

# IEEE 1284 Parallel Data Bus

## Application Overview

The IEEE1284 standard defines a signaling method for asynchronous, fully interlocked, bidirectional parallel communications between hosts and printers or other peripherals. The IEEE 1284 interface is designed to be interoperable with an older interface called “Centronics.” The “Centronics-compatible” printer interface is widely used today. Its standard external interface connector is a 36-pin AMP 555119-1 or equivalent connector and is by definition the same as the IEEE 1284-B connector. An example of this type of interface is the print server whereby a pocket-sized print server device connects printers directly to a network allowing users of different operating systems to share printer resources.

### Problem/Solution

Pin #18 of the connector can source up to 350mA at 5V. A misconnection of the connectors or a foreign metal object placed into the connector can cause a large overcurrent which could damage internal electronics. Placing a PolySwitch device in series with the connector will help to protect the system circuitry when a fault occurs.

### Typical Agency Approval Requirements

IEC60950 and UL1950 agency approvals apply to all Information Technology equipment.

### Device Selection

Devices from the microSMD and miniSMD series are typically used for this application.

Figure 1. Typical Schematic

