

SERIAL PERIPHERAL INTERFACE (SPI)

What it is ?

- It's a Synchronous Serial Bus Standard.
- Developed by Motorola and Supported by various microprocessor and controller manufacturers.
- Devices communicate using Master / Slave relationship in which master initiates the data frame.
- Data is transferred in both directions.
- Speed between 1-3 Mbps and 8 bit data is transferred.



- **MISO = Master In Slave Out**
- **MOSI = Master Out Slave In**
- **SS = Slave Select**

Contd..

- It is up to the Master and Slave devices to know whether a received byte is meaningful or not.
- Drawbacks :
- This do not have acknowledge mechanism.
- No flow control.
- It is suitable whenever only raw data are exchanged.
- Will be trouble some with more no.of slaves.
- Motorola , PIC, AVR supports SPI.
- **H.W** Comparison of I2C and SPI.

THANK - YOU