

# SKW Associates, Inc.

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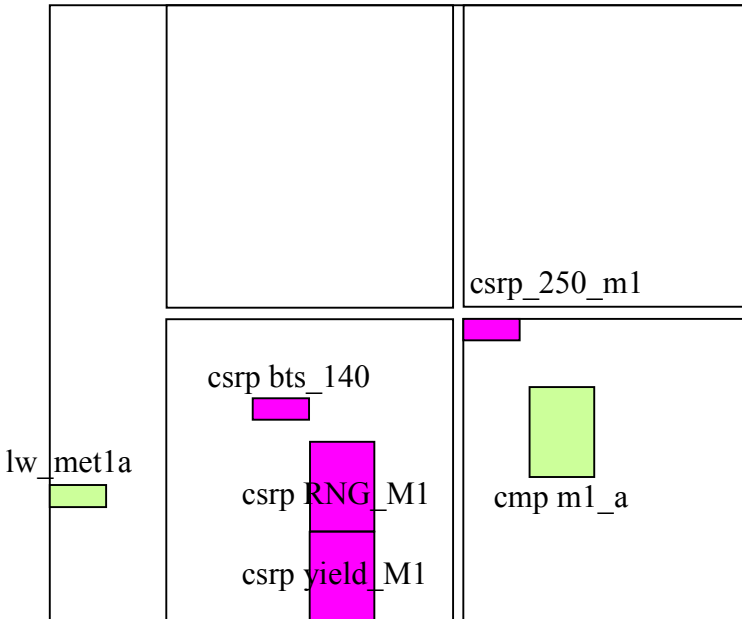
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<http://www.testwafer.com>

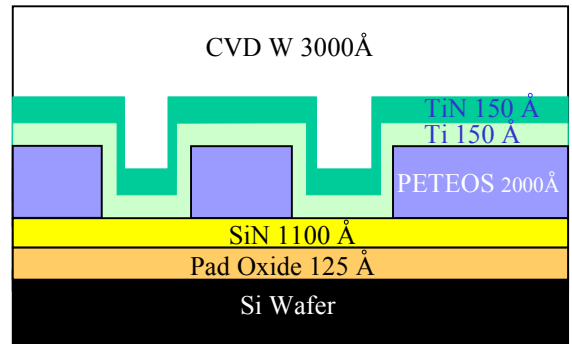
# SKW 5-ICP Wafer Specifications

Rev. DATE: Aug 26, 2004



Dishing, Erosion
  Comb, Serpentine

SKW 5-6 Mask Floor Plan



Cross Sectional View

PARAMETER	NOMINAL	TOLERANCE
<b>Patterning</b>		
Center Die X Location	-10.000 mm	+/- 100 $\mu$ m
Center Die Y Location	-10.000 mm	+/- 100 $\mu$ m
Die Size: X	22.124 mm	+/- 10 $\mu$ m
Die Size: Y	19.25 mm	+/- 10 $\mu$ m
Die Stepping (X / Y)	1000 / 20 $\mu$ m	+/- 10%
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>Line CD Variation (measured on 0.2 um structure)</b>		
Lot-to-Lot	200 nm	+/- 10 nm
Within-Lot (Wafer-to-Wafer)		+/- 10 nm
Within-Wafer		+/- 10 nm
Within-Die (measured on 9 trenches)		+/- 10 nm
<b>Trench depth Variation (measured on 0.2um structure)</b>		
Lot-to-Lot	2000 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 3 %
Within-Die (measured on 9 trenches)		+/- 3 %
<b>PETEOS thickness</b>		
Lot-to-Lot	2000 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 3 %
Within-Die		+/- 3 %
<b>PVD Ti film thickness</b>		
Lot-to-Lot	150 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %
<b>PVD TiN film thickness</b>		
Lot-to-Lot	150 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %
<b>CVD W film thickness</b>		
Lot-to-Lot	3000 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %