

ABSTRACT

A memory device includes; a memory area including a first memory area including first memory cells storing N-bit data and a second memory area including
5 second memory cells storing M-bit data, where 'M' and 'N' are natural numbers and M is greater than N, and a controller configured to read data stored in the first memory area using a first read operation, read data stored in the second memory area using a second read operation different from the first read operation, and selectively store data in one of the first memory area and the second memory area based on a frequency of use (FOU) of
10 the data.

FIG. 2