

MEMORY SYSTEM

ABSTRACT

Embodiments of the disclosure provide a memory system including: a memory, configured to, during a read or write operation, write or read multiple data, here the multiple data are divided into M bytes, each having N data; and an encoding module, configured to generate, at an encoding stage, X first check codes, each based on a subset of the data at fixed bits among all the bytes, and to generate, at the encoding stage, Y second check codes based on all data in a subset of the bytes, here the X first check codes are configured for at least one of error detection or error correction on the N data in each of the bytes, and the Y second check codes are configured for at least one of error detection or error correction on the M bytes. The embodiments of the disclosure facilitate performance of the memory system to be improved.

[Fig. 2]