



JM20338 Hi-Speed USB & SATA Combo to PATA Bridge



Description

The JM20338 is single chip solution to bridge between USB 2.0, SATA and ATA/ATAPI-based mass storage device. It provides the capability to translate USB 2.0 mass storage and SATA protocols to ATA/ATAPI commands. The USB adheres to the Mass Storage Class Bulk-Only Transport Specification, and supports dual LUN operation. The embedded command parser supports both ATA and ATAPI command set with LBA48 bit addressing capability.

Features

- Compliance with GenI, and GenI_m of Serial ATA II Electrical Specification 1.0
- Support SATA spread-spectrum transmitter
- Support SATA II Asynchronous Signal Recovery (Hot Plug) feature
- Compliance with USB 2.0 (Hi-Speed USB) electrical specification
- Compliance with USB Mass Storage Class Bulk-Only Transport Specification
- Support 480Mbps High Speed (HS) and 12Mbps Full Speed USB operation
- Support ATA/ATAPI-7
- Support ATA/ATAPI Ultra DMA Mode
- Support ATA/ATAPI PACKET command feature set
- Support ATA/ATAPI LBA48 addressing mode
- Support dual LUN (Logic Unit Number) for USB to ATA/ATAPI
- Support 12MHz external crystal.
- Single-power 3.3V power supply
- 0.18um CMOS technology and 64-pin LQFP ASSP package

Quick Reference

Signal Bit Rate	1.5 Gbps/SATA and 480 Mbps/USB
Spread Spectrum	-0.3% to 0.0
Power Supply	3.3V
ESD Protection	2000 V
Adj. Amplitude	2 levels
Adj. Pre-emphasis	4 levels
Package	64-pin LQFP
Applications	USB & SATA products <ul style="list-style-type: none"> • Enclosure system • Storage subsystem • Backward compatible Storage system

Functional Block Diagram

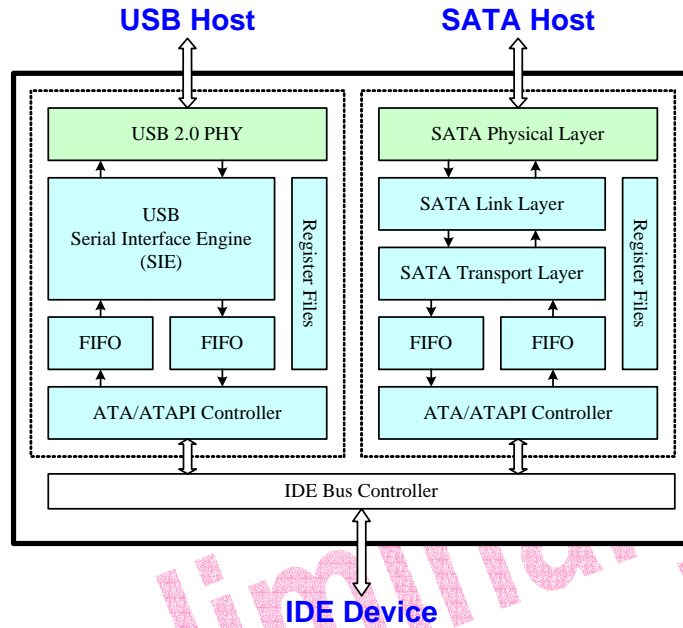


Fig. 1 Functional Block Diagram of JM20338

Applications

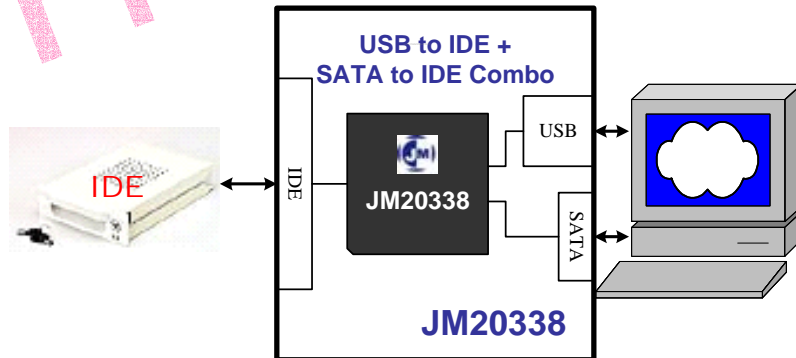


Fig. 2 Hi-Speed USB & SATA Combo to PATA device

Product Information

Name	Description
JM20338	Hi-Speed USB & SATA Combo to PATA Bridge

Design Kit

1	JM20338 Data Sheet
2	JM20338 Design Guide
3	Application EVB

Contact Information

Department	Email
Sales	sales@jmicron.com
Tech. Support	fae@jmicron.com