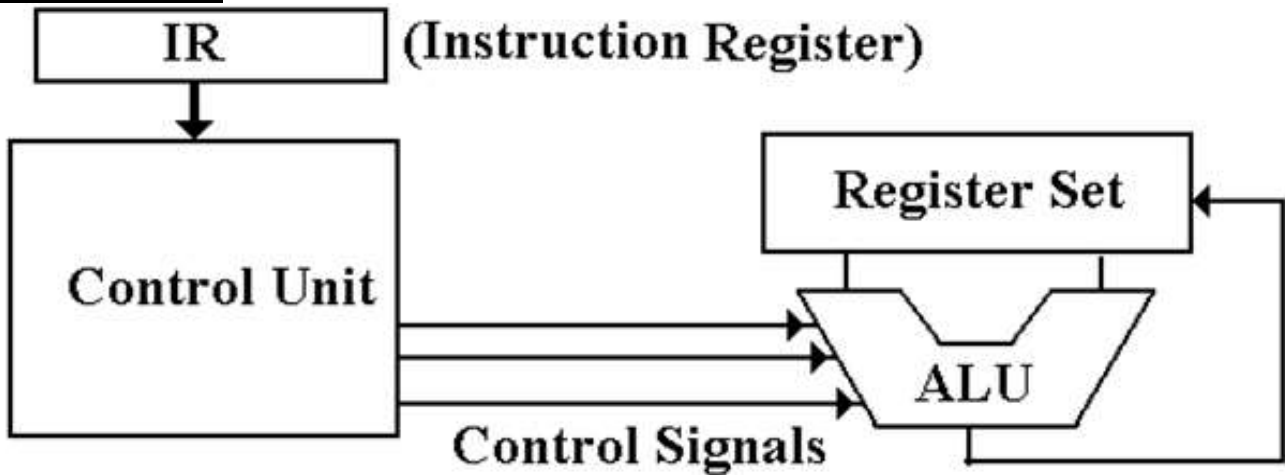




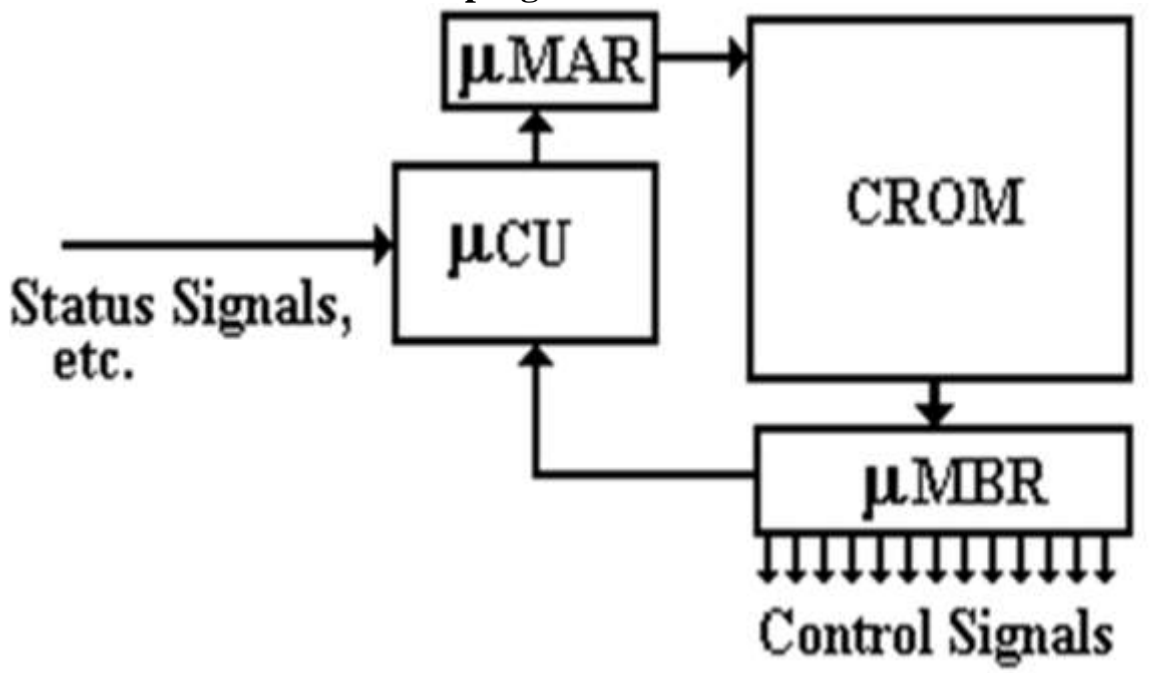
**Control Units:**



**Two Options for the Control Unit**

- **Hardwired:** The control signals are generated as an output of a set of basic logic gates, the input of which derives from the binary bits in the Instruction Register.
- **Microprogrammed:** The control signals are generated by a microprogram that is stored in Control Read Only Memory.

**The Microprogrammed Control Unit**



## Hardwired Signal Generation

