

SOI-625-1-1

Quality : Prime	Diameter : 100 mm ⁽¹⁾
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Top silicon layer

Parameters	Measurement equipment /conditions	Min	Target	Max	Unit
Metrology edge exclusion	All parameters			5	mm
Mean thickness	+/- 3 sigma	950	1000	1050	nm
Doping type / species	P type / Boron				
Resistivity	SEMI M1	14		22	Ω .cm
Crystal orientation	SEMI M1		<100>		

Buried oxide

Parameters	Measurement equipment /conditions	Min	Target	Max	Unit
Mean thickness		900	1000	1100	nm

Handle wafer **with oxidized backside**

Parameters	Measurement equipment /conditions	Min	Target	Max	Unit
Thickness	SEMI M1	610	625	640	μ m
Doping type / species	P type / Boron				
Resistivity	SEMI M1	14		22	Ω .cm
Crystal orientation	SEMI M1		<100>		

Mechanical

Parameters	Measurement equipment /conditions	Min	Target	Max	Unit
Diameter			100 ⁽¹⁾		mm
TTV				6	μ m
Warp				80	μ m

⁽¹⁾ This 100mm diameter was obtained by downsizing 150mm wafers. Left-over of various shape/size for piece-part/chip processing is also available.

The downsizing procedure was as follows:

1. Cleanroom open 150mm wafers
2. Blanket coat 5um thick photoresist on each wafer
3. Lasercore wafers
4. Edge grind wafers
5. Laserscribe with original wafer ID (if any)
6. Photoresist strip
7. Cleanroom package and seal