



Genesys Logic, Inc.

GL831A

**SATA / PATA
Bridge Controller**

Product Overview



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GENERAL DESCRIPTION

The GL831A is a highly-compatible, low cost SATA to PATA and PATA to SATA bridge controller, which integrates Genesys Logic own design Serial ATA PHY. As a one-chip solution which complies with Serial ATA specification rev. 2.6 and ATA / ATAPI-6 specification rev 1.0, the GL831A can support various kinds of ATA / ATAPI device in SATA to PATA and SATA device in PATA to SATA. The GL831A uses 25MHz crystal and slew-rate controlled pads to reduce the EMI issue. With 64-pin LQFP (7X7mm) package, the GL831A is the best cost/ performance solution for SATA to PATA and PATA to SATA application.



FEATURES

- · Complies with ATA/ATAPI-6 specification rev 1.0
- · Support 16-bit Multiword DMA mode and Ultra DMA mode interface
- · Operating system supported: Win Vista/ Win XP / 2000 / Me / 98 / 98SE; Mac OS 9.X / X
- · Complies with Serial ATA specification rev. 2.6
- · Support Spread Spectrum Clocking to reduce EMI
- · Support SATA hot-plug
- · Provide adjustable TX signal amplitude and pre-emphasis level
- · Provide specified OOB signal detection and transmission
- · Supports 1.5Gbps data rate
- · Supports both Host/Device controller configuration
- · Support SATA 25MHz external crystal
- · Support Master/Slave setting
- · 3.3V power input; 5V tolerance pad
- · Embedded Regulator (3.3V to 1.8V)
- · Available in 64 pin LQFP

BLOCK DIAGRAM

