Abstract Submitted for the MAR16 Meeting of The American Physical Society

**Diffusion of Copper through Ti overlayer**<sup>1</sup> BRITT LONG, A. MEN-CHACA, A. R. CHOURASIA, Texas AM University-Commerce — The Cu/Ti interface has been characterized by x-ray photoelectron spectroscopy and resistivity measurements. Thin films of titanium were deposited on copper substrates by ebeam method. The thickness of the Ti film was kept at 50 Å. The interface was annealed at temperatures of 100, 200, 300 and 400C. The Ti 2p and Cu 2p regions were analyzed by XPS. The diffusivity of copper through titanium has been investigated. The resistivity measurements were done by the four probe method. The correlation between the resistivity and the surface composition has been evaluated.

<sup>1</sup>Work supported by Organized Research, TAMU-Commerce

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Date submitted: 06 Nov 2015

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