

## Microsisteme electromecanice (MEMS) și fiabilitate

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### Microelectromechanical Systems (MEMS) and reliability

#### Abstract

*MEMS components by their very nature have different and unique failure mechanisms than their macroscopic counterparts. In MEMS, there are several failure mechanisms that have been found to be the primary sources of failure within devices. In comparison to electronic circuits, these failure mechanisms are neither well understood nor easy to accelerate for life testing. The main reason for the lack of success in commercialization of MEMS cannot be attributed to the advance of micro technology but to packaging techniques used in production of MEMS devices. This paper is intended to inform the non-MEMS technologists, researchers and decision makers about some MEMS actual problems.*

**Keywords:** *MEMS, reliability, failure mechanisms, failure modes, degradation modes, packaging.*