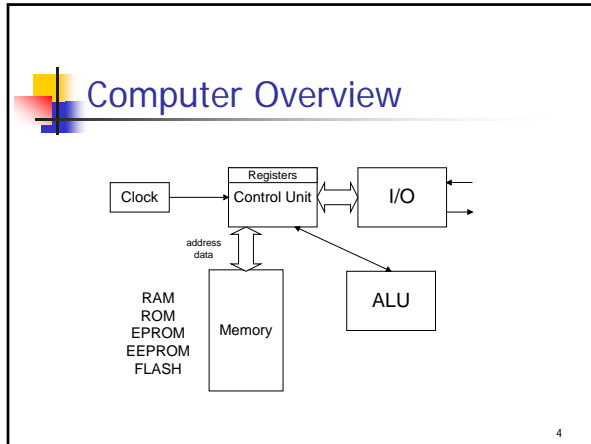


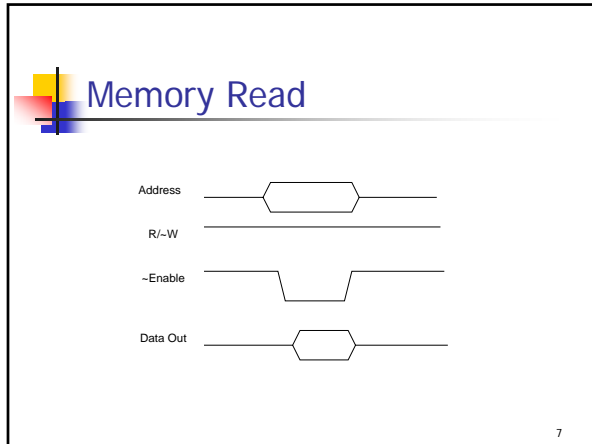
Parts of a computer

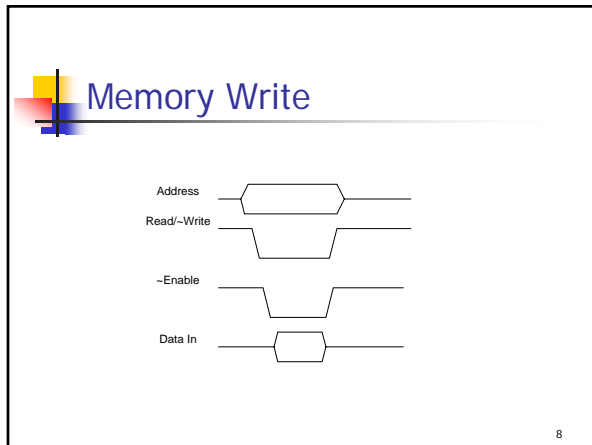
- Clock circuit – usually crystal controlled, may be an RC circuit (low cost PICs, frequency drifts with humidity and temperature)
- Control Unit
- ALU – Arithmetic-Logic Unit
- Memory – RAM, ROM, EEPROM, flash, etc.
- I/O – Input/Output; video, serial, parallel, USB, SCSI, etc.



- ### Memory Structure
- Address bus (16-bit in 68HC11)
 - Data bus (8-bit in 68HC11)
 - Control (Read/~Write and Enable signals)
 - A unique address references each memory byte.

- ### Memory Types
- Volatile – RAM
 - SRAM (used on Fox11, 0x8000-0xFFFF)
 - DRAM
 - Nonvolatile – ROM
 - ROM
 - PROM
 - EPROM (used on Fox11 for Wyttec debugger)
 - EEPROM
 - FLASH ROM





- ### Control Unit
- Steps to execution
 - Fetch (retrieve instruction from memory)
 - Decode (which instruction is it?)
 - Execute (do it)
 - In non-parallel processors, all code is executed sequentially
- 9

