Abstract

SEMICONDUCTOR DEVICE AND METHOD OF FORMING THE DEVICE USING SACRIFICIAL CARRIER

A semiconductor device is made by forming contact pads on a sacrificial carrier. The contact pads may be formed on a pillar. A semiconductor die is mounted to electrically connect to the contact pads with solder bumps or wire bonds. The semiconductor die is encapsulated with molding compound. The sacrificial carrier is removed. A backside interconnect structure has a first conductive layer formed over the molding compound to electrically connect to the contact pads. A first insulating layer is formed over the first conductive layer. A portion of the first insulating layer is removed to expose the first conductive layer. Solder material is deposited in electrical contact with the first conductive layer. The solder material is reflowed to form a solder bump. A wire bond electrically connects to a contact pad. A front-side interconnect structure can be formed through the molding compound to the contact pads. (Fig. 3)