



## Memory Module, Memory Device, And Processing Device Having A Processor Mode And Memory System

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### The Invention

A memory module includes a memory device, a command/address buffering device, and a processing data buffer. The memory device includes a memory cell array, a first set of input/output terminals, each terminal configured to receive first command/address bits, and a second set of input/output terminals, each terminal configured to receive both data bits and second command/address bits. The command/address buffering device is configured to output the first command/address bits to the first set of input/output terminals. The processing data buffer is configured to output the data bits and second command/address bits to the second set of input/output terminals. The memory device is configured such that the first command/address bits, second command/address bits, and data bits are all used to access the memory cell array.

#### Tech Fields

- [Information Technology : Hardware](#)

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