



## Chapter 12 Important Points

This is a summary of the parts of Chapter 12 that you should understand and be able to explain. In addition you should be able to solve problems related to them.

1. I/O Hardware: ports buses, controllers and devices
  - (a) memory mapped I/O
  - (b) direct I/O
2. I/O system software:
  - (a) device drivers
  - (b) I/O programs
  - (c) polling
3. Interrupt-driven I/O: steps
4. DMA:
  - (a) what it is,
  - (b) steps that take place
  - (c) issues
5. Device characteristics
6. Steps in I/O - life cycle of an I/O operation