

SEMICONDUCTOR STRUCTURE, LAYOUT OF SEMICONDUCTOR STRUCTURE AND SEMICONDUCTOR DEVICE

ABSTRACT

The disclosure provides a semiconductor structure, a layout of the semiconductor structure and a semiconductor device. The semiconductor structure includes: a plurality of first conductive layers that are spaced; a plurality of capacitor banks, and the capacitor banks being on the first conductive layers in one-to-one correspondence and each of the capacitor banks including at least a capacitor, each capacitor including a lower electrode layer, a capacitance dielectric layer and an upper electrode layer stacked from bottom to top; a capacitor plate, wherein the capacitor plate is on each upper electrode layer; and a second conductive layer, wherein the second conductive layer is above the capacitor plate and connected with the capacitor plate. In the above semiconductor structure, the second conductive layer is formed above the capacitor plate, and the second conductive layer is connected with the capacitor plate, so that in the semiconductor structure, the second conductive layer is equivalent to being connected in parallel at two ends of the capacitor plate, that is, the second conductive layer is connected with the capacitor plate in parallel, and the resistance formed by the parallel connection of the second conductive layer and the capacitor plate is lower than the resistance of the capacitor plate itself, thereby avoiding the problem of affecting the performance due to the high resistance and improving the performance of the semiconductor structure.

[Fig. 1]