Abstract

SEMICONDUCTOR DEVICE AND METHOD OF DUAL-MOLDING DIE FORMED ON OPPOSITE SIDES OF BUILD-UP INTERCONNECT STRUCTURE

A semiconductor device has dual-molded semiconductor die mounted to opposite sides of a build-up interconnect structure. A first semiconductor die is mounted to a temporary carrier. A first encapsulant is deposited over the first semiconductor die and temporary carrier. The temporary carrier is removed. A first interconnect structure is formed over a first surface of the first encapsulant and first semiconductor die. The first interconnect structure is electrically connected to first contact pads of the first semiconductor die. A plurality of conductive pillars is formed over the first interconnect structure. A second semiconductor die is mounted between the conductive pillars to the first interconnect structure. A second encapsulant is deposited over the second semiconductor die. A second interconnect structure is formed over the second encapsulant. The second interconnect structure is electrically connected to the conductive pillars and first and second semiconductor die.

(Fig. 4)