



SPC BENCHMARK 1™

EXECUTIVE SUMMARY

HUAWEI TECHNOLOGIES CO., LTD HUAWEI OCEANSTOR™ 6800 V3

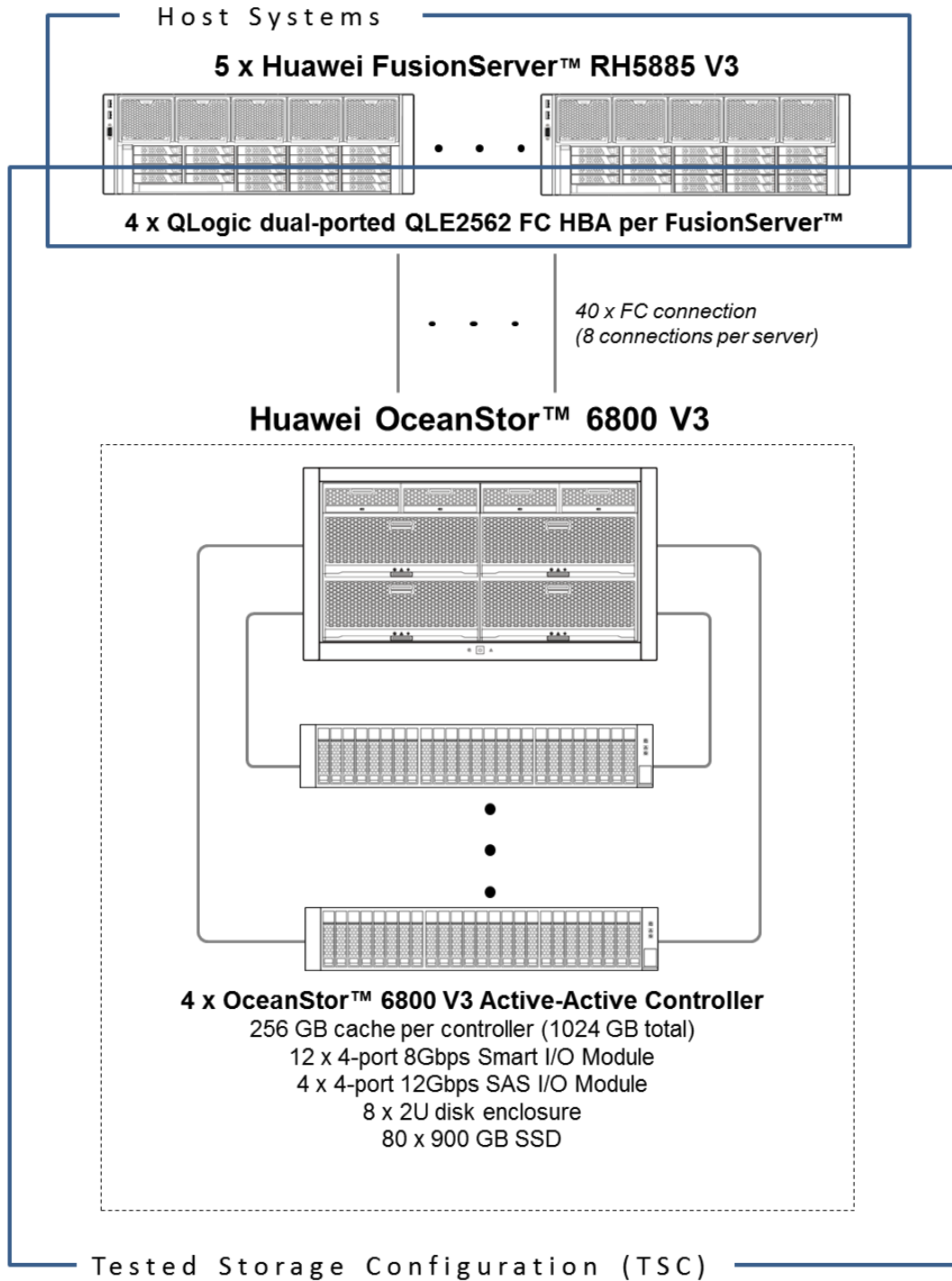
SPC-1 IOPS™	800,022
SPC-1 Price-Performance™	\$0.34/SPC-1 IOPS™
SPC-1 IOPS™ Response Time	0.713 ms
SPC-1 Overall Response Time	0.514 ms
SPC-1 ASU Capacity	25,428 GB
SPC-1 ASU Price	\$10.42/GB
SPC-1 Total System Price	\$264,741.42
Data Protection Level	Protected 2 (RAID-10)
Physical Storage Capacity	71,600 GB
Pricing Currency / Target Country	U.S. Dollars / USA

SPC-1 V3.2

SUBMISSION IDENTIFIER: A31004

SUBMITTED FOR REVIEW: JANUARY 25, 2017

Benchmark Configuration Diagram



Tested Storage Product Description

The OceanStor™ 6800 V3 Storage System offers a cloud architecture-oriented operating system, high-performance hardware platform, and a complete suite of smart management software.

