

ABSTRACT

A memory, a manufacturing method thereof, and an electronic device are provided. The memory includes a first semiconductor structure and a second semiconductor structure coupled to the first semiconductor structure. The first semiconductor structure includes a plurality of memory arrays arranged in an array and spaced apart from each other, each memory array includes a plurality of memory cells arranged in an array, each memory cell includes a vertical transistor extending in a first direction and a capacitor coupled to the vertical transistor, the capacitor includes a first electrode and a second electrode opposite to each other, and the first electrode is coupled to the vertical transistor; the second semiconductor structure includes a peripheral circuit and is disposed on a side of the vertical transistor away from the capacitor in the first direction; the first semiconductor structure further includes a common electrode electrically connected to the second electrodes of the capacitors in the plurality of memory arrays and a common electrode contact plug disposed on a same side of the common electrode as the vertical transistors in the first direction, and the common electrode is coupled to the peripheral circuit through the common electrode contact plug.

[FIG. 3a]