

MEMORY REFRESH TECHNOLOGY AND COMPUTER SYSTEM

ABSTRACT

This application provides a memory refresh technology and a computer system. The memory refresh technology is applied to a computer system including a memory controller and a dynamic random access memory DRAM. According to the memory refresh technology, the memory controller receives access requests. When a quantity of access requests for accessing a first rank in the DRAM that are in the received access requests is greater than 0 and less than a second threshold, the memory controller refreshes the first rank. According to the memory refresh technology provided in this application, the first rank can be refreshed in time even if the first rank cannot be in an idle state. Therefore, impact caused on computer system performance by an increase in passive refreshes caused by refresh postponements is mitigated, memory refresh flexibility is improved, and refresh overheads are reduced.

Figure 3