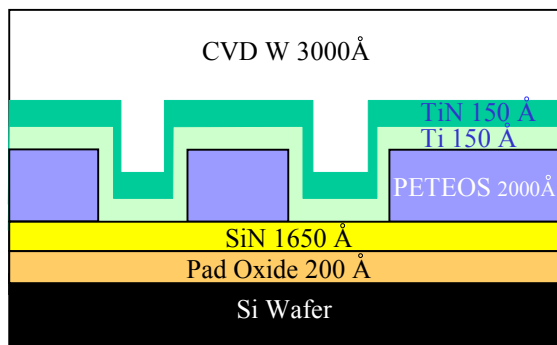
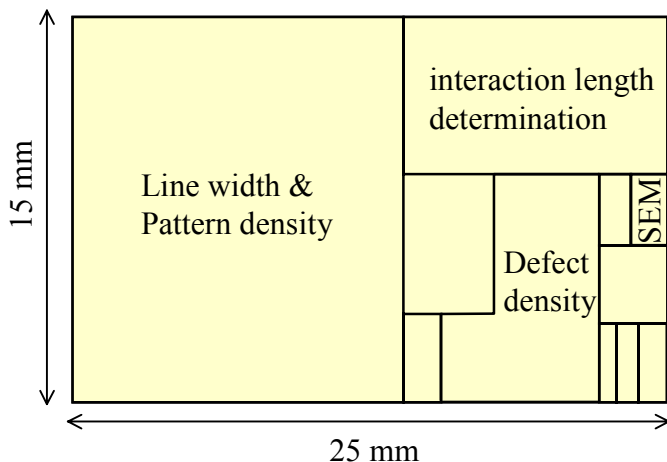


SKW Associates, Inc.

3370 Victor Court
 Santa Clara, CA 95054
 Phone (408) 919-0094
 Fax (408) 919-0097
 Email: skw@testwafer.com
<http://www.testwafer.com>

SKW 5-ICP-K Wafer Specifications

Rev. DATE: Nov 1, 2004



Cross Sectional View

SKW 5-ICP-K Mask Floor Plan

PARAMETER	NOMINAL	TOLERANCE
Patterning		
Center Die X Location	-12.5 mm	+/- 100 μm
Center Die Y Location	-7.5 mm	+/- 100 μm
Die Size: X	25 mm	+/- 10 μm
Die Size: Y	15 mm	+/- 10 μm
Die Stepping (X /Y)	25.06 / 15.16 μm	+/- 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
Line CD Variation (measured on 0.2 um structure)		
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
Trench depth Variation (measured on 0.2um structure)		
Lot-to-Lot	2000 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 3 %
Within-Die (measured on 9 trenches)		+/- 3 %
PETEOS thickness		
Lot-to-Lot	2000 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 3 %
Within-Die		+/- 3 %
PVD Ti film thickness		
Lot-to-Lot	150 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %
PVD TiN film thickness		
Lot-to-Lot	150 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %
CVD W film thickness		
Lot-to-Lot	3000 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %