Abstract

SEMICONDUCTOR DEVICE AND METHOD OF FORMING FO-WLCSP HAVING CONDUCTIVE LAYERS AND CONDUCTIVE VIAS SEPARATED BY POLYMER LAYERS

A Fo-WLCSP has a first polymer layer formed around a semiconductor die. First conductive vias are formed through the first polymer layer around a perimeter of the semiconductor die. A first interconnect structure is formed over a first surface of the first polymer layer and electrically connected to the first conductive vias. The first interconnect structure has a second polymer layer and a plurality of second vias formed through the second polymer layer. A second interconnect structure is formed over a second surface of the first polymer layer and electrically connected to the first conductive vias. The second interconnect structure has a third polymer layer and a plurality of third vias formed through the third polymer layer. A semiconductor package can be mounted to the WLCSP in a PoP arrangement. The semiconductor package is electrically connected to the WLCSP through the first interconnect structure or second interconnect structure.

(Fig 6a)