

ABSTRACT

A non-volatile memory device and a non-volatile memory system comprising the same are provided. The non-volatile memory device includes a first stack in which a first conductive pattern and a first dielectric layer are alternately stacked in a first direction on a substrate, a second stack in which a second conductive pattern and a second dielectric layer are alternately stacked in the first direction on the first stack opposite the substrate, a first monitoring channel structure that penetrates the first stack in the first direction, and a second monitoring channel structure that penetrates the second stack in the first direction and is on the first monitoring channel structure. A width of a top of the first monitoring channel structure opposite the substrate is smaller than a width of a bottom of the second monitoring channel structure adjacent the top of the first monitoring channel structure.

FIG. 14