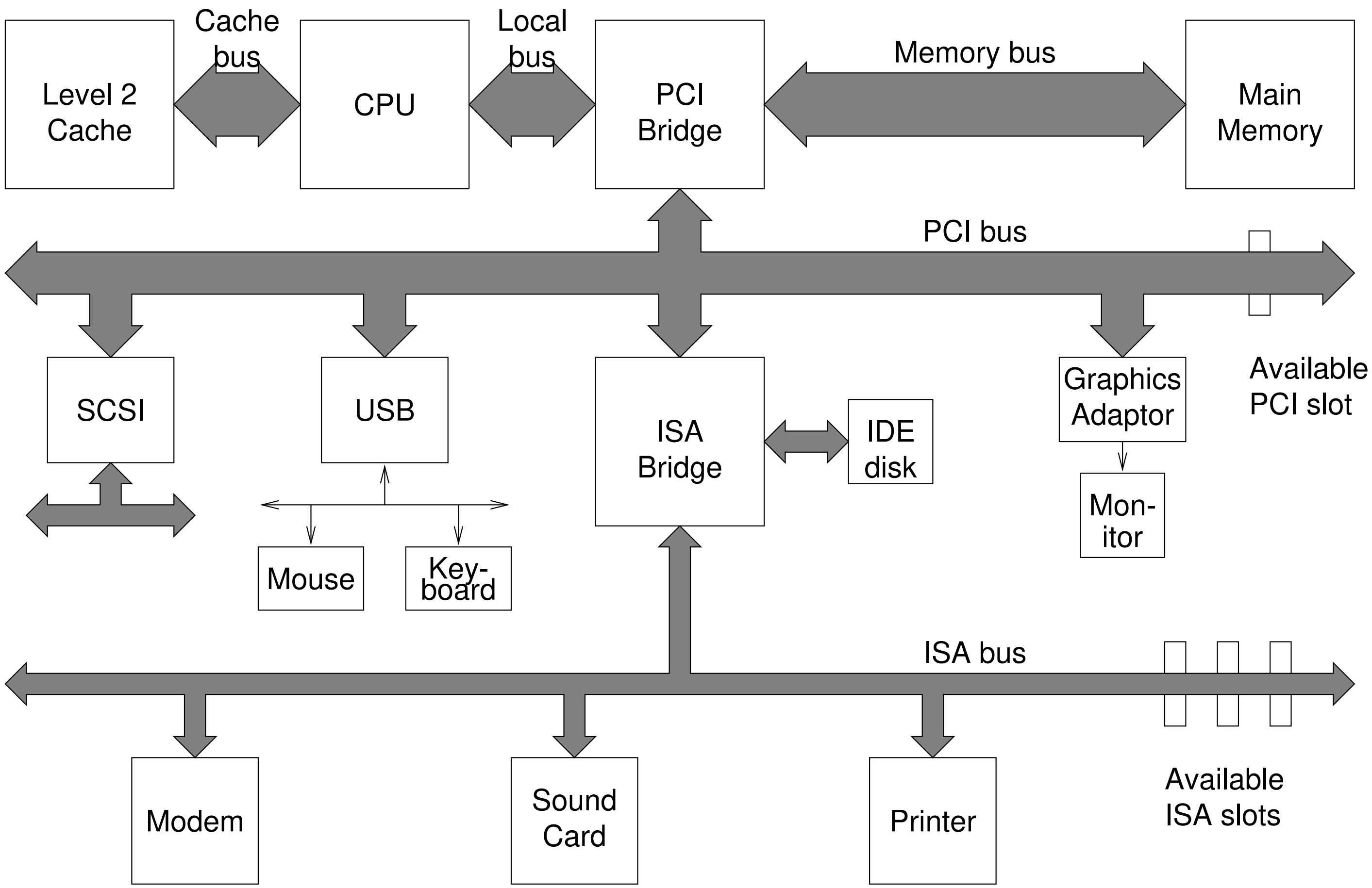
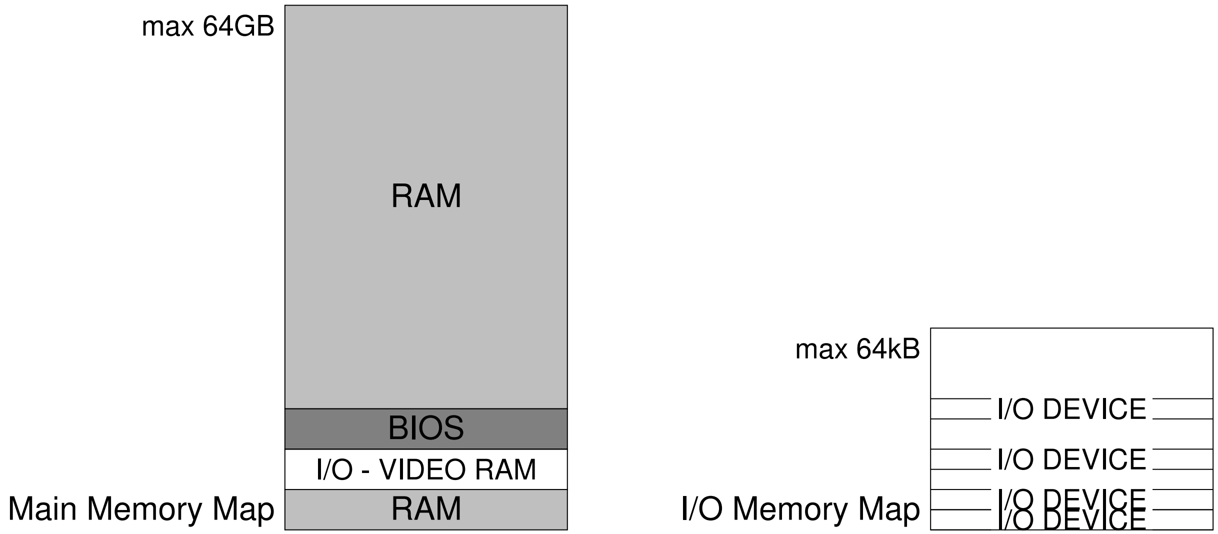
PC Architecture

