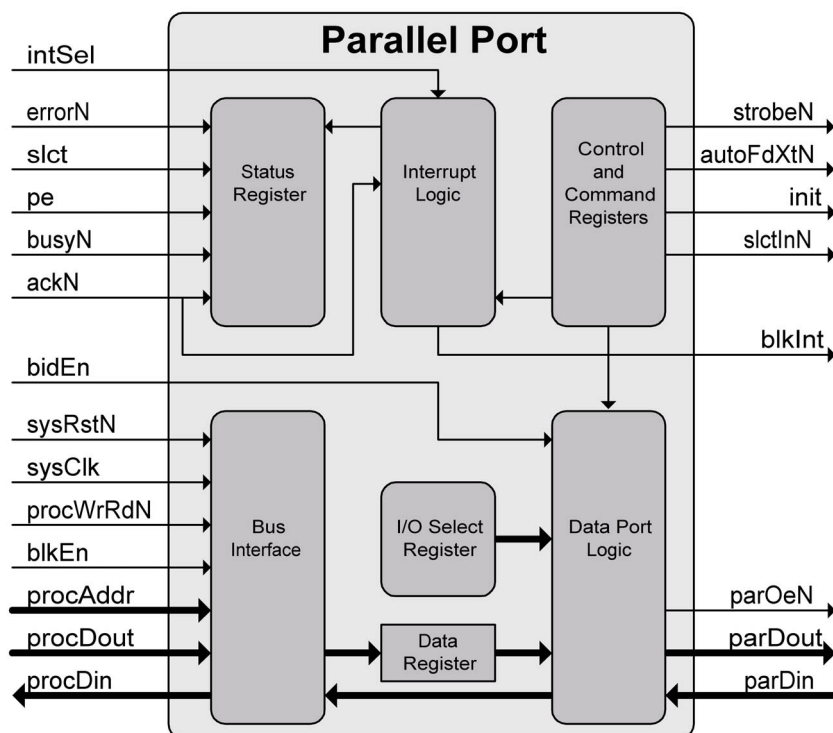


## Features

- 8-bit bidirectional data port
- CENTRONICS compatible
- Interrupt output
- Two I/O modes
- Two interrupt modes
- Standard uP bus interface
- Included in PiP-EC Embedded Controller Verilog IP
- Testbench and Bus Functional Model included



## General Description

The **SoC-IP1008** is an 8-bit bidirectional parallel port compatible with CENTRONICS type printers. It contains a standard microprocessor bus interface to access its status, command, and control registers which monitor and control the printer I/O, the interrupt system, and the bidirectional data interface. All signals needed to generate a bidirectional data bus are generated within the parallel port.

Two I/O modes are supported in the **SoC-IP1008** to allow the programmer to control the parallel port by a direction bit in the control register, or in an IBM interface compatible mode using the I/O Select register.

The **SoC-IP1008** also has two interrupt modes ("ack" and "latch" modes) to control interrupts based off of the ackN input. The "ack" interrupt mode allows interrupt generation by tracking the ackN input for any activity while the "latch" interrupt mode causes the parallel port to generate an interrupt on the assertion of the ackN input.

## IP Package

The **SoC-IP1008** Parallel Port package includes fully tested and verified Verilog source, comprehensive Verilog testbench, microprocessor Bus Functional Model, and TCL simulation scripts.