

ABSTRACT

A semiconductor device includes a gate structure including a first select line, a second select line, a first wordline, a second wordline, and a third select line. The semiconductor device also includes a first channel layer passing through the second wordline and the third select line. The semiconductor device further includes a second channel layer passing through the first wordline and the first select line, the second channel layer connected to the first channel layer, and a third channel layer passing through the first wordline and the second select line, the third channel layer connected to the first channel layer. The semiconductor device additionally includes an isolation structure that isolates the second channel layer from the third channel layer.

FIG. 1