

SILICON PRIME WAFERS - SPECIFICATION 100/P/DS/01-05

Rev. 2.2 / 07.04.2003

1. Material Parameters

1.1 Growth method	Czochralski
1.2 Conductivity type	P
1.3 Dopant	Boron
1.4 Orientation	<100>
1.5 Off-orientation	0° ± 0.5°
1.6 Resistivity range	0.1 - 0.5 ohm-cm
1.7 Dislocation density	< 100 / cm ²

2. Dimensional Parameters

2.1 Diameter	100 ± 0.2 mm
2.2 Thickness	380 ± 5 µm
2.3 Primary flat orientation	<110> ± 1°
2.4 Primary flat length	32.5 ± 2.5 mm
2.5 Secondary flat location	90° CW from primary flat
2.6 Secondary flat length	18 ± 2 mm
2.7 Total thickness variation, max	2 µm
2.8 Bow, max	20 µm
2.9 Warp, max	20 µm
2.10 Edge contour	As per SEMI MI-0996
2.11 Wafer ID marking	As specified

3. Front Surface Parameters

3.1 Particules, max	0.075 / cm ²
3.2 Scratches	None
3.3 Haze	None
3.4 Edge chips and indents	None
3.5 Orange peel	None
3.6 Saw marks	None
3.7 Other surface defects	None

4. Back Surface Parameters

4.1 Back surface	Polished
4.2 Scratches	None
4.3 Haze	None
4.4 Edge chips and indents	None
4.5 Orange peel	None
4.6 Saw marks	None
4.7 Other surface defects	None