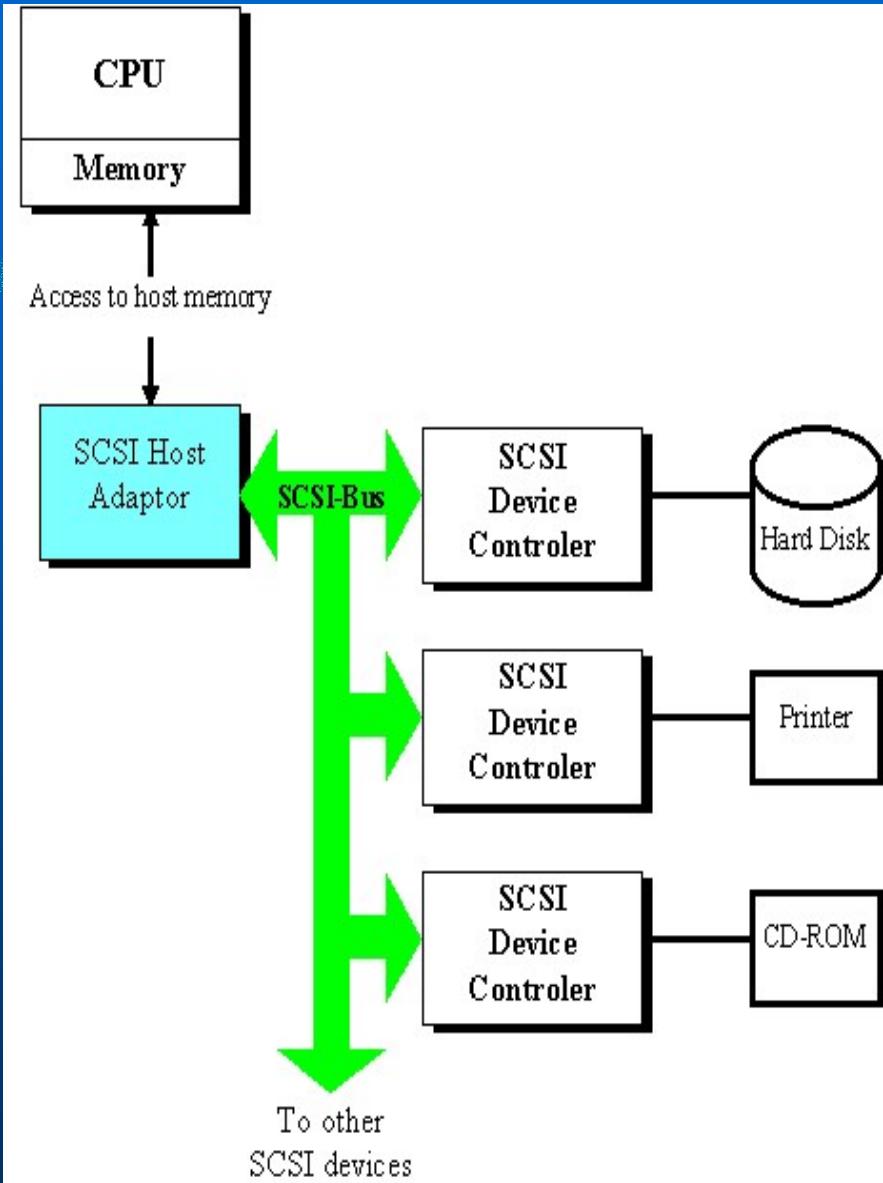


SCSI

- Small Computer System Interface.
- A high-speed, intelligent peripheral I/O bus with a device independent protocol. It allows different peripheral devices and hosts to be interconnected on the same bus. Depending on the type of SCSI, you may have up to 8 or 16 devices connected to the SCSI bus.



- There must be at least one initiator (usually a host) and one target (a peripheral device) on a bus.
- There is a large variety of peripheral devices available for SCSI, including hard disk drives, floppy drives, CDs, optical storage devices, tape drives, printers and scanners to name a few.

SCSI Bus Phases

- **BUS Free Phase**
 - **BUS FREE phase begins when the SEL and BSY signals are both continuously false for a bus settle delay. It ends when the BSY signal becomes true.**
- **Arbitration Phase**
 - **In this state a unit can take control of the bus and become an initiator.**

SCSI Bus Phases (cont'd)

- **Selection Phase**
 - In this state the initiator selects a target unit and gets the target to carry out a given function, such as reading or writing data.

SCSI Bus Phases (cont'd)

- **Message Phase**
 - This is the first information transfer phase in the connection. It allows the initiator to send an Identify message to the target. Messages are always transferred asynchronously

SCSI Bus Phases (cont'd)

- **Command Phase**
 - The command phase is used by the target to request command information from the initiator.
- **Data In Phase**
 - The target responds with Inquiry data. The data is transferred synchronously if both the target and the initiator have previously established a synchronous data transfer agreement

SCSI Bus (cont'd)

- Status Phase
 - The target sends a single status byte asynchronously
- Message In Phase
 - The last information that is transferred in the connection is typically the Command Complete message
- Back to Bus Free Phase

Varieties of SCSI

- **SCSI-1**
- **SCSI-2**
- **Wide SCSI**
- **Fast SCSI**
- **Fast Wide SCSI**
- **Ultra SCSI**
- **SCSI-3**
- **Ultra2 SCSI**
- **Wide Ultra2 SCSI**