

SKW Associates, Inc.

3370 Victor Court

Santa Clara, CA 95054

Phone: (408) 919-0094

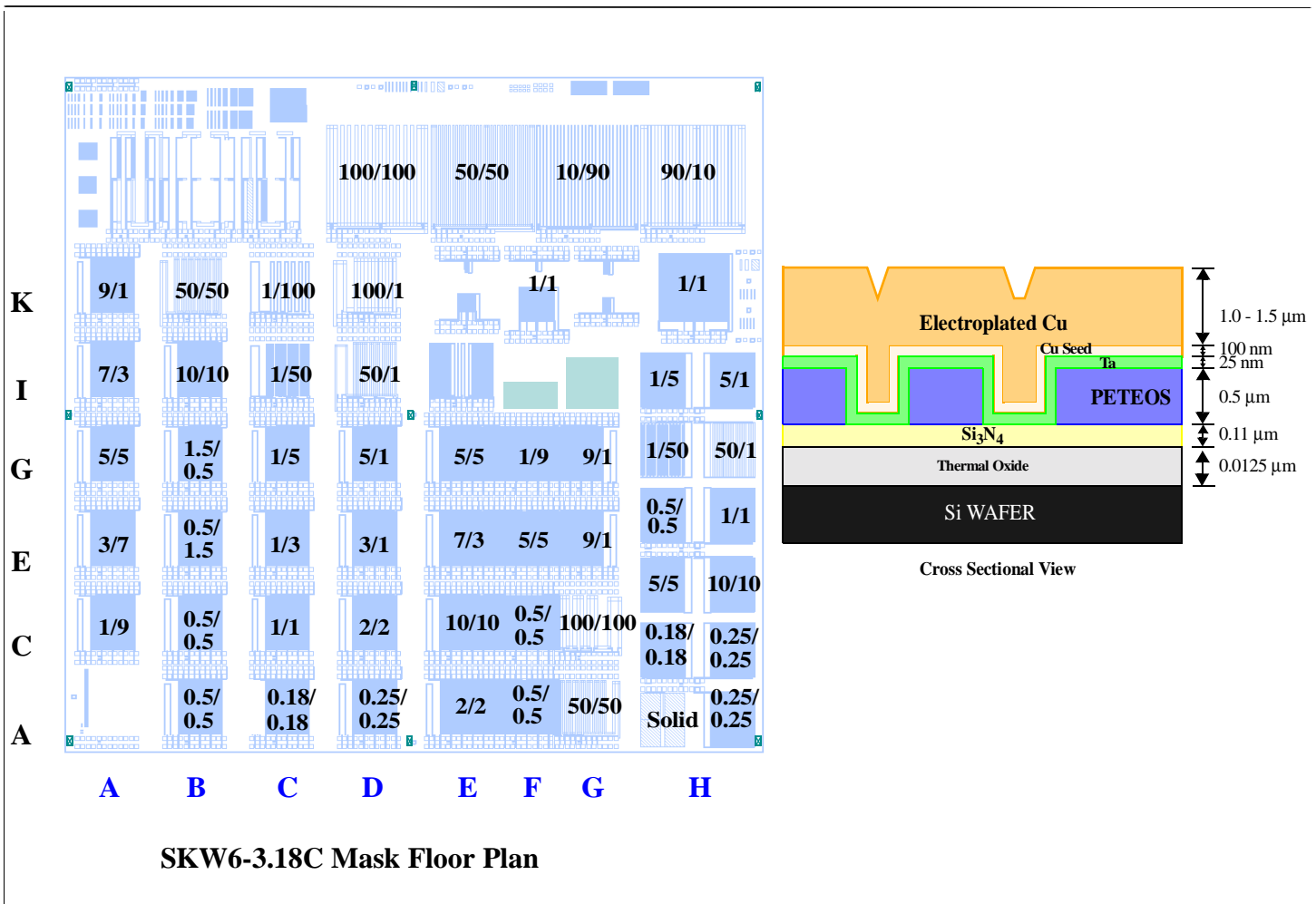
Fax: (408) 919-0097

Email: skw@testwafer.com

<http://www.testwafer.com>

SKW6-3.18C Wafer Specifications

DATE: March 1, 2003



Isolation Layer Deposition

A. Thermal Oxide Deposition

PARAMETER	NOMINAL	TOLERANCE
<i>Thermal Oxide Film Thickness</i>		
Lot-to-Lot	125 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 3 %
Within-Die		+/- 3 %

B. Plasma Enhanced Nitride Deposition

PARAMETER	NOMINAL	TOLERANCE
<i>Nitride Film Thickness</i>		
Lot-to-Lot	1,100 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)T		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %

Oxide Deposition

PARAMETER	NOMINAL	TOLERANCE
<i>PETEOS Thickness</i>		
Lot-to-Lot	5,000 Å	+/- 5 %
Within-Lot (Wafer-to-Wafer)		+/- 5 %
Within-Wafer		+/- 3 %
Within-Die		+/- 3 %

Ta Deposition

PARAMETER	NOMINAL	TOLERANCE
<i>Ta PVD Film Thickness</i>		
Lot-to-Lot	250 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %

Within-Wafer		+/- 5 %
Within-Die		+/- 5 %

Cu Seed Layer Deposition

PARAMETER	NOMINAL	TOLERANCE
<i>PVD Cu Film Thickness</i>		
Lot-to-Lot	1,000 Å	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %

ECD Cu Layer Deposition

PARAMETER	NOMINAL	TOLERANCE
<i>ECD Cu Film Thickness</i>		
Lot-to-Lot	1 micron	+/- 10 %
Within-Lot (Wafer-to-Wafer)		+/- 10 %
Within-Wafer		+/- 5 %
Within-Die		+/- 5 %

Patterning

PARAMETER	NOMINAL	TOLERANCE
<i>Patterning</i>		
Center Die X Location	-10.000 mm	+/- 100 µm
Center Die Y Location	-10.000 mm	+/- 100 µm
Die Size: X	20 mm	+/- 10 µm
Die Size: Y	20 mm	+/- 10 µm
Vertical Die Spacing	180 µm	+/- 10 %
Horizaontal Spacing	360 µm	+/- 10 %
<i>LineWidth Variation (measured on 2 µm structures)</i>		
Lot-to-Lot	2 µm	+/- 0.1 µm
Within-Lot (Wafer-to-Wafer)		+/- 0.1 µm

Within-Wafer		+/- 0.1 μm
Within-Die		+/- 0.1 μm