



USB to SATA Bridge

Overview

INIC-1605 provides an advanced solution to connect SATA devices to USB Host with integrated CPU and embedded SRAM. To provide high performance and cost effective solution, INIC-1605 integrates USB-PHY Mass Storage Class Bulk-Only USB function, SATA link/PHY core and microprocessor into a single ASIC. INIC-1605 provides the data transfer rate of up to 60 MB/sec connecting to a 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).
- Supports 3Gbps SATA HDD connection.
- 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



USB to SATA Bridge - INIC-1605

PRODUCT BRIEF

Block Diagram

