

ABSTRACT

A semiconductor device and a method for manufacturing the same are disclosed. The semiconductor device includes a word-line structure extending into a semiconductor layer to a first depth, and additionally extending in a first direction, an active region extending in a diagonal direction with respect to the first direction in the semiconductor layer, and overlapping with the word-line structure, a bit-line pad region overlapping with one end of the active region and contacting one side of the word-line structure, and extending into the semiconductor layer to a second depth that is shallower than the first depth, and a storage-node pad region overlapping with another end of the active region and contacting another side of the word-line structure, the storage-node pad region being spaced apart from the bit-line pad region in the diagonal direction and extending into the semiconductor layer to a third depth that is shallower than the first depth.

FIG. 3