Assignment1: Serial and Parallel Communications

**Serial Communication**: Data is transmitted at the rate of one bit per unit time through a single channel sequentially.

**Parallel Communication:** Group of bits are transmitted (one or more byte) at a time through group of channels.

|  |  |
| --- | --- |
| **Serial Communication** | **Parallel Communication** |
| Used For long Distance | Used For Shorter Distance |
| 1 bit is transmitted at 1 clock pulse | Group of bits is transmitted at 1 clock pulse |
| Cost is less than Parallel | Involves more cost |
| No of channels required are on | No of channel are required more than two according to mode of communication and data bits sent |
| Error are less | Error are more |
| Cables are thinner and longer | Cable are thicker than serial |
| Reliable | Unreliable and complicated |
| Communication Mode Duplex | Communication mode Half Duplex |