

## On Reliability of Electroplated Thin Copper Films

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### Abstract

*Micro-tensile experiments are useful to determine the mechanical response of thin films and coatings used in most microelectronic devices.*

*Two aspects of reliability issues have been addressed on this sort of film on substrate systems: one corresponds to the degradation of a film on a substrate, when submitted to several cyclic mechanical solicitations; the other one, corresponds to the effect produced by geometrical and material discontinuities at the interfaces, on the local stress fields.*

**Keywords:** Reliability, Microelectronic devices, Thin films, Degradation, Stress.