> Over 120,000 random IOPS
> Over 600MB/s random writes
> Less than 50 µs latency

ioDrive™

The world of storage is no longer just about capacity, it is also about fast, reliable access to your data. The ever increasing demand of media servers, database servers, real time business analytics and mining systems, combined with the exponential growth of processor performance, has exposed the limitations of today's storage architectures. The time has come for a truly innovative solution that takes enterprise data availability, scalability and access rates to a new level of simplicity and performance, without sacrificing price/capacity.

Based on a revolutionary silicon-based storage architecture known as ioMemory, the ioDrive provides access rates comparable to DRAM with storage capacity on par with disks – giving you the power to improve both memory capacity and storage performance by a thousand fold. The ioDrive unleashes such a dramatic performance increase that every server can now contain the power of an enterprise SAN.

With sustained, random access rates hundreds of times faster than the industry's fastest storage devices, users who leverage Fusion's ioDrive, won't be forced into price/performance/capacity tradeoffs. Users can expect to experience performance gains comparable to the following:

KEY APPLICATIONS

- Web Servers & Web Services
  - > Serve 10x the content per server
  - > Host 4x the virtual machines per server
- Data Acquisition & Warehousing
  - > Increase transaction rates 25x
  - > Improve MTBF
- Simulation & Visualization
  - > Augment RAM with high performance swap
  - > Accelerate data loading, saving and streaming100x

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KEY BENEFITS

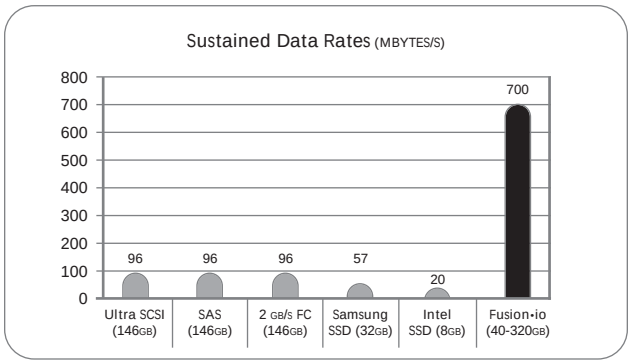
- Sustained, ultra high-speed, small-packet data transfers
- Data redundancy between ioDrives
- No RAID controller required
- Industry standard interface and form factor
- No moving parts

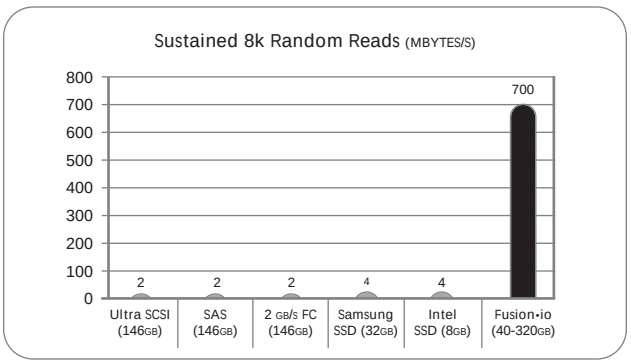
SCALE CAPACITY & PERFORMANCE (WITH MULTIPLE CARDS)

Augment DRAM to a terabyte+

350,000 IOPS & 2.8Gbytes/sec in a single machine

Fusions's ioDRIVE vs. ENTERPRISE HDD (MBYTES/SEC)





FUSION·ioDRIVE (PRELIMINARY)

Capacities (GB)	80	160	320
Write BW (Mbytes/s)	600		
Read BW (Mbytes/s)	700		
IOPS**	125,000 (sustained 1k random) 100,000 (sustained 4k random)		
Access Latency	50µs Read 40µs Write		
Bus Interface	PCI-Express x4		
Form Factor	Low profile PCI-e card		
Weight	Less than 2 ounces		
Operating Systems*	RHEL 4 & 5; SLES 9 & 10		
Wear Leveling (SLC NAND Constant 7x24 writes	4yrs	8yrs	8yrs

* *Microsft Windows XP, Vista, Server 2003 & 2008; Mac OS X Available second half 2008*

** *Virtual Memory page size is 4K*

ENVIRONMENTAL SPECIFICATIONS

		Min	Nominal	Max
Power (W)			6	~9
3V Input	Voltage (V)	3.0	3.3	3.6
	Current (A)		1.5	2.0
12V Input	Voltage (V)	11.0	12.0	20.0
	Current (A)		0.5	0.9
Temperature (°C)*	Operational	0		55
	Non-operational	- 40		70
Air Flow (LFM)		300		
Humidity (%)	Non-condensing	5		95
Altitude (ft)	Operational			10,000
	Non-operational			30,000

* *Temperate derated 1 C per 1000 ft elevation above sea level*

STANDARDS

Form Factor	PCI Express base spec 1.0a
Connectivity	PCI Express card electromechanical spec 1.0a

SAFETY

US / Canada	UL60950, CSA C22.2 No.60950-1-03
Europe	TUV EN60950-1:2001; 3N50825-1:

AGENCY

US / Canada	FCC Part 15, ICES-003, Class A
Europe	2004/108/EC EMC Directive CE Mark;
Japan	VCCI, Class A
Taiwan	BSMI, Class A
New Zealand /Australia	AS/NZS 3548 Class A
RoHS	R5 (Directive 2002/95/EC)