

SEMICONDUCTOR STRUCTURE AND MANUFACTURING METHOD THEREFOR

ABSTRACT

Embodiments of the present disclosure provide a semiconductor structure and a manufacturing method thereof. The semiconductor structure includes: a base; bit lines, located on the base, and a material of the bit line including a metal semiconductor compound; semiconductor channels, each including a first doped region, a channel region and a second doped region arranged in sequence, and the first doped region being in contact with the bit line; a first dielectric layer, covering sidewall surfaces of the first doped regions, and a first interval being provided between parts of the first dielectric layer covering sidewalls of adjacent first doped regions on a same bit line; an insulating layer, covering sidewall surfaces of the channel regions; word lines, covering a sidewall surface of the insulating layer away from the channel regions, and a second interval being provided between adjacent word lines; a second dielectric layer, covering sidewall surfaces of the second doped regions, and a third interval being provided between parts of the second dielectric layer located on sidewalls of adjacent second doped regions; and a third dielectric layer, located in the first interval, the second intervals and the third intervals.

[Fig. 1]