

ABSTRACT OF THE DISCLOSURE

The memory device includes a memory cell array including a plurality of memory cells and a voltage generator configured to supply a voltage to the memory cell array. The voltage generator includes a charge pump circuit, a switching circuit, and a stage controller. The charge pump circuit includes a plurality of pump units and is configured to output a pump voltage and a pump current in accordance with a number of pump units that have received an input voltage among the plurality of pump units. The switching circuit is configured to output the pump voltage. The stage controller is configured to receive an input signal corresponding to the pump current and perform a stage control operation of generating a stage control signal for controlling the number of pump units to be driven.

FIG. 2