

SEMICONDUCTOR STRUCTURE AND METHOD FOR MANUFACTURING SAME

ABSTRACT

Embodiments of the disclosure provide a semiconductor structure and a method for manufacturing same. The semiconductor structure includes a base and a storage unit located on the base. The storage unit includes: a first dielectric layer and a metal bit line located in the first dielectric layer; a semiconductor channel, located on a partial surface of the metal bit line; a word line, disposed surrounding a partial region of the semiconductor channel; a second dielectric layer, located between the metal bit line and the word line, and located on a side of the word line away from the base; a first lower electrode layer and a second lower electrode layer, stacked on a top surface of the semiconductor channel away from the metal bit line, in which the first lower electrode layer is in contact with the top surface of the semiconductor channel; an upper electrode layer, located on a top surface of the second lower electrode layer, and surrounding the first lower electrode layer and the second lower electrode layer; and a capacitor dielectric layer, located between the upper electrode layer and the first lower electrode layer, and further located between the upper electrode layer and the second lower electrode layer.

[Fig. 1]