

# SKW Associates, Inc.

3370 Victor Court

Santa Clara, CA 95054

Phone: (408) 919-0094

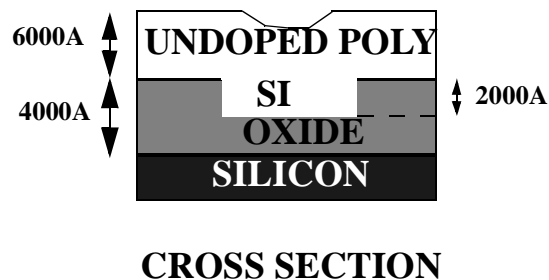
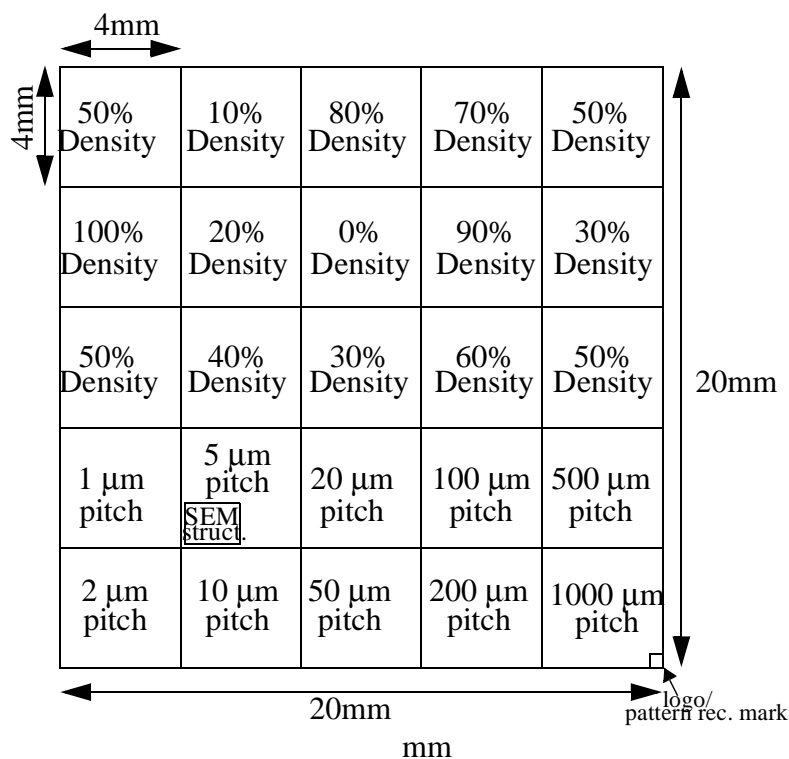
Fax: (408) 919-0097

Email: [skw@testwafer.com](mailto:skw@testwafer.com)

<http://www.testwafer.com>

# SKW 3PS Wafer Specifications

DATE: April 17, 2003



**SKW3PS Mask Floor Plan**

PARAMETER	NOMINAL	TOLERANCE
<b>Patterning</b>		
Center Die X Location	-10.000 mm	+/- 100 $\mu\text{m}$
Center Die Y Location	-10.000 mm	+/- 100 $\mu\text{m}$
Die Size: X	20 mm	+/- 10 $\mu\text{m}$
Die Size: Y	20 mm	+/- 10 $\mu\text{m}$
Die Spacing	120 $\mu\text{m}$ /120 $\mu\text{m}$	+/- 100 $\mu\text{m}$

<b>Wafers must be patterned all the way to the edges of the wafer, i.e. no area anywhere on wafer unpatterned. (Under certain stepper operating conditions, 2mm edge exclusion is allowed.)</b>		
<b><i>Linewidth Variation</i></b> (measured on 10 $\mu\text{m}$ and 90 $\mu\text{m}$ structures)		
Lot-to-Lot	10 $\mu\text{m}$ , 90 $\mu\text{m}$	+/- 1 $\mu\text{m}$
Within-Lot (Wafer-to-Wafer)		+/- 1 $\mu\text{m}$
Within-Wafer		+/- 1 $\mu\text{m}$
Within-Die		+/- 1 $\mu\text{m}$
<b><i>Raised Area Thickness (Undoped Silicon Fill)</i></b>		
Lot-to-Lot	0.6 $\mu\text{m}$	+/- 8 %
Within-Lot (Wafer-to-Wafer)		+/- 8 %
Within-Wafer		+/- 8 %
Within-Die		+/- 8 %
<b><i>Raised Area Thickness (Oxide)</i></b>		
Lot-to-Lot	0.4 $\mu\text{m}$	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %
<b><i>Oxide Trench Depth</i></b>		
Lot-to-Lot	2000 $\text{\AA}$	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5%
Within-Die		+/- 5 %