

## SUN FLASH ACCELERATOR F40 PCIe CARD

### IDEAL FOR DATABASES AND I/O INTENSIVE APPLICATIONS

#### KEY FEATURES

- 400 GB capacity
- Up to 149K IOPS (8K) performance
- Over 2.0 GB/s throughput
- 95 microsecond write latency
- Embedded Flash controllers for greater performance, compatibility and low CPU burden
- Advanced write endurance
- Proactive monitoring features
- Low-profile PCIe form factor
- Enterprise reliability

#### KEY BENEFITS

- Increase application performance and business response
- Eliminate I/O bottlenecks
- Improve server efficiency
- Reduce power and space

*Oracle's Sun Flash Accelerator F40 PCIe Card accelerates applications and server performance by reducing storage latencies and increasing I/O throughput for greater productivity and business response. The low latency, high throughput, and IOPS performance of the Sun Flash Accelerator F40 PCIe Card help servers and their applications run faster and more efficient while reducing space and power.*



Figure 1. The Sun Flash Accelerator F40 PCIe Card accelerates application, improves response times, and improves server efficiency

### Meeting Today's IT Challenges

Today's demanding, high-performance applications are increasingly being held back by slow storage, resulting in poor application performance and business response. The Sun Flash Accelerator F40 is designed to deliver high performance with low latency and minimum CPU burden for accelerating applications and eliminating I/O bottlenecks, whether used as cache or storage.

### High Performance and Reliability

The Flash Accelerator F40 PCIe Card is built on the latest enterprise level solid-state technologies with sophisticated features to help deliver consistently a high level of performance, endurance and reliability under some of the most demanding conditions. The Sun Flash Accelerator F40 PCIe Card delivers performance that equals hundreds of spinning hard disk drives (HDD), with no moving parts for greater reliability and power efficiency.

Advanced on-board controllers extend write endurance up to 20x that of standard flash controllers for greater reliability. Sophisticated algorithms provide advanced error-correction, provisioning, and wear leveling for improved efficiency and data integrity. Proactive health monitoring features provide added level of security and durability.

## The Sun Flash Accelerator F40 PCIe Card Specifications

Capacity	
Usable Capacity	400 GB (512 GB raw)
Domains	4 domains/SSD devices
NAND Type	eMLC (Enterprise Multi-Level Cell)
Performance *	
Random Read IOPS (8K) **	148,958
Random Write IOPS (8K)	121,018
Read Bandwidth (1M)	2.156 GB/sec
Write Bandwidth (1M)	1.059 GB/sec
Write Latency (8K)	0.095 milliseconds
Read Latency (8K)	0.251 milliseconds
Technology	
Interface	PCI Express 2.0 (x8)
Flash Controllers	4 x 6Gb/s SAS/SATA2 controllers (1/domain)
Form Factor	Low profile PCIe (2.7 x 6.6 inches)
Reliability	
MTBF	Over 1M hours
Health Monitoring Feature	Proactive self-monitoring, SMART analysis and reporting, flash monitoring
Power	
Max Power	25 W max (11.5 W idle)
Environmental	
Operating Temperature	0 to 74 C measured at the card temp sensor
Relative Humidity	5% to 90%, non-condensing, 200 LFM airflow req.
Altitude	10,000 feet operating max.
Compliance	RoHS-6, US/Canada UL, Europe TUV safety
Compatibility	
Servers and Operating Systems	Qualified Sun servers and operating Systems

\* Using 1.25:1 compressible data

\*\* Using non-compressible data

## Contact Us

For more information about the Sun Flash Accelerator F40 PCIe Card, visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.



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