

ABSTRACT

INTERCONNECT STRUCTURE FOR A SEMICONDUCTOR DEVICE WITH A RESILIENT STRESS ABSORBER AND RELATED METHOD OF MANUFACTURE

A semiconductor device (50) having a device substrate (102) is provided. The semiconductor device (50) comprises an electrically conductive pad (110) formed overlying the device substrate (102) an electrically conductive platform (160) formed overlying the electrically conductive pad (110) and a pillar interconnect (180) formed on the electrically conductive platform (160) the electrically conductive platform (160) having a perimeter portion (162) extending away from the electrically conductive pad (110) and a capping portion (170) atop the perimeter portion (162), wherein the electrically conductive platform (160) encloses a cavity located between the capping portion (170), the perimeter portion (162) and the electrically conductive pad (110), a cushioning material (140) being disposed in the cavity, the cushioning material (140) being intended to act as a resilient stress absorber upon application of force on the pillar interconnect (180).

Figure 3