

# IO Expander - MCP23S17

## Description

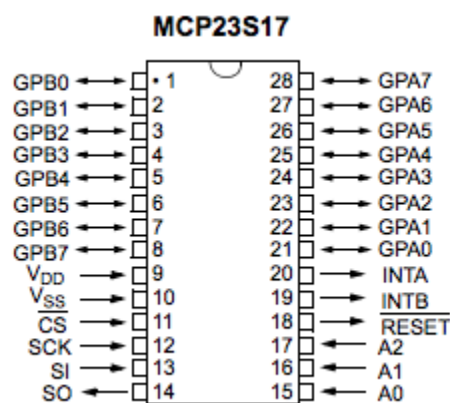
The MCP23017/MCP23S17 (MCP23X17) device family provides 16-bit, general purpose parallel I/O expansion for I2C bus or SPI applications. The two devices differ only in the serial interface.

- MCP23017 – I2C interface
- **MCP23S17 – SPI interface**

The MCP23X17 consists of multiple 8-bit configuration registers for input, output and polarity selection. The system master can enable the I/Os as either inputs or outputs by writing the I/O configuration bits (IODIRA/B). The data for each input or output is kept in the corresponding input or output register. The polarity of the Input Port register can be inverted with the Polarity Inversion register. All registers can be read by the system master.

## Features

## Pins



## Sample Code

## References

Reference	URL
Manufacturer's Page	<a href="http://www.microchip.com/wwwproducts/en/MCP23S17">http://www.microchip.com/wwwproducts/en/MCP23S17</a>
DataSheet	<a href="http://ww1.microchip.com/downloads/en/DeviceDoc/20001952C.pdf">http://ww1.microchip.com/downloads/en/DeviceDoc/20001952C.pdf</a>