

Abstract

SEMICONDUCTOR DEVICE AND METHOD OF USING LEADFRAME BODIES TO FORM OPENINGS THROUGH ENCAPSULANT FOR VERTICAL INTERCONNECT OF SEMICONDUCTOR DIE

A semiconductor device has a leadframe with a plurality of bodies extending from the base plate. A first semiconductor die is mounted to the base plate of the leadframe between the bodies. An encapsulant is deposited over the first semiconductor die and base plate and around the bodies of the leadframe. A portion of the encapsulant over the bodies of the leadframe is removed to form first openings in the encapsulant that expose the bodies. An interconnect structure is formed over the encapsulant and extending into the first openings to the bodies of the leadframe. The leadframe and bodies are removed to form second openings in the encapsulant corresponding to space previously occupied by the bodies to expose the interconnect structure. A second semiconductor die is mounted over the first semiconductor die with bumps extending into the second openings of the encapsulant to electrically connect to the interconnect structure.

(Fig.5)