Part Number	Customer

Category		Parameter	Specification	Measurement Method
OverallWafer	1.0	Diameter	150.00 +/- 0.30 mm	
	2.0	Primary Flat Orientation	{110}+/-1 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	675.50 +/- 27.00 µm	ADE, 100%
	6.0	Total Thickness Variation (TTV)	<5.00	ADE to ASTM F657
	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	6mm	
HandleSilicon	11.0	Handle Growth Method	CZ	Wafer Vendor
	12.0	Handle Orientation	{100} +/- 1.0 degree	Wafer Vendor
	13.0	Handle Thickness	500.00 +/- 25.00 µm	ADE, 100%
	14.0	Handle Doping Type	P	Wafer Vendor
	15.0	Handle Dopant	Boron	Wafer Vendor
	16.0	Handle Resistivity	1 - 30 Ohmcm	Wafer Vendor
	17.0	Backside Finish	Lapped and etched with oxide and lasermarking	Guaranteed by process
BuriedOxide	18.0	Oxide Type	Thermal	
	19.0	Oxide Thickness	5,000.00 +/- 250.00 A	Nanospec centre point, 4%
	20.0	Oxide formed on	Handle Wafer	
DeviceSilicon	21.0	Device Growth Method	FZ	Wafer Vendor
	22.0	Device Orientation	{100} +/- 1.0 degree	Wafer Vendor
	23.0	Carbon Concentration	<2E16 atoms/cm3 ASTM 75	Wafer Vendor
	24.0	Oxygen Concentration	<2E16 atoms/cm3	Wafer Vendor
	25.0	Nominal Thickness	175.00 +/- 1.50 µm	FTIR, 100% 9-Pt (note3)
	26.0	Distance to device silicon edge from wafer edge	<= 2.0mm	Typical by Process
	27.0	Device Doping Type	N	Wafer Vendor
	28.0	Device Dopant	Phosphorous	Wafer Vendor
	29.0	Device Resistivity	112 - 138 Ohmcm	Wafer Vendor
	30.0	Buried Layer Implant	N/Phos, Dose = 1.5E+13 ions/sq, Energy = 100KeV, tilt = 0deg.	Implant Vendor
	31.0	Surface	Prime polished surface, Micro roughness < 0.5nm	Guaranteed by process
	32.0	Voids	none	Wafer Vendor
	33.0	Scratches	none	Bright Light, 100% (note 2)
	34.0	Haze	none	Bright Light, 100% (note 2)

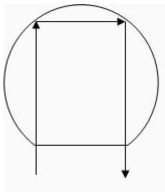
Category		**Parameter**	**Specification**	**Measurement Method**
DeviceSilicon	35.0	Device Side Scribe	As per ABB specification attached: Device Scribe 5SYK 0697-08	Guaranteed by process

Part Number	Customer

Category	**Parameter**	**Specification**	**Measurement Method**
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	

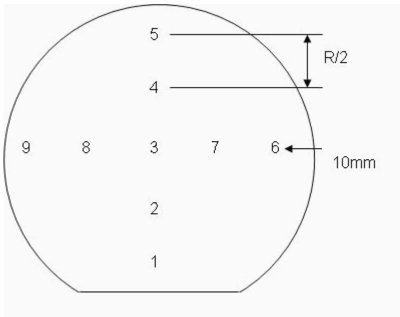
Explanatory Notes

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