

## **Wire Bond Shear Test Simulation on Hemispherical Surface Bond Pad**

### **Abstract**

Wire bonding process is an interconnection method adopted in the semiconductor packaging manufactory. One of the method used to assess the reliability and bond strength of the bonded wires are wire bond shear test .In this study, simulation on wire bond shear test is done to evaluate the stress response of the bonded wire when sheared on a hemispherical surface bond pad. The contrast between three types of wire material:gold(Au), aluminum(Al) and copper(Cu) were carry out to examine the effects of wire material on the stress response of bonded wire during wire bond shear test. The simulation results showed that copper wire bond induces highest stress and gold wire exhibits the least stress response.

Keywords; ANSYS, Hemisphere Surface Bond Pad, Shear Test, Wire Bond