



## RocketRAID 2640X4 SAS RAID 5 Controller Sustains 501MB/s READ and 486 WRITE Performance

Your digital data and bandwidth-intensive applications demand a new level of performance making data protection more important. The key to making the best storage investment for demanding applications is to understand how the latest high-performance RAID controllers designed for the PCI Express (PCIe) environment will work under the demands of your daily workload. This performance report will focus on how the sustained performs of streaming I/O.

### RocketRAID 2640X4

The world's first PCI-Express x4 SAS RAID controller with Marvel 88SE6445 IC delivering unmatched power and performance for desktops and workstations.

PCI-Express x4 bus speed works in conjunction with Super-Fast SAS devices, seamlessly integrate with High Definition Performance Applications- CAD, Graphics, Imaging, Digital video, Audio Editing Desktops and Workstations.

The RocketRAID 2640X4 is a 4 channel PCI-Express x4 SAS RAID controller supports RAID levels (0, 1, 5, 10 and JBOD) for data protection and offers advance software features to safeguard data for reliability. It offers unprecedented flexibility of cost-effective, high-capacity of Serial ATA (SATA) disk drives or high-performance Serial Attached SCSI (SAS) drives in a single storage system.

### Streaming I/O

Streaming reads and writes are defined as contiguous read or write requests made to the disk(s), and are typically created by media applications such as video or audio. Various block sizes are tested ensuring your storage subsystem can deliver sufficient performance for your applications.

Measurement	I/O Characteristics	Typical Applications
Streaming Reads	100% Reads; Large contiguous requests; 1 - 64 concurrent requests	CAD, Graphics, Imaging, Digital video, Audio Editing
Streaming Writes	100% Writes; Large contiguous requests; 1 - 64 concurrent requests	CAD, Graphics, Imaging, Digital video, Audio Editing

## **System Test Disclosure**

### **Test Environment:**

CPU: Intel (R) Xeon (TM) 1.6 GHz  
Motherboard: Supermicro X7DB3  
Memory: Kingston DDR2 1G\*2  
OS : Microsoft Windows 2008 Server  
HDD: ST3146855SS 146G\*4

