11 Serial Data Communication & 8251

This Chapter is a just-to-know chapter.

Data transmission is the transfer of data from point to point often represented as an electromagnetic signal over a physical communication channel

A **communication channel** refers to the medium used to *convey information from a sender (or transmitter)* to a receiver.

Different way to transfer data

- Parallel data transfers: expensive & fast, suitable for short-distance transmission.
- Serial data transfers: cheap & slow, suitable for long-distance transmission.

MODEM: *Modulate* and *Demodulate* the signals.

Serial Communication



where DTE means Data Terminal Equipment and DCE means Data Communication Equipment.

- Data transfer rate;
- Synchronization methods;
- Communication modes;
- Error detection;
- Modulation and Demodulation.