CE293 Team 1 – Darrel Januardi

Serial Peripheral Interface

SPI is serial communication method used for short distance communication. It is mainly used in microcontrollers and small devices such as shift registers, SD cards, and sensors. Basically how this method works is that is uses separate CLOCK and DATA lines and a SELECT line to select which device to communicate with.

SPI devices has four signals:

- CLOCK (SPI CLK)
- CHIP SELECT (CS)
- Master out, Slave in (MOSI)
- Master in, Slave out (MISO)

The device that produces the clock signal is the MASTER. The CHIP SELECT signal is used to select the SLAVE. MOSI and MISO are data lines. MOSI transmits data from the MASTER to the SLAVE, vice-versa for MISO. SPI can operate with a single MASTER and multiple SLAVES.