

SEMICONDUCTOR STRUCTURE AND METHOD FOR MANUFACTURING SAME

ABSTRACT

A semiconductor structure and a method for manufacturing same, in which the semiconductor structure comprises: a semiconductor base (100), comprising a logical device region (I) and a memory region (II); a bit line (101) and an electrical contact layer (111) disposed in a same layer as the bit line (101), the bit line (101) being located in the memory region (II), the electrical contact layer (111) being located in the logical device region (I); a first semiconductor channel (102), located on a surface of the bit line (101); a second semiconductor channel (112), disposed in a same layer as the first semiconductor channel (102), and located on a surface of the electrical contact layer (111); a word line (103) and a gate (113) disposed in a same layer as the word line (103); a capacitor structure (104), in contact with a second doped region (c) of the first semiconductor channel (102); an electrical connection structure (105), in contact with the fourth doped region (f) of the second semiconductor channel (112); and a dielectric layer (106), located between the bit line (101) and the word line (103), and further located on a side of the word line (103) away from the semiconductor base (100).

[Fig. 1]