Supporting data

Ultra Thin Diffusion Barrier Development by Utilizing Advanced Deposition Materials in ALD

Changbong Yeon, Deok-Hyun Cho, Jaesun Jung, Kok Chew Tan, Jung Hun Lim and Young-Soo Park

Thin Film Material Development Team, Soulbrain, Gongju-si, Chungcheongnam-do 32598, South Korea

E-mail: cbyeon@soulbrain.co.kr

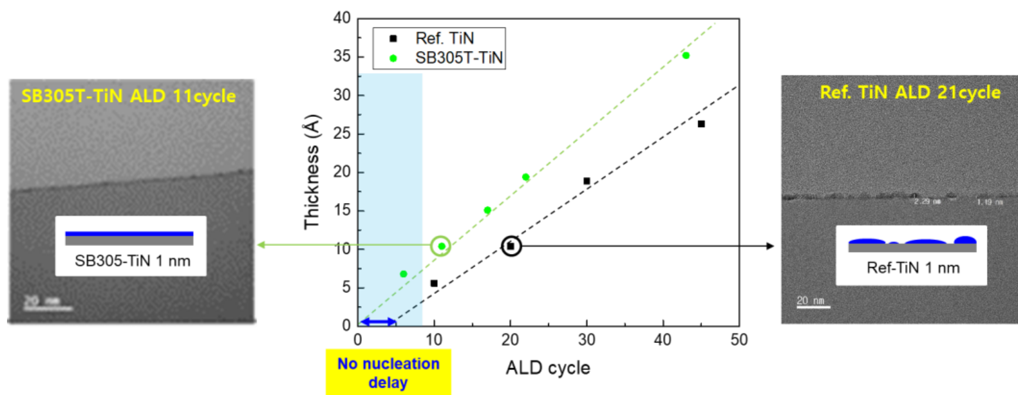

Figure 1. Thickness as a function of the number of ALD cycles.

Table 1. SEM images of TiN films before and after DHF dipping test.

Samples	Before	After
Ref. TiN	Tilted SEM TiN surface SiO_2 Si	pinhole
SB305T-TiN	Tilted SEM TiN surface SiO_2 Si	

*Dip test using DHF 100:1 for 5min