

Abstract

A semiconductor device has a first conductive layer including a plurality of conductive traces. The first conductive layer is formed over a substrate. The conductive traces are formed with a narrow pitch. A first semiconductor die and second semiconductor die are disposed over the first conductive layer. A first encapsulant is deposited over the first and second semiconductor die. The substrate is removed. A second encapsulant is deposited over the first encapsulant. A build-up interconnect structure is formed over the first conductive layer and second encapsulant. The build-up interconnect structure includes a second conductive layer. A first passive device is disposed in the first encapsulant. A second passive device is disposed in the second encapsulant. A vertical interconnect unit is disposed in the second encapsulant. A third conductive layer is formed over second encapsulant and electrically connected to the build-up interconnect structure via the vertical interconnect unit.

(Fig.5)