ABSTRACT

INPUT/OUTPUT CIRCUIT, MEMORY DEVICE HAVING THE SAME, AND OPERATING METHOD THEREOF

An input/output circuit for use in a memory includes: a data pattern detector for outputting an up resistance control code and a down resistance control code according to whether the pattern of consecutively input data is a consecutively varied pattern or an inconsecutively varied pattern; and an output circuit for controlling resistance in response to the up resistance control code and the down resistance control code, and amplifying the data and then outputting the amplified data to an input/output pad.

FIG. 3