

# Fusion ioMemory<sup>™</sup> PX600 PCIe Application Accelerators

Ultra-low latency and high performance for real-time business data access

#### **Key Benefits**

- Up to 2x the performance over the previous ioDrive®2 PCIe card
- Ultra-Low Write Latency of 15µs
- Exceptional Random Write Performance of up to 385K IOPS
- Superior Reliability UBER 10<sup>-20</sup>
- Updated VSL® (virtual storage layer) for immediate data access
- Up to double the capacity over the previous ioDrive2 PCle card
- Now available with FlashSoft® Software as a Caching Bundle

#### Mixed-Use Application Workloads

- Virtualization
- Virtual Desktop Infrastructure
- Databases
- Business Intelligence
- Real-time Financial Data Processing



#### Introducing World Class Flash Memory

The Fusion ioMemory PX600 PCIe application accelerator provides a costeffective solution for mixed-use application workloads that include: virtualization, virtual desktop infrastructure, databases, business intelligence and real-time financial data processing.

#### An Advanced Flash Technology

The Fusion ioMemory PX600 PCIe series is designed for enterprise applications requiring high transaction rates and real-time data access where high performance and ultra-low latency is critical. Whether virtualized, hyperscale or cloud rack environments, the Fusion ioMemory PX600 PCIe cards deliver high performance, large capacities and superior reliability. These PCIe application accelerators deliver up to 2x the performance and double the capacity over the previous ioDrive®2 PCIe cards.

## Inherent Data Integrity Built on a Rich Backbone of Reliability

The Fusion ioMemory PX600 PCIe device has a trusted architecture. SanDisk<sup>®</sup> delivers on the one important metric of storage memory which is ultra-low latency, not just bandwidth and operations per second. SanDisk has built-in self-healing features to all our Fusion ioMemory PCIe application accelerators, delivering superior reliability for an UBER of 10<sup>-20</sup>. With over 7,000 customers and 250,000 units sold, this third generation of PCIe devices is designed to provide customers with the piece of mind that these products will perform in the field as intended.

## Dramatically Reduced Total Cost of Ownership (TCO)

By leveraging the significant performance improvements the Fusion ioMemory PX600 PCle application accelerator provides over traditional hard disk drive infrastructures, customers can reduce infrastructure, increase the number of virtual machines, and improve overall system efficiency. These improvements provide savings in capital expenditures (CapEx) and operating expenditures (OpEx) which include reduced application licensing fees and savings related to space, cooling costs, and energy use.

Model Number	PX600-1000	PX600-1300	PX600-2600	PX600-5200		
Usable MLC Capacity*	1TB	1.3TB	2.6TB	5.2TB		
Read Bandwidth (GB/s)	2.7	2.7	2.7	2.7		
Write Bandwidth (GB/s)**	1.5	1.7	2.2	2.1		
Ran. Read IOPS (4K)	196,000	235,000	350,000	285,000		
Ran. Write IOPS (4K)	330,000	375,000	385,000	385,000		
Read Access Latency	92µs	92µs	92µs	92µs		
Write Access Latency	15µs	15µs	15µs	15µs		
Bus Interface	Gen. 2, x8					
Endurance (PBW)	12	16	32	64		
Reliability (UBER)	10-20					
Weight		5.2 ounces		7.25 ounces		
Form Factor			Standard Height, Half-Length			
Warranty	Limited 5 year warranty or maximum endurance used					
Operating Systems	Microsoft Windows: Windows Server Linux: RHEL; SLES; OEL; CentOS; Debian Squeeze; Ubuntu UNIX: Solaris Hypervisors: VMware ESXi, Windows Server 2012 with Hyper-V, Windows Server 2012 R2 with Hyper-V, Oracle VM 3.2.7 and up For current compatibility please visit http://support.fusionio.com/kb/ vsl-software-and-operating-system-compatibility-matrix/					

## **Environmental Specifications**

		Min	Max		
Temperature <sup>1</sup>	Operational	0°C	55°C		
	Non-operational	-40°C	70°C		
Power Requirements			25 W		
Air Flow (LFM) <sup>2</sup>		300			
Humidity (%)	Non-condensing	5	95		
Altitude (ft)	Operational	-1,000	10,000		
	Non-operational	-1,000	30,000		
Agency					
US/Canada	FCC Title 47, Part 15 Subpart B, Class A, CAN ICES-3 (A) NMB-3 (A)				
Europe/CE	EN 55022: 2010, EN 61000-3-2: 2006 plus A1:2009 & A2:2009, EN 61000- 3-3: 2008, EN 55024: 2010				
Japan/VCCI	VCCI V-3/2013.04 ClassA & EN 55022 (2010) Class A, ANSI C63.4: 2009				
Taiwan	BSMI CNS 13438: 2006 Class A, EN 55022 (2006)A1 (2007) Class A				
Australia/New Zealand	AS/NZS CISPR 22: 2009 plus A1:2010				
Korea	MSIP-REM-FIO-ioMemoryPX600				
Low Voltage Directive Testing	Directive: 2006/95/EC, EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 and IEC 60950-1:2005 + A1:2009				
RoHS	DIRECTIVE 2011/65/EU				
REACH	Regulation (EC) No 1907/2006				
WEEE	Directive 2002/96/E	C			
Fusion ioMemory™ P	X600 PCle Applica	ation Accelerator	Ordering Information		
Dout Number			Compositor		

Part Number	Capacity
SDFACAMOP-1T00-SF1	1.0TB
SDFACAMOP-1T30-SF1	1.3TB
SDFACAMOP-2T60-SF1	2.6TB
SDFACCMOP-5T20-SF1	5.2TB

Specifications subject to change without notice. Performance results are based on internal testing and use. Results and performance may vary according to configurations and systems, including drive capacity, system architecture and applications. \* TIB = 1000,000,000 bytes. Actual user capacity less. \* Write BW achieved with optional high power mode. Maximum write bandwidth performance of 1.6 GB/s achievable within 25 W power limit. Performance may vary based on host device. IGB = 1,000,000,000 bytes. X = 150 KB/sec. 1 Temperature derated 1°C per 1000 ft elevation above sea level 2 Products are designed for server platforms only and relies on 300 LFM (min) airflow, which is required for normal operation in server environments.

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#### **Contact information**

fusion-sales@sandisk.com

#### Western Digital Technologies, Inc.

951 SanDisk Drive Milpitas, CA 95035-7933, USA T: 1-866-744-2165

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At SanDisk, we're expanding the possibilities of data storage. For more than 25 years, SanDisk's ideas have helped transform the industry, delivering next generation storage solutions for consumers and businesses around the globe.