

ABSTRACT

A semiconductor device includes a substrate. A wiring layer is over the substrate. A first via structure directly contacts a lower portion of the wiring layer. A second via structure directly contacts an upper portion of the wiring layer. The first via structure generates first stress in the wiring layer. The second via structure generates second stress in the wiring layer. The second stress is of an opposite type to the first stress. The first stress and the second stress compensate for each other in the wiring layer.

FIG. 1