

Part Number		Customer		
Category	Parameter	Specification	Measurement Method	
OverallWafer	1.0	Silicon Supplier	Silicon Materials	Wafer Vendor
	2.0	Diameter	150.00 +/- 0.50 mm	Wafer Vendor
	3.0	Primary Flat Orientation	{110} +/- 0.5 degree	Wafer Vendor
	4.0	Primary Flat Length	57.50 +/- 2.50 mm	Wafer Vendor
	5.0	Secondary Flat Orientation	none	
	6.0	Edge Rounding	Semi M1	Wafer Vendor
	7.0	Overall Thickness	569.00 +/- 31.00 $\mu$ m	ADE, 100%
	8.0	Total Thickness Variation (TTV)	<5.00 $\mu$ m	ADE measure
	10.0	Bow	<50.00 $\mu$ m	ADE to ASTM F534, 20%
	11.0	Warp	<50.00 $\mu$ m	ADE to ASTM F657, 20%
	12.0	Edge Chips	0	Bright Light, 100% (note 2)
	13.0	Edge Exclusion	5mm	
	HandleSilicon	14.0	Handle Growth Method	CZ
15.0		Handle Orientation	{100} +/- 1 degree	Wafer Vendor
16.0		Handle Doping Type	ANY	Wafer Vendor
17.0		Handle Dopant	ANY	Wafer Vendor
18.0		Handle Resistivity	>1 Ohmcm	Wafer Vendor
19.0		Handle Thickness	550.00 +/- 30.00 $\mu$ m	ADE, 100%inspection
20.0		Backside Finish	lapped with oxide and scribe	Guaranteed by Process
BuriedOxide	25.0	Oxide Type	10,000.00 +/- 1,000.00	Guaranteed by process
DeviceSilicon	32.0	Device Growth Method	CZ	Wafer Vendor
	33.0	Device Orientation	{100} +/- 0.5 degree	Wafer Vendor
	34.0	Device Doping Type	N	Wafer Vendor
	35.0	Device Dopant	Phosphorous	Wafer Vendor
	36.0	Device Resistivity	1 - 3 Ohmcm	Wafer Vendor
	37.0	Nominal Thickness	18.00 +/- 0.75 $\mu$ m	FTIR or Filmetrics 9 point measurement
	38.0	Distance to device silicon edge from wafer edge	<2mm	Guaranteed by process
	39.0	Surface	roughness < 3A rms	Guaranteed by process
	40.0	Voids	none inside 5mm edge exclusion	Bright Light inspection 100%
	41.0	Scratches	none	Bright Light inspection 100%
	42.0	Haze	none	Bright Light inspection

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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