### **Testing Utility:**

lometer-2006.07.27.win32.i386

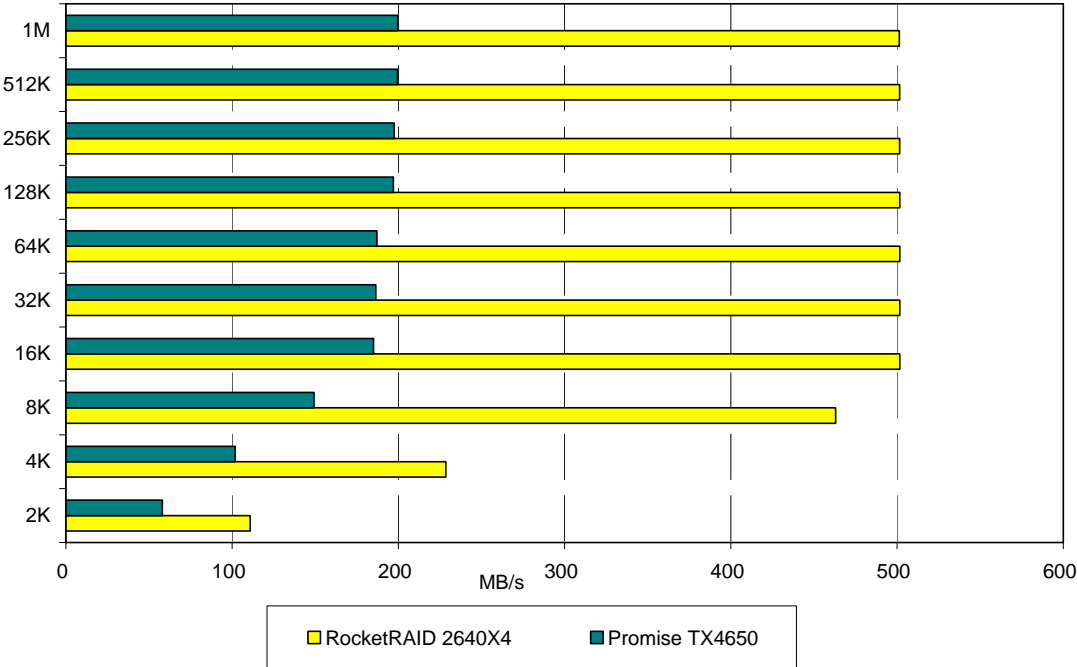
### **Host Adapter BIOS version info:**

HighPoint RocketRAID :2640 v1.0  
PROMISE TX4650: 2.8.0.0010

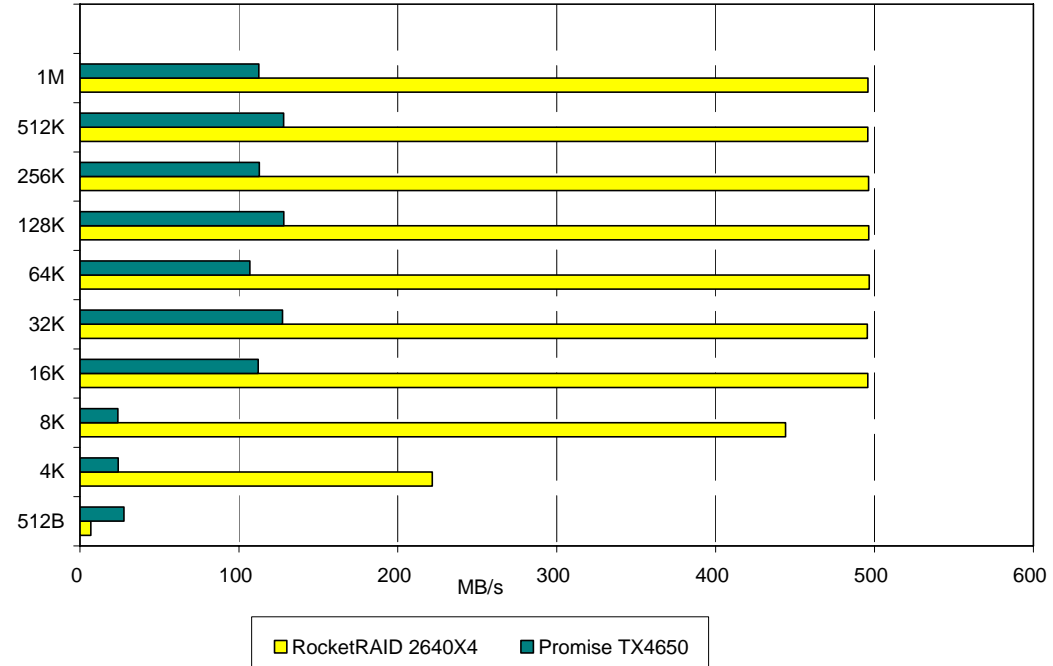
### **Host Adapter Device Driver:**

HighPoint RocketRAID 2640: v1.0  
PROMISE TX4650: 5.2.3790.1830

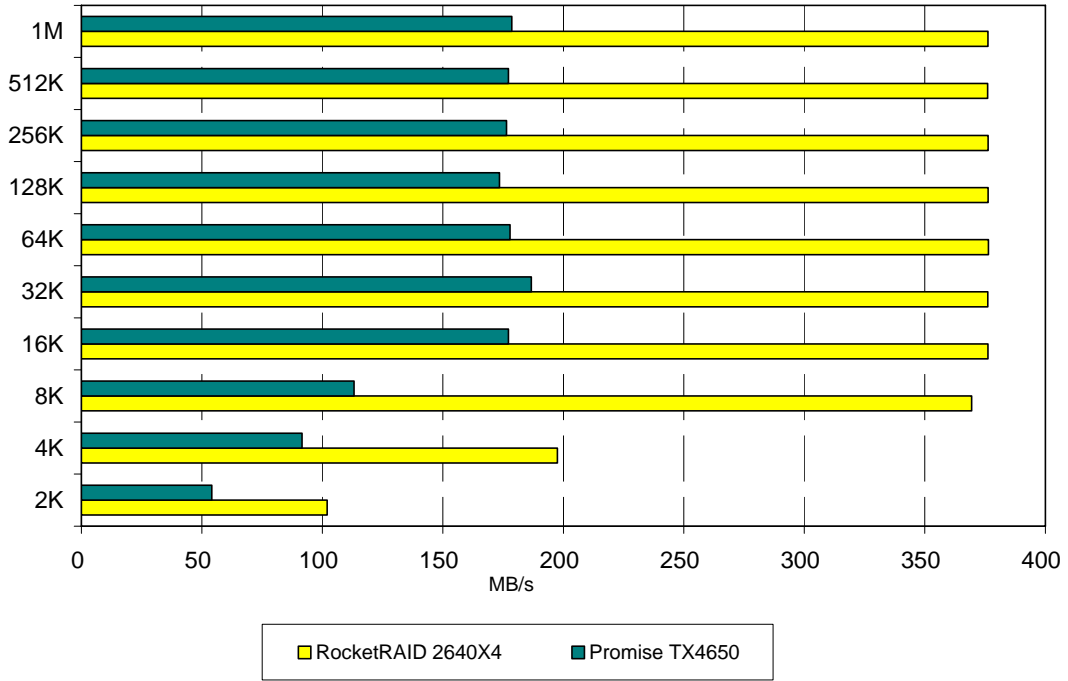
### FOUR-DRIVE RAID 0 READ PERFORMANCE



### FOUR-DRIVE RAID 0 WRITE PERFORMANCE



### FOUR-DRIVE RAID 5 READ PERFORMANCE



### FOUR-DRIVE RAID 5 WRITE PERFORMANCE

