

Part Number

Customer

Category	Parameter	Specification	Measurement Method	
OverallWafer	1.0	Silicon Supplier	Topsil GW Only	Material Supplier
	2.0	Diameter	100.00 +/- 0.50 mm	
	3.0	Primary Flat Orientation	<110> +/- 1 degree	Wafer Vendor
	4.0	Primary Flat Length	32.50 +/- 2.50 mm	Wafer Vendor
	5.0	Secondary Flat Orientation	none/semi std	
	6.0	Overall Thickness	496.00 +/- 7.00 $\mu$ m	ADE 100%
	7.0	Total Thickness Variation (TTV)	<5.00 $\mu$ m	Guaranteed by Process
	8.0	Bow	<60.00 $\mu$ m	ADE to ASTM F534, 20%
	9.0	Warp	<60.00 $\mu$ 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 - Topsil only
	13.0	Handle Orientation	{111} off 2.5 +/- 0.5 degree	Wafer Vendor
	14.0	Handle Thickness	440.00 +/- 5.00 $\mu$ m	ADE, 100%
	15.0	Handle Doping Type	N	Wafer Vendor
	16.0	Handle Dopant	Arsenic	Wafer Vendor
	17.0	Handle Resistivity	<0.003 Ohmcm	Wafer Vendor
	18.0	Backside Finish	Lapped and etched with lasermark and no oxide.	Wafer Vendor
DeviceSilicon	19.0	Device Growth Method	FZ	Wafer Vendor - Topsil only
	20.0	Device Orientation	{111} off 3.5 +/- 0.5 degree	Wafer Vendor
	21.0	Nominal Thickness	50.00 +/- 2.00 $\mu$ m	FTIR, 100% 9-Pt (note3)
	22.0	Distance to device silicon edge from wafer edge	< 2 mm	Guaranteed by Process
	23.0	Device Doping Type	N	Wafer Vendor
	24.0	Device Dopant	Phosphorous	Wafer Vendor
	25.0	Device Resistivity	> 10000 Ohm-cm	Wafer Vendor
	26.0	Buried Layer Implant	none	implant vendor
	27.0	Voids	0	Bright Light, 100% (note 2)
	28.0	Scratches	0	Bright Light, 100% (note 2)
	29.0	Haze	none	Bright Light, 100% (note 2)

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