

Part Number

Customer

Category	Parameter	Specification	Measurement Method	
OverallWafer	1.0	Diameter	150.00 +/- 0.20 mm	
	2.0	Primary Flat Orientation	{110} +/- 0.5 degree	Wafer Vendor
	3.0	Primary Flat Length	57.50 +/- 2.50 mm	Wafer Vendor
	4.0	Secondary Flat Orientation	none	
	5.0	Overall Thickness	647.00 +/- 26.10 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	3mm	
HandleSilicon	11.0	Handle Growth Method	CZ	Wafer Vendor
	12.0	Handle Orientation	{100} +/- 0.5 degree	Wafer Vendor
	13.0	Handle Thickness	525.00 +/- 25.00 µm	ADE, 100%
	14.0	Handle Doping Type	N	Wafer Vendor
	15.0	Handle Dopant	Phosphorous	Wafer Vendor
	16.0	Handle Resistivity	1 - 50 Ohmcm	Wafer Vendor
	17.0	Backside Finish	Polished with oxide and lasermark	Wafer Vendor
BuriedOxide	18.0	Oxide Type	Thermal	
	19.0	Oxide Thickness	20,000.00 +/- 1,000.00 A	Nanospec centre point, 4%
	20.0	Oxide formed on	Handle and Device Wafer	
DeviceSilicon	21.0	Device Growth Method	CZ	Wafer Vendor
	22.0	Device Orientation	{100} +/- 0.5 degree	Wafer Vendor
	23.0	Nominal Thickness	120.00 +/- 1.00 µm	FTIR, 100% 9-Pt (note3)
	24.0	Distance to device silicon edge from wafer edge	<= 2.0mm	Guaranteed by process
	25.0	Device Doping Type	N	Wafer Vendor
	26.0	Device Dopant	Phosphorous	Wafer Vendor
	27.0	Device Resistivity	1 - 10 Ohm-cm	Wafer Vendor
	28.0	Buried Layer Implant	none	implant vendor
	29.0	Oxygen Concentration	<12.6 ppma	Wafer Vendor
	30.0	Voids	All wafers scanned for voids by Scanning Acoustic Microscope (SAM)	SAM & Bright Light, 100% (note 2). Void spec as per comments below.
	31.0	Scratches	0	Bright Light, 100% (note 2)
32.0	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, 150.00mm 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