- Example PC multi-bus architecture



PC Interfacing

- PC Memory Map

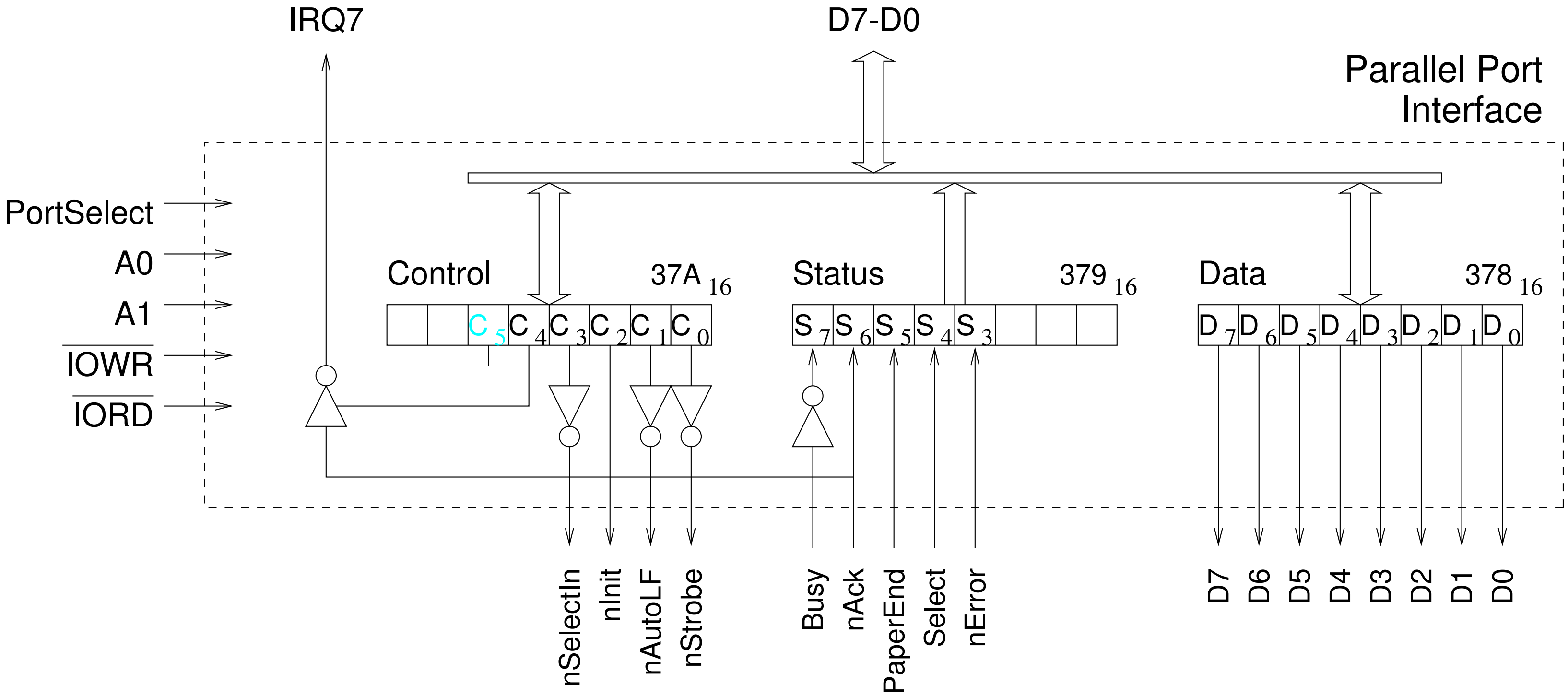


x86 processors support

- memory mapped I/O
  used for video ram
- a separate I/O address space
  used for most I/O devices
  accessed via special instructions; IN OUT

PC Interfacing

- Parallel Port – for centronics printers
  - 5 inputs — 8 + 4 outputs
  - IRQ7 interrupt — *can be disabled*



Lift Interface Board

- Limited I/O resources
  - multiplexor allows us to query any input
  - AND gate allows interrupt if any call button is active