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(54) **THREE-DIMENSIONAL SEMICONDUCTOR MEMORY DEVICE ANDELECTRONIC SYSTEM INCLUDING THE SAME**

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(57) **ABSTRACT**

A three-dimensional semiconductor memory device may include a peripheral structure and a cell structure on the peripheral structure. The cell structure may include a substrate having first and second surfaces, which are opposite to each other, a stack including gate electrodes, which are stacked on the first surface of the substrate, an insulating layer on the second surface of the substrate, a penetration contact plug penetrating the first surface of the substrate, a first gapfill conductive pattern provided to penetrate the second surface of the substrate and the insulating layer and spaced apart from the penetration contact plug, a second gapfill conductive pattern provided to penetrate the second surface of the substrate and the insulating layer and connected to the penetration contact plug, a first gapfill spacer between the first gapfill conductive pattern and the substrate, and a second gapfill spacer between the second gapfill conductive pattern and the substrate.