

# SKW Associates, Inc.

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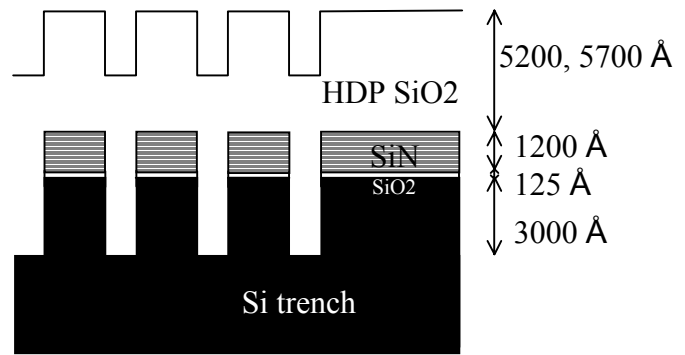
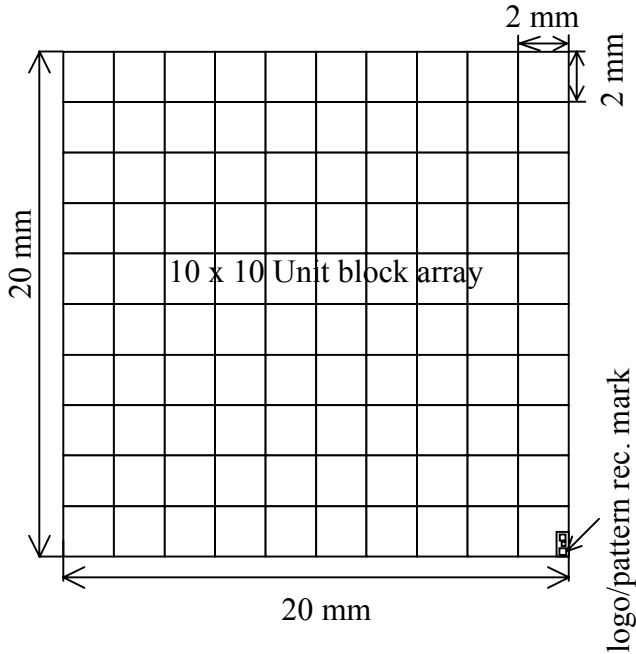
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# SKW 3-5 Wafer Specifications

DATE: May 15, 2004



Cross Sectional View

SKW 3-5 Mask Floor Plan

PARAMETER	NOMINAL	TOLERANCE
<b>Patterning</b>		
Center Die X Location	-10.000 mm	+/- 10 μm
Center Die Y Location	-10.000 mm	+/- 10 μm
Die Size: X	20 mm	+/- 10 μm
Die Size: Y	20 mm	+/- 10 μm
Die Stepping	20 μm	+/- 100 μm
Wafers must be patterned all the way to the edges of the wafer, i.e. no area anywhere on the wafer unpatterned. (Under certain stepper operating conditions, 2 mm edge edge exclusion is allowed.)		

PARAMETER	NOMINAL	TOLERANCE
<b>CD Variation (measured on shallow trenches)</b>		
Lot-to-Lot	250 nm	+/- 10 nm
Within-Lot (Wafer-to-Wafer)		+/- 10 nm
Within-Wafer		+/- 10 nm
Within-Die (measured on 9 trenches)		+/- 14 nm
<b>Raised area thickness (HDP CVD Oxide fill)</b>		
Lot-to-Lot	5200 or 5700 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %
<b>Raised area thickness (Nitride)</b>		
Lot-to-Lot	1200 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %
<b>Raised area thickness (Pad Oxide)</b>		
Lot-to-Lot	125 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %
<b>Silicon Trench Depth</b>		
Lot-to-Lot	3000 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 10 %
Within-Die		+/- 10 %