

ABSTRACT

A storage device includes a first memory device, a second memory device, and a controller. The first memory device and the second memory device share the same channel to communicate with the controller. Communication between the first
5 memory device and the controller and communication between the second memory device and the controller are mutually exclusive. When the controller receives a read request directed to the second memory device while the controller processes a direct memory access (DMA) operation directed to the first memory device, the controller
10 suspends the DMA operation and transmits a read command associated with the read request to the second memory device.

FIG. 9