



### **Overview**

The LT-PCI-SSD is a high performance PCI 64-bit, 66 MHz, 4-channel Solid State Disk (SSD) RAID controller, targeted for server class, high-performance workstations and embedded environments.

The built-in Flash SSD engine supports Ultra DMA modes which yield data transfers at speeds of up to 133 MB/s per channel.

The adapter houses all SSD memory, providing a single card solution for your non-rotating media requirements.

All SSD channels operate simultaneously which is essential for demanding multi-tasking environments, providing the highest transfer rates available in the market.

PCI scatter/gather functionality reduces interrupt handling which tremendously improves on performance.

Raid Striping is used to optimize on sustained transfer rates. Thus a fully populated board provides the best performing solution.

Industrial SSD Drive modules were designed in to provide the highest performing and most reliable single-slot device available today.

Adapter capacities follow SSD module availability. Only the fastest and most robust modules qualify, thus adapters are preconfigured before shipment.

## **PCI Interface**

- 64-bit, 66 MHz PCI bus with data rates up to 533 MB/s
- PCI specification Rev 2.2 compliant
- PCI Bus Power Management Interface Specification Version 1.1 compliant
- Scatter/Gather DMA compliant with Bus Master Programming Interface IDE ATA Controller Rev 1.0
- Flash ROM interface provides RAID setup utility and OS booting

## **Flash SSD**

- Sustained Data Rates: Reads 500 MB/s, Writes 400 MB/s
- Up to 4 independent SSD channels. Each SSD channel supports DMA 133 transfers
- PIO mode 0 through 4 and Multiword DMA mode 0,1,2 transfers up to 16.6 MB/s
- Ultra DMA mode 0 through 6 transfers up to 133 MB/s per SSD channel
- Supports RAID0, RAID1, RAID10 or JBOD
- Built-in timer for Auto-rebuilding on RAID1 and above levels
- Simultaneous data written to both channels in RAID1 mode
- Error Detection and Correction
- Wear Leveling

## **System Support**

- Windows and Linux Device drivers
- Onboard BIOS based RAID Configuration Utility
- Windows Configuration and Monitor Utility

## **Reliability**

- MTBF: >1,000,000 hours
- Data reliability: Built-in EDC/ECC function
- Patent pending Wear-leveling algorithms

## **Endurance**

- Read: Unlimited
- Write/Erase: >140 years @ 50GB write-erase /day

## **Ordering Information**

LT-PCI-SSD-XX

XX: Flash memory size from 2 GB to 128 GB

The LT-PCI-SSD is only offered preconfigured with SSD quality SSD modules. Our modules are carefully selected to provide the performance data specified here. These modules also support wear leveling, so that you may use our product in demanding environments with confidence.



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