

Abstract

SEMICONDUCTOR DEVICE AND METHOD OF FORMING BASE LEADS FROM BASE SUBSTRATE AS STANDOFF FOR STACKING SEMICONDUCTOR DIE

A semiconductor device has a base substrate with first and second opposing surfaces. A first etch-resistant conductive layer is formed over the first surface of the base substrate. A second etch-resistant conductive layer is formed over the second surface of the base substrate. A first semiconductor die has bumps formed over contact pads on an active surface of the first die. The first die is mounted over a first surface of the first conductive layer. An encapsulant is deposited over the first die and base substrate. A portion of the base substrate is removed to form electrically isolated base leads between opposing portions of the first and second conductive layers. A second semiconductor die is mounted over the encapsulant and a second surface of the first conductive layer between the base leads. A height of the base leads is greater than a thickness of the second die.

(Fig. 5)