Guaranteed by Process
	9.0	Edge Exclusion	5 mm	Guaranteed by Process
	10.0	Silicon Supplier	Topsil - handle and device silicon. Cannot be changed without customer approval.	Confirmed Wafer Vendor
HandleSilicon	11.0	Handle Growth Method	FZ	Wafer Vendor
	12.0	Handle Orientation	<100> +/- 0.5 degree	Wafer Vendor
	13.0	Handle Thickness	385.00 +/- 5.00 um	Guaranteed by Process
	14.0	Handle Doping Type	N	Wafer Vendor
	15.0	Handle Dopant	Phosphorous	Wafer Vendor
	16.0	Handle Resistivity	1-2 Ohmcm	Wafer Vendor
	17.0	Backside Finish	Polished with no oxide and lasermark	Wafer Vendor
DeviceSilicon	18.0	Device Growth Method	FZ	Wafer Vendor
	19.0	Device Orientation	<100> +/- 0.5 degree	Wafer Vendor
	19.1	Carbon Concentration	<2E16 atoms/cm3	Wafer Vendor
	19.2	Oxygen Concentration	<2E16 atoms/cm3	Wafer Vendor
	20.0	Nominal Thickness	15.00 +/- 1.00 um	ADE Single Point, 100%
	21.0	Distance to device silicon edge from wafer edge	<= 2mm	Guaranteed by Process
	22.0	Device Doping Type	N	Guaranteed by Process
	23.0	Device Dopant	Phosphorous	Guaranteed by Process
	24.0	Device Resistivity	500-700 Ohmcm	Wafer Vendor
	25.0	Buried Layer Implant	Energy = 40keV, Dose = 1e14, Species = Phosphorous	Implant Vendor
	26.0	Voids	none	Guaranteed by Process, SAM inspection
	27.0	Haze	none	Guaranteed by Process, Bright LIght inspection
	28.0	Scratches	none	Guaranteed by Process, Bright LIght inspection

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	

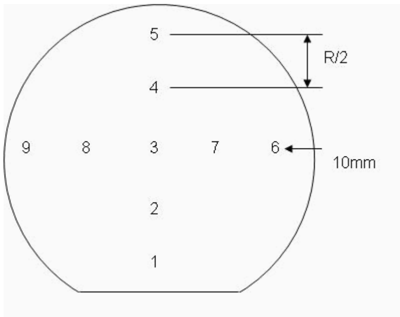
Explanatory Notes

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