

Computer hardware

[Technology](#), [Computer](#)



1.) Why does a motherboard sometimes support more than one Front Side Bus speed?

A motherboard sometimes supports more than one Front Side Bus speed to support a number of processors and memory that differ in bus speed.

2.) Why don't all buses on a motherboard operate at the same speed?

The reason that all the buses don't operate at the same speed on a motherboard is because some devices on the board are slower than others and don't require or can't support the same bus speed.

3.) When you turn off the power to a computer at night, it loses the date, and you must reenter it each morning. What is the problem and how do you solve it?

The problem is that the battery that runs the internal clock is no good. You either have to replace the battery or buy a new motherboard.

4.) Why do you think the trend is to store configuration information on a motherboard in CMOS RAM rather than by using jumpers or switches?

I think the trend to store configuration information on a motherboard in CMOS rather than by using jumpers or switches because it is easier.

5.) Why do you think the trend is to put more control such as the graphics controller and the memory controller in the processor rather than in the chipset?

6.) When troubleshooting a motherboard, you discover the network port no longer work. What is the best and least expensive solution to this problem? If this solution does not work, which solution should you try next?

c.) Use a wireless network device in a USB port to connect to a wireless network. b.) Disable the network port and install a network card in an expansion slot.

7.) A computer freezes at odd times. At first, you suspect the power supply or overheating, but have eliminated overheating and replaced the power supply without solving the problem. What do you do next?

e.) Flash BIOS

Chapter 5 Thinking Critically

1.) You need to upgrade memory in a system but you don't have the motherboard documentation available. You open the case and notice that the motherboard has four DIMM slots; three slots are colored yellow and one slot is black. What type of DIMM does the motherboard likely use? How can you tell?

It would most likely be a DDR3 SDRAM. It is capable of triple channeling and that's what the yellow slots mean.

2.) If your motherboard supports DIMM memory, will RIMM memory still work on the board?

No RIMM only works with RD-RAM boards. Different memory has different pins.

3.) If your motherboard supports ECC SDRAM memory, can you substitute non-ECC SDRAM memory? If your motherboard supports buffered SDRAM memory, can you substitute un-buffered SDRAM modules?

If your motherboard supports ECC SDRAM memory you can substitute with non-ECC SDRAM memory you would have to go in to CMOS to setup to enable or disable this feature if your motherboard supports it. No you can't use un-buffered SDRAM memory on a motherboard that supports buffered memory because the notches on the buffered DIMMs are in different positions than the un-buffered DIMMs.

4.) You have just upgraded memory on a computer from 1 GB to 2 GB by adding one DIMM. When you first turn on the PC, the memory count shows only 1 GB. Select which of the following is most likely the source of the problem. What can you do to fix it?

c.) The new DIMM is not properly seated. To fix this you would need to take the computer apart and make sure it is pushed in all the way.

5.) Your motherboard supports dual channeling and you currently have two slots used in channel A on the board; each module holds 1 GB of RAM. Will your system run faster if you install two 512 MB DIMMs or one 1 GB DIMM? Explain your answer.

The system will run faster by installing the two 512 MB DIMMs rather than one 1 GB DIMM because it is a dual channel and it works better if the pair of DIMMs are equally matched in size, speed, and features. It is also recommended that they come from the same manufacture.