



What is meant by the term 'embedded system'?	Explain the term 'Memory Management' in relation to the role of the operating system.	If the clock speed of a CPU is 3.3MHz, how many cycles will the CPU perform in a second?
Convert 1100111 into denary.	Draw an AND gate.	Roughly, how many bytes are in a terabyte?



What is meant by the term 'embedded system'?

**An embedded system is a computer which has all of its components arranged together on a single circuit board. They usually run specific tasks (are not general purpose).**

Explain the term 'Memory Management' in relation to the role of the operating system.

**When you load an application, the OS will copy the application to the RAM and will ensure that it has its own space on the RAM, stopping other programs reading and writing to the memory area for another application. It is also responsible for managing virtual memory.**

If the clock speed of a CPU is 3.3MHz, how many cycles will the CPU perform in a second?

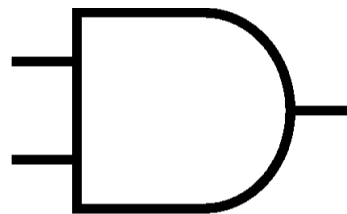
**A clock speed of 3.3MHz means 3.3 million cycles per second.**

Convert 1100111 into denary.

128	64	32	16	8	4	2	1
(0)	1	1	0	0	1	1	1

$$64 + 32 + 4 + 2 + 1 = 103$$

Draw an AND gate.



Roughly, how many bytes are in a terabyte?

**1 Trillion Bytes**