

Shear ram speed characterization for copper wire bond shear test

Abstract

This paper presents the evaluation of the stress and strain response of the copper ball bond during wire bond shear test using finite element analysis. A 3D non-linear finite element model was developed for the simulation. The effects of the shear ram speed on the stress and strain response of the copper ball bond were investigated. A preliminary investigation confirms that shear ram speed has a significant effect on the von mises stress and equivalent strain response of the copper ball bond during wire bond shear test.