

Exhibit B

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2000 UPDATE										
YEAR OF PRODUCTION TECHNOLOGY NODE (1999 ITRS)	1999 180 nm	2000	2001	2002 130 nm	2003	2004	2005 100 nm	2006 70 nm	2011 50 nm	2014 35 nm
YEAR OF PRODUCTION TECHNOLOGY NODES (PROPOSED NODE YEARS ARE NOW 2007/65nm; 2010/45nm; 2013/32nm; 2016/23nm) (SC. 2.0)	1999 180 nm	2000	2001 130 nm	2002	2003	2004 90nm	2005	2006 [60 nm]	2011 [40 nm]	2014 [30 nm]

Table 36 DRAM Trench Capacitor Films Technology Requirements**

Year of First Product Shipment Technology Node	1999 180 nm	2002 130 nm	2005 100 nm	2008 70 nm	2011 50 nm	2014 35 nm
DRAM Half-Pitch (nm)	180	130	100	70	50	35
DRAM Half-Pitch proposed for 2001 ITRS (nm) (A)	180	115	80	60	40	30
Storage node area, top view (1H1R1C pitch) ²	2	2	2	<2	<2	<2
Trench structure	conventional	bottled	bottled	bottled	tbd.	tbd.
Trench area enhancement factor	1	1.5	2	2	1.5	1.5
Capacitor dielectric equivalent oxide thickness (nm)	4.5	3.5	3.2	2.5	2	1.5
Trench depth (µm), (at 3NF)	6-7	5-6	5-6	4-5	4-5	4-5
Aspect ratio (trench depth / trench width)	30-40	40-45	50-60	80-70	>70	>100
Upper electrode	Silicon	Silicon	Silicon	Metal	Metal	Metal
Dielectric material	NO	NO	NO	High-k	High-k	High-k
Bottom electrode	Silicon	Silicon	Silicon	Silicon	Metal	Metal

(A) In response to observed acceleration of DRAM 1/2 Pitch scaling, new proposed values are presented here for year 2001 updating. Table 36 above has not been updated to reflect these new proposed values.

** In response to the observed acceleration of the Technology Nodes (TN) represented by DRAM half-pitch, the IRC proposes a new TN called Scenario 2 (SC. 2.0) for the year 2001 Renewal. However, due to the lack of time the subsequent contents of this Table are not updated to reflect the new TN.

All modifications of the items and/or numericals modified from the 1999 ITRS are based on the TN of ITRS 1999 and are highlighted in bold blue text.