Unit 19 D2

**How will the address bus width affect the computers processor performance?**

The width of the address bus does affect the computers speed and performance this is because the data bus includes electrical cables that make the bus up and if the bus has a lot of width the data be fetched even quicker because more data can travel through the electrical cables. The widths of the cable can be 1-, 4-, 8-, 16-, 32-, and 64-bit max.

On the computer that you have if you check the bit (which is the width of the data bus) it will either say 32 bit or 64 bit because that is the normal width of the buses these days if your computer has 32 bit they are referring to the width of the front side bus in your processor.

The way the width of the data bus affects the performance of your computer is that if you have a 64 bit computer which is the max computers have right now it means that you have the fastest performance. If you have a bigger width on your data bus it means that you can fetch more data so basically the higher the width the faster data can be fetched.

The width of the data cables control all the processing in the computer because the data travels through the cables and reads the denary code and coverts it so that the processor can process the information. This means that the higher the width the faster the data can be converted and fetched. It also means the width contains the power to choose how much it wants to convert depending on how much can fit inside the width.

Now that you know the higher the width the more data can be read which means that you improve your computers performance. This means that the higher the width the higher digits the number can have when it exits, like 64 bits can have 64 exit digits but only the higher width cables can handle that many digits.