

**METHOD OF APPLICATION OF COPPER SOLUTION IN FLIP-CHIP, COB, AND
MICROMETAL BONDING**

ABSTRACT

A method of bonding a bonding element to a metal bonding pad, comprising the following steps. A semiconductor structure having an exposed metal bonding pad within a passivation layer opening is provided. The bonding pad has an upper surface. A bonding element is positioned to contact the bonding pad upper surface. A bonding solution is applied within the passivation layer opening, covering the bonding pad and a portion of the bonding element. The structure is annealed by heating said bonding element to selectively solidify the bonding solution proximate said contact of said bonding element to said bonding pad, bonding the bonding element to the bonding pad.

(Figure 1)