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## ***USB to SATA Bridge***

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### ***Overview***

The INIC-1608 provides an advanced solution to connect SATA devices to USB Host with integrated CPU and embedded SRAM/ROM. To provide high performance and cost effective solution, the INIC-1608 integrates USB-PHY, Mass Storage Class Bulk-Only USB function, SATA link/PHY core and microprocessor into a single ASIC. The INIC-1608 provides the data transfer rate of up to 60 MB/sec connecting to a 1.5G SATA interface.

- USB 1.1 and USB 2.0 compliant.
- USB Mass Storage Class Bulk-Only Transport Specification Compliant.
- SATA specification 1.0, SATA II Compliant (Hot Plug is supported).
- Support SATA BIST through USB and SATA bus
- Support ATA/ ATAPI device DMA and PIO mode.
- 2k bytes of data buffer for data transfer.
- On-Chip 3.3V to 1.8V regulator and 5V to 3.3V regulator.
- 48 pin LQFP

### ***Feature Summary***

- Integrates USB2.0 PHY IP core.
- Data transfer rate of up to 60 MB/sec.
- Integrated internal Turbo 8051 uP with 24KB embedded ROM and 2KB SRAM.
- External NVRAM supported (optional).
- Support HID.
- Up to 8 GPIO pins.
- Use a single crystal for both USB and SATA
- Supports SATA (bridged SATA) Hard Disk drives, CD-RW devices, DVDs, Removable media devices, BD drive(Blue Ray)

### ***Firmware/Software Support***

- USB Mass Storage Class Bulk-Only Transport support
- Provide software utilities for NVRAM upgraded.

### ***Devices Support***

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

## Block Diagram

