



P1394a and USB to ATA Bridge

Overview

The Initio INIC-1530 provides an advanced solution to connect ATAPI or EIDE devices to IEEE-1394a and USB interface with integrated CPU and embedded SRAM. To provide high performance and cost effective solution, the INIC-1530 integrates 1394a link core, USB-PHY, Mass Storage Class Bulk-Only USB function, ATA control block and microprocessor into a single ASIC. The INIC-1530 provides the data transfer rate of up to 50 MB/sec; its ATA interface supports ultra DMA modes (33/66/100 MB/sec).

Feature Summary

- IEEE Std 1394-1995 and IEEE 1394a-2000 Compliant
- Support industry standard 1394a PHY
- Support Asynchronous Transfers at 100, 200 and 400 Mb/s for 1394a
- Implements 1394a SBP-2 stack engine to optimize the performance
- USB Mass Storage Class Bulk-Only specification-compliant (version 1.0)
- Two Bulk endpoints(IN and OUT) and one Interrupt endpoint(IN)

- T13 1410D ATA/ATAPI-6 Compliant (3.3 V with 5V tolerance)
- Support DMA mode 0-2, and UDMA mode 2,4 and 5 (up to 100MB/s)
- Integrated internal CPU with embedded SRAM
- In-system programming supported
- Local Bus Interface to parallel Flash or SPI serial Flash memory
- Up to 11 GPIO pins
- Low power CMOS with 3.3Volts
- 128-pin LQFP package

Firmware/Software Support

- 1394 Protocols support including SBP-2, MMC-2, RBC and ATA/ATAPI
- USB Mass Storage Class Bulk-Only Transport support and/or USB HID support
- Provide software utilities for downloading the upgraded firmware code

Devices Support

- Hard disk drives
- CD-RW devices
- DVDs
- Removable media devices
- Tape drives

Block Diagram

