JMB368
PCI Express to PATA Host Controller

Overview

JMB368 is a single chip, 1-lane PCI Express to 1-port PATA Host Controller. It is designed to provide better PATA extension and compatibility, especially for chipsets without PATA. For these chipsets with only one PATA interface, JMB368 also provides a feature-up for Legacy IDE device supporting. It features PCI Express bus interface to lower pin count as possible.

JMB368 supports PCI Express trace length can be up to 12" (30.48cm). Although the maximum length is up to 12 inch, the trace length is as short as possible on real application. JMB368 supports PATA trace can be up to 10" (25.4cm). Although the maximum length is up to 10 inch, the trace length is as short as possible on real application.

PATA of JMB368 supports up to UDMA6. Serial damping resistors are necessary to keep UDMA performance. Please reference JMB368 Application Schematic in detail. Also, place these serial resistors within 0.5 inch of Host IDE Connector sid

Feature

Compliance

- Compliant with ***Bus Master Programming interface for IDE ATA Controllers Revision 1.0***
- Compliant with ***PCI Express Base Spec. Revision 1.0a***
- Compliant with ***PCI IDE Controller Spec. Revision 1.0***
- Compliant with ***SFF-8038i Bus Master Programming Interface Revision 1.0***

Overall

- Integrated 1-Lane PCI Express PHY
- Output swing control and Automatic impedance calibration for PCI Express PHY
- Fabricated 0.18um/3.3V UMC CMOS Standard Logic Process with 2.0V and 3.3V
- Available in 48-pin LQFP package
- Co-layout with JMB361 and JMB363

PCI Express

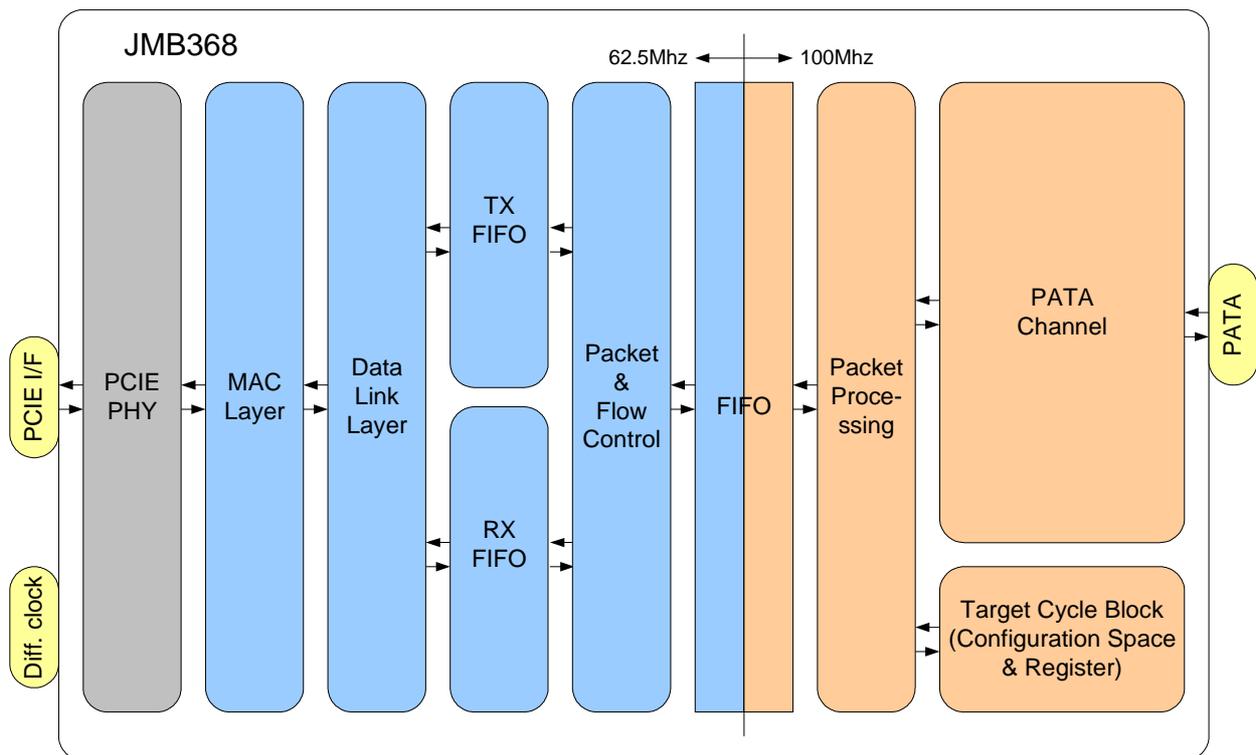- Supports 1-Lane 2.5Gbps PCI Express bus
- All registers accessible in unified memory space
- PCI Express PCB trace length can be up to 8" (20.3cm)

PATA

- Supports up to UDMA6 transfer mode of PATA
- Supports up to 2 storage device connection
- PATA PCB trace length can be up to 10" (25.4cm)

Functional Block Diagram

Functional Block Diagram of JMB368

Product Information

Name	Description
JMB368	PCI Express to PATA Host Controller

Document

1	JMB368 Data Sheet
2	JMB368 Design Specification
3	JMB368 Hardware Design Guide
4	JMB368 Hardware Schematic

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NDA Required
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