



# SATA2100

## PCI Serial ATA II Dual-Channel Host Controller



### Overview

Serial ATA is the next-generation internal storage inter-connect, designed to replace parallel ATA technology. Serial ATA is the proactive evolution of the ATA interface from a parallel bus to serial bus architecture. This architecture overcomes the electrical constraints that are increasing the difficulty of continued speed enhancements for the classic parallel ATA bus.

### Introduction

SATA2100 is PCI Serial-ATA II phase one IDE Controller Card which provides an efficient and economical way for users increasing the speed or fault-tolerance of their PC. It can upgrade your desktop computer to have dual internal Serial ATA channels with NCQ, TCQ and hot plugging features. It is fully compliant Serial ATA ports on the device side to access Serial ATA storage media such as hard disk drives, CD-RW and DVD-ROM drives.

### Features

- Fully compatible with PCI Spec. Ver.2.3 standard.
- Serial ATA Specifications 1.0a compatible.
- Serial ATA II Specifications 1.0 compatible. (Extensions to Serial ATA 1.0a)
- Provides dual Serial ATA channels (up to 2 drives).
- Serial ATA maximum transfer rate of 1.5 GB/s.
- Serial ATA Disk RAID 0/1/JBOD support.
- Integrated PCI DMA engines.
- SATA hot plug/unplug hardware support
- Implements Power Management support.
- Serial ATA TCQ and NCQ commands support.
- Serial ATA RAID Manager Configuration Utility support
- Supports 48-bit LBA (Logical Block Addressing) for hard drives larger than 137GB.

### Specifications

Interface: PCI 32 bit/66 MHz  
Mode: Serial ATA II phase one  
Controller: INITIO INI1622  
RAID: RAID 0 (Striping) and RAID 1 (Mirroring)  
Channel: Two internal Serial ATA ports

- Supports Native Command Queuing (NCQ)
- Supports tagged command queuing (TCQ)

O.S. Support: Windows 2000/XP/2003/ and Linux 2.4x, 2.6x  
Environment :  
Operation temperature: 0°C ~ 57°C  
Storage temperature: -20°C ~ 85°C  
Operation humidity: 5% ~ 95% RH

### Package SATA2100

Serial-ATA Cable  
User Manual  
CD Driver

### Application



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