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Module A.2 Level 2 Answers

1. – The first CPU chip such as the 8086 was made by Intel and released in July 1976 and it contained DNA which is at the centre of a computer (Windows, Mac, etc.)

* An integrated circuit is an electronic circuit formed on a small piece of semiconducting material, doing the same function as a larger circuit made from discrete components
* Before ICs, computers were made using vacuum tubes and solid state devices such as the transistor

1. - Core Memory is described as tiny donuts made of magnetic material strung on wires into an array

* “The idea revolutionized computer memory”
* Each one of the donuts was a bit, magnetized one way for “zero” and the other way for “one”
* The wires could detect and change the magnetization
* Random Access Memory is long in shape and is much more advance
* Moore’s law “refers to an observation made by Intel co-founder Gorden Moore in 1965. He noticed that the number of transistors per square inch on integrated circuits has doubled every year since their innovation”
* “It predicts that this trend will continue in the future”
* RAM follows the Moore’s law, but is gradually slowing down the doubling if integrated circuits.
* RAM is the physical hardware inside a computer. Hard disks are external and not inside the computer.
* RAM has evolved in technology and has become better in that sense. Old vacuum tubes and magnetic cords are replaced to enable motherboard development and eventually allowing computers to develop and improve to what we know and use today

1. – A VGA is display hardware as well as a cable

* They utilize an HD15 connector (male of female depending on the equipment being attached) to connect the monitor and laptop/PC
* The VGA was introduced in 1987
* The VGA is a three row, 15 pin DE-15 connector cable
* The VGA hardware is a chip like card
* Before VGA, there were green screen monitors that produced graphics
* 3D graphics were introduced in 1976
* The first 3D graphic cards, such as the S3 Virge, had many different parts and features
* They were a bit complex
* The performance of graphic cards has changed a lot over the years
* Before, they only displayed rows of characters
* Now, the render photorealistic scenes in real-time
* The appearance and designs of graphics cards have also evolved over time and experienced radical changes