Basic concepts of Semiconductor RAMs

Semiconductor RAM:

It is a form of computer data storage which stores frequently used program instructions to increase the general speed of a system.

SRAM(Static Random Access Memory):

This form of semiconductor memory gains its name from the fact that, unlike DRAM, the data does not need to be refreshed dynamically.These semiconductor devices are able to support faster read and write times than DRAM

DRAM(Dynamic Random Access Memory):

It is a form of random access memory. DRAM uses a capacitor to store each bit of data, and the level of charge on each capacitor determines whether that bit is a logical 1 or 0.However these capacitors do not hold their charge indefinitely, and therefore the data needs to be refreshed periodically.

Semiconductor Memory:

Semiconductor memory is used in any electronics assembly that uses computer processing technology. Semiconductor memory is the essential electronics component needed for any computer based PCB assembly.

Types of Semiconductor Memory:

1.RAM(Random Access Memory): It is a form of semiconductor memory technology that is used for reading and writing data in any order.Data is stored and read many times to and from this type of memory.

2.ROM(Read Only Memory): It is a form of semiconductor memory technology used where the data is written once and then not changed. In view of this it is used where data needs to be stored permanently, even when the power is removed - many memory technologies lose the data once the power is removed.

Ques 4 Give the structure of a commercial 8M x 8-bit DRAM chip.

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Answer:

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