EZ-USB AT2™ USB 2.0 To ATA/ATAPI Bridge

1.0 Features

- **Complies with USB-IF specifications for USB 2.0, the USB *Mass Storage Class*, and the USB *Mass Storage Class Bulk-Only Transport Specification***
- **Operates at high (480-Mbps) or full (12-Mbps) speed**
- **Complies with T13's ATA/ATAPI-6 Draft Specification**
- **Supports 48-bit addressing for large hard drives**
- **Supports PIO modes 0, 3, 4, and UDMA modes 2, 4**
- **Uses one external serial EEPROM containing the USB device serial number, vendor and product identification data, and device configuration data**
- **ATA interface IRQ signal support**
- **Support for a single ATA/ATAPI device configured either as master or slave**
- **"ATA-Enable" input signal, which three-states all signals on the ATA interface in order to allow sharing of the bus with another controller (e.g., an IEEE-1394 to ATA bridge chip)**
- **Support for board-level manufacturing test via USB interface**
- **3.3V operation for self-powered devices**
- **56-pin SSOP and 56-pin QFN packages**

2.0 Introduction

The CY7C68300A implements a fixed-function bridge between one USB port and one ATA- or ATAPI-based mass storage device port. This bridge adheres to the *Mass Storage Class Bulk-Only Transport Specification* and is intended for self-powered devices.

The USB port of the CY7C68300A is connected to a host computer directly or via the downstream port of a USB hub. Host software issues commands and data to the CY7C68300A

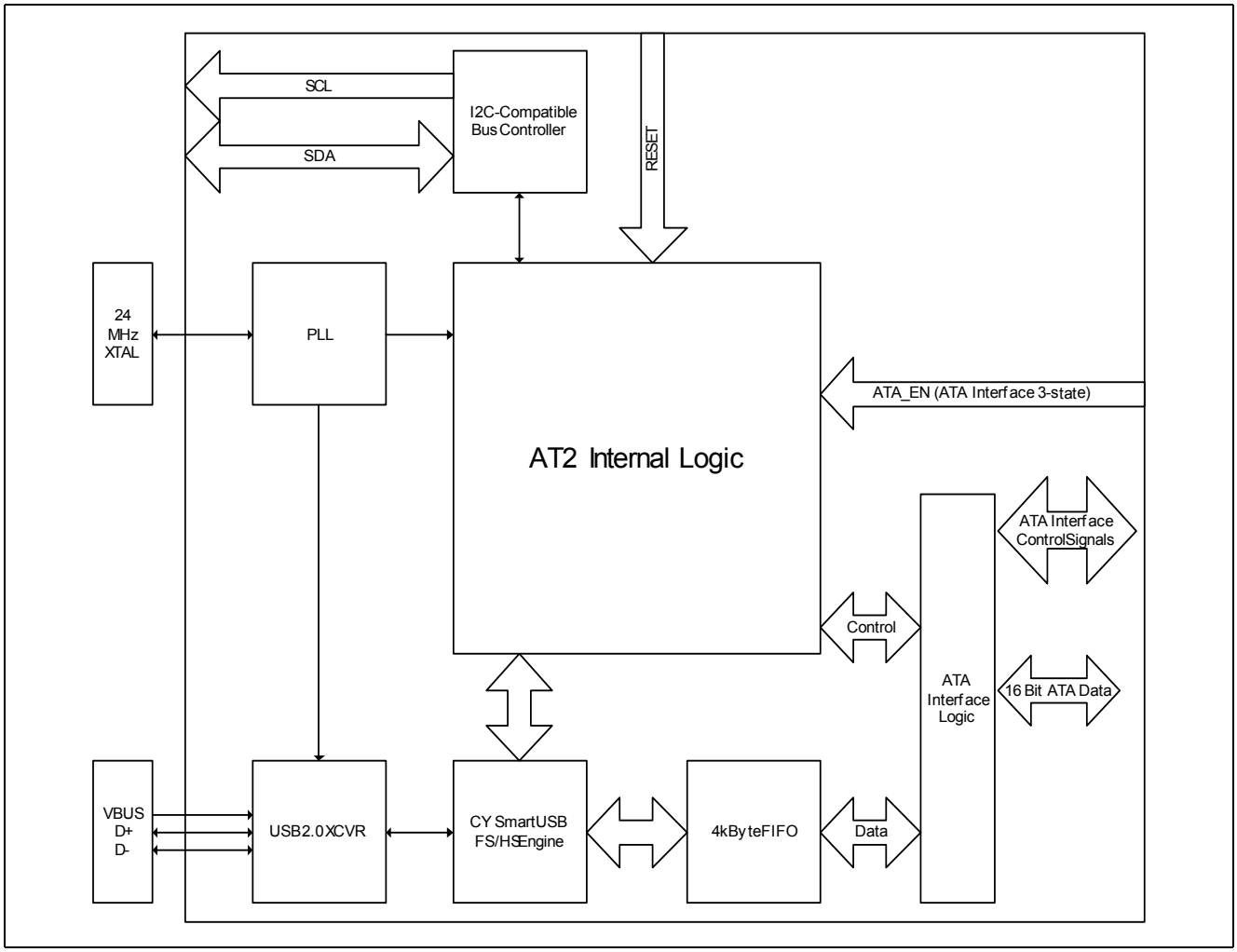

Figure 1-1. Block Diagram