

38 Lecture - CS501

Important Subjective

1. What is a memory module?

Answer: A memory module is an electronic device that contains memory chips and is used to provide additional memory to a computer system.

What is the difference between a SIMM and a DIMM?

Answer: SIMM stands for Single In-line Memory Module and has a 32-bit data path, while DIMM stands for Dual In-line Memory Module and has a 64-bit data path.

What is the purpose of ECC memory?

Answer: ECC (Error Correction Code) memory is designed to detect and correct errors in memory, which can improve the overall stability and reliability of a computer system.

What is the maximum memory capacity of a DDR4 memory module?

Answer: The maximum memory capacity of a DDR4 memory module is 16GB.

What is the difference between a UDIMM and an RDIMM?

Answer: A UDIMM (Unbuffered DIMM) is a memory module that does not have a register, while an RDIMM (Registered DIMM) has a register that helps to improve memory stability and reduce electrical load on the memory controller.

What is the difference between a SODIMM and a regular DIMM?

Answer: SODIMM stands for Small Outline DIMM and is smaller in size than a regular DIMM. SODIMMs are commonly used in laptops and other portable devices.

What is the purpose of heat spreaders on memory modules?

Answer: Heat spreaders are designed to help dissipate heat generated by memory modules, which can improve their overall performance and longevity.

What is the maximum clock speed of DDR3 memory modules?

Answer: The maximum clock speed of DDR3 memory modules is 2133MHz.

What is the difference between a DDR3 and a DDR4 memory module?

Answer: DDR4 memory modules have a higher memory bandwidth and lower operating voltage than DDR3 memory modules, which can improve their overall performance and energy efficiency.

What is the purpose of memory channels in a computer system?

Answer: Memory channels are used to increase the memory bandwidth of a computer system, which can improve its overall performance.