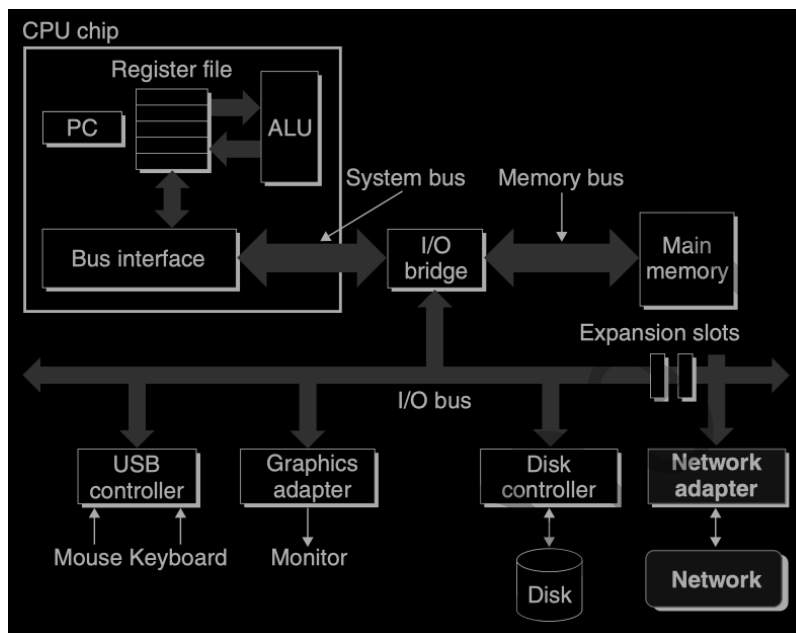


## 1\_8

# Chapter 1: A Tour of Computer System

## 1.8 Systems Communicate with Other Systems Using Networks

- In practice, modern systems are often linked to other systems by networks.
- From the point of view of an individual system, the network can be viewed as just another I/O device:
  - When the system copies a sequence of bytes from main memory to the network adapter, the data flow across the network to another machine, instead of, say, to a local disk drive.
  - Similarly, the system can read data sent from other machines and copy these data to its main memory.



- Steps of running hello on a remote machine:
  - Suppose we use a telnet client running on our local machine to connect to a telnet server on a remote machine.
  - After we log in to the remote machine and run a shell, the remote shell is waiting to receive an input command.
  - After we type in the hello string to the telnet client and hit the enter key, the client sends the string to the telnet server.
  - After the telnet server receives the string from the network, it passes it along to the remote shell program.
  - the remote shell runs the hello program and passes the output string back to the telnet server.
  - the telnet server forwards the output string across the network to the telnet client, which prints the output string on our local terminal.