

# ATTO ExpressPCI FC 3321



**Dual-channel, Low-profile 2-Gigabit Fibre Channel Host Adapter provides compact design and high performance**

*The ATTO ExpressPCI FC 3321 host adapter incorporates dual independent channels of 2-Gigabit Fibre Channel performance on a single, low-profile Fibre Channel host adapter. Its compact design facilitates use in full height or 2U PCI slots, providing design flexibility and maximum performance in high-density environments. With throughput up to 400 MB/sec. per channel, the product is designed to support data-intensive applications while, at the same time using only one PCI slot, representing a cost-effective and efficient choice for Enterprise applications.*

*In addition to our ExpressPCI FC family of products, ATTO recently released a new line of Fibre Channel adapter products, Celerity FC. Designed to provide reliable connectivity, intelligence and scalability, Celerity FC storage adapters meet tomorrow's connectivity needs today. With several 2-Gb and 4-Gb product options, Celerity FC takes storage connectivity to the next level.*

## TECHNICAL HIGHLIGHTS

- 2.125-Gigabit Fibre Channel host adapter
- 400 MB/sec. per channel throughput in full-duplex mode
- Dual, independent channels
- 64-bit/66 MHz PCI interface
- Fixed Short-wave optical LC connectors
- Support for SNIA HBA API
- Optimized Fibre Channel and SCSI-3 algorithms
- Advanced data-interleave architecture
- Full multiple block buffering

Fibre Channel

ATTO

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# ATTO ExpressPCI FC 3321

## Hardware Specifications

### Fibre Channel Interface:

- 2.125-Gigabit data-transfer rates on each channel
- 400 MB/sec. per channel throughput in full-duplex mode
- Auto negotiation between 2-Gigabit and 1-Gigabit speeds
- Short-wave optical LC connectors
- Supports all Fibre Channel topologies
  - Point-to-Point
  - Arbitrated Loop
  - Direct Fabric/Switch Attach
- Strict adherence to ANSI FC-AL-2, FC-PLDA FC-Tape, and FC-FLA specifications
- Supports Class 2 and Class 3 transfers
- Flash ROM for easy field upgrades

### Advanced FC Features:

- Support for SNIA HBA API
- Supports Target and Initiator Modes

### Advanced SCSI-FCP Support:

- Large command FIFO
- Asynchronous I/O support
- ASPI and SCSI Manager 4.3 compatible
- SCSI-3 tagged command queuing
- Bootable from attached disks
- Support for multiple block sizes

### Accelerated PCI Bus Management:

- PCI bus master DMA
- PCI 2.2 and PCI 99 compliant
- 64-bit/66 MHz PCI

## Software Specifications

### Driver Support:

- Windows® 2000
- Windows XP
- Windows Server 2003
- Linux
- Mac® OS X

### Advanced Data Streaming (ADS™):

- Improved PCI system bandwidth use
- Optimized FC and SCSI-3 algorithms
- Tagged command queuing
- RISC processor for high performance

## Environmental & Physical Characteristics

### Dimensions:

- Low Profile: 2.53"H x 6.6" W (low profile and full height brackets available)

### Operating Environment:

- Temperature: 0-55° C
- Humidity: 5-90% non-condensing
- Airflow: 100 LFM (min.)

### Power:

- 1.43 Amp @ 5 Volts (max)

### PCI Signal Compatibility:

- 3.3 Volts/5 Volts universal

### Configuration:

- Easy to install connection plate with LEDs to monitor link, on-line and fault status for each channel (full-height bracket shown. Low-profile bracket also available.)



## Fibre Channel Host Adapter Selection Chart

Single & Multi-Channel 2-Gigabit Adapters			
PRODUCT FEATURES	FC 3321	FC 3300	FC 3305
Number of FC Channels	2	1	1
Maximum Transfer Rate (MB/sec.)	400*	400	400
32-bit PCI Compatible	•	•	•
64-bit PCI Compatible	•	•	•
Fabric & Loop Support	•	•	•
Cable Distances (max.)	500m	500m	10m
33 MHz PCI Compatible	•	•	•
66 MHz PCI Compatible	•		
66 MHz PCI-X		•	•
Optical/Copper Interface	SW LC SFF	Fixed SW LC	HSSDC
Class	2,3	2,3	2,3
Full-duplex	•	•	•
RAID Support	•	•	•
Windows® 2000/XP/Server 2003	•	•	•
Solaris, Linux	Linux	•	•
Mac® OS and Mac OS X Support	OS X	•	•

\* per channel

# Fibre Channel