

Part Number

Customer

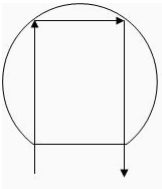
Category		Parameter	Specification	Measurement Method
OverallWafer	1.0	Diameter	100.00 +/- 0.20 mm	
	2.0	Primary Flat Orientation	{110} +/-1.0 degree	Wafer Vendor
	3.0	Primary Flat Length	32.50 +/- 2.50 mm	Wafer Vendor
	4.0	Secondary Flat Orientation	none/semi standard	
	5.0	Secondary Flat Length	none / 18.5mm +/-2.5mm	Wafer Vendor
	6.0	Overall Thickness	409.50 +/- 16.00 μ m	ADE, 20%
	7.0	Total Thickness Variation (TTV)	<5.00 μ m	Guaranteed by Process
	8.0	Bow	<80.00 μ m	ADE to ASTM F534, 20%
	9.0	Warp	<80.00 μ m	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
	13.0	Handle Orientation	{100} +/- 1.0 degree	Wafer Vendor
	14.0	Handle Thickness	400.00 +/- 15.00 μ m	ADE, 100%
	15.0	Handle Doping Type	N	Wafer Vendor
	16.0	Handle Dopant	Phosphorous	Wafer Vendor
	17.0	Handle Resistivity	3 ~ 5 Ohm cm	Wafer Vendor
	18.0	Backside Finish	Polished with oxide (not measured) and lasermark	Guaranteed by process
	19.0	Fusion Bonded Surface	Ion Implant at bonded interface to achieve Handle doping at BOX interface: 0.005 – 0.020 Ohm.cm	Guaranteed by process
	20.0	Handle implant	At bonded interface, Does: 2E15 cm-2, Species: Phos, Energy: 30KeV, Tilt: 7deg.	Customer specified conditions. Guaranteed by implant provider
BuriedOxide	21.0	Oxide Type	Thermal	
	22.0	Oxide Thickness	30,000.00 +/- 1,500.00 A	Nanospec centre point, 4%
	23.0	Oxide formed on	Handle and Device Wafer. Thermal Oxide 1.5um: 1150deg / 220min	
OverallWafer	24.0	Bond Anneal cycle	Bond Anneal: 1200 deg / 180min	Guaranteed by process
DeviceSilicon	25.0	Device Growth Method	CZ	Wafer Vendor
	26.0	Device Orientation	{100} +/- 1.0 degree	Wafer Vendor
	27.0	Nominal Thickness	6.50 +/- 0.50 μ m	Filmetrics, 100% 9-Pt (note3)
	28.0	Distance to device silicon edge from wafer edge	<= 2.0mm	Typical by Process
	29.0	Device Doping Type	N	Wafer Vendor
	30.0	Device Dopant	Phosphorous	Wafer Vendor
	31.0	Device Resistivity	3 - 5 Ohm-cm	Wafer Vendor

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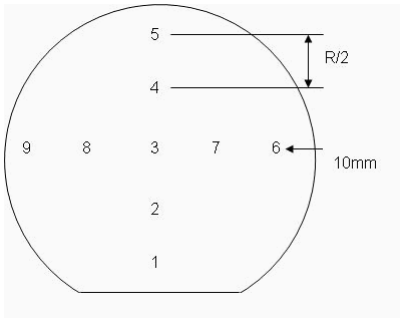
Category		Parameter	Specification	Measurement Method
DeviceSilicon	32.0	Surface Implant	Device Silicon Top Surface implant: Does 1E14 cm-2, Energy 120 keV Species Phos (N+), Tilt: 7deg	Customer specified conditions. Guaranteed by implant provider
	33.0	Drive implant 1	1100 deg, 30mins	Guaranteed by process
	34.0	Top surface resistivity (implanted)	Customer Target resistivity: 0.050 Ohm-cm	Approximate resistivity - not measured.
	35.0	Voids	0	Bright Light, 100% (note 2)
	36.0	Scratches	0	Bright Light, 100% (note 2)
	37.0	Haze	none	Bright Light, 100% (note 2)

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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