Abstract

SEMICONDUCTOR DEVICE AND METHOD OF FORMING DAM MATERIAL AROUND PERIPHERY OF DIE TO REDUCE WARPAGE

A semiconductor device has a temporary carrier with a designated area for a first semiconductor die. A dam material is deposited on the carrier around the designated area for a first semiconductor die. The first semiconductor die is mounted to the designated area on the carrier. An encapsulant is deposited over the first semiconductor die and carrier. The dam material is selected to have a CTE that is equal to or less than the CTE of the encapsulant. The carrier is removed to expose the encapsulant and first semiconductor die. A first interconnect structure is formed over the encapsulant. An EMI shielding layer can be formed over the first semiconductor die. A second interconnect structure is formed over a back surface of the first semiconductor die. A conductive pillar is formed between the first and second interconnect structures. A second semiconductor die is mounted to the second interconnect structure.
(Fig. 4)