



USB/SATA to SATA Bridge

Overview

The INIC-1610 provides an advanced solution to connect SATA devices to USB or SATA Host with integrated CPU and embedded SRAM. To provide high performance and cost effective solution, the INIC-1610 integrates USB-PHY Mass Storage Class Bulk-Only USB function, SATA link/PHY core and microprocessor into a single ASIC. The INIC-1610 provides the data transfer rate of up to 60 MB/sec connecting to a 1.5G SATA interface.

Feature Summary

- Integrates USB2.0 PHY IP core.
 - Data transfer rate of up to 60 MB/sec on USB side, 150 MB/sec on SATA side.
 - Integrated internal Turbo 8051 uP with 16KB embedded SRAM.
 - Program Flash In-Line (Firmware download mechanism, USB direct for MFG Test, write .bta file.
 - Local Bus Interface to Serial Peripheral Interface (SPI) Flash Only.
 - Support HID.
 - Up to 9 GPIO pins.
 - The option of using only one external crystal
 - Provide software utilities for downloading the upgraded firmware code under USB.
- Supports SATA (bridged SATA) Hard Disk drives, CD-RW devices, DVDs, Removable media devices, BD (Blu-ray Disc) drive.
 - USB 1.1 and USB 2.0 compliant.
 - USB Mass Storage Class Bulk-Only Transport Specification Compliant.
 - SATA specification 1.0, SATA II and eSATA Compliant (Hot Plug is supported).
 - Support SATA to SATA pass through.
 - Supports SATA NCQ.
 - Supports 3Gbps SATA host and 3Gbps SATA HDD.
 - Support ATA/ATAPI device DMA and PIO mode.
 - 4k bytes of data buffer for data transfer.
 - On-Chip 3.3V to 1.8V regulator.
 - 64 pin LQFP (7mm x 7mm or 10mm x 10mm)

Firmware/Software Support

- USB Mass Storage Class Bulk-Only Transport support
- Provide software utilities for downloading the upgraded firmware code

Devices Support

- Hard disk drives
- CD-RW devices
- DVDs
- Removable media devices
- BD(Blu-ray Disc) Drive



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PRODUCT BRIEF

Block Diagram