The OceanStor™ 6800 V3 Storage System achieves high performance at a latency lower than 1 ms when configured with all SSDs.

Scalable to eight controllers, 4 TB cache, 25.6 PB storage capacity, with many interfaces, including 16 Gbit/s FC, 56 Gbit/s IB, PCIe 3.0, 12 Gbit/s SAS, and smart I/O cards.

A secure solution for large OLTP/OLAP databases, file sharing, or cloud computing in government, finance, telecom, energy, and media industries.

For more details, visit:

<http://e.huawei.com/en/products/cloud-computing-dc/storage/unified-storage/high-end>

Priced Storage Configuration Components

20 x QLogic dual-ported QLE2562 FC HBA
4 x OceanStor™ 6800 V3 Active-Active Controller, each with: 256 GB cache (1024 GB total) 3 x 4-port 8Gbps Smart I/O Module (40 ports active total)
4 x 4-port 12Gbps SAS I/O Module
8 x 2U disk enclosure, each with: 10 x 900 GB SSD (80 total)

Storage Configuration Pricing

	Description	Qty	Unit Price	Ext. Price	Disc.	Disc. Price
Hardware & Software						
6800V3-512E-AC	6800 V3 (Four Controller, AC, 1TB Cache, 12*4-port SmartIO I/O module, 4*4-port 4 12Gb SAS Entire Sharing I/O module, SPE72C0600), Enhanced Version	1	341,695.00	341,695.00	74%	88,840.70
SSDM-900G2S-02	900GB SSD SAS Disk Unit(2.5")	80	4,832.00	386,560.00	75%	96,640.00
DAE22525U2-1-AC	Disk Enclosure (2U, AC, 2.5", Expanding Module, 25 Disk Slots, without Disk Unit, DAE22525U2)	8	8,820.00	70,560.00	75%	17,640.00
N8GHBA000	QLOGIC QLE2562 HBA Card, PCIE ,8Gbps DualPort, Fiber Channel Multimode LC Optic Interface, English Manual, No Drive CD	20	1,000.00	20,000.00	0%	20,000.00
HS-SAS-3-01	High Speed Cable, Mini SAS HD Cable, 3m, (SFF 8644 Plug), (28A WG*4P*2B(S)), (SFF 8644 Plug), Indoor use	16	96.00	1,536.00	0%	1,536.00
SN2F01FCPC	Patch Cord, DLC/PC, DLC/PC, Multi-mode, 3m, A1a.2, 42mm DLC ,OM3 bending insensitive	48	11.00	528.00	0%	528.00
LIC-6800V3-BS	Basic Software License for Block (Device Management, SmartThin, SmartMulti-tenant, SmartMigration, SmartErase, SmartMotion, UltraPath, Cloud Service, SystemReporter)	1	29,552.00	29,552.00	73%	7,979.04
Hardware & Software Subtotal						233,163.74
Support & Maintenance						
88125ESH	OceanStor 6800 V3 Installation Service - Engineering	1	5,557.59	5,557.59	30%	3,890.31
02350XCS-88134ULF-36	6800 V3 (6U,Dual Ctrl, AC, 512GB, SPE72C0600), Enhanced Version-Hi-Care Onsite Premier 24x7x4H Engineer Onsite Service-36Month(s)	1	9,009.54	9,009.54	30%	6,306.68
02359806-88134ULF-36	Disk Enclosure (2U, AC, 2.5", Expanding Module, 25 Disk Slots, without Disk Unit, DAE22525U2) - Hi-Care Onsite Premier 24x7x4H Engineer Onsite Service-36Month(s)	8	3,485.73	27,885.84	30%	19,520.09
88032NMR-88134UHK-36	Basic Software License for Block (Device Management, SmartThin, SmartMulti-tenant, SmartMigration, SmartErase, SmartMotion, UltraPath, Cloud Service, SystemReporter) - Hi-Care Application Software Upgrade Support Service - 36-Month	1	2,658.00	2,658.00	30%	1,860.60
Support & Maintenance Subtotal						31,577.68
SPC-1 Total System Price						264,741.42
SPC-1 IOPS™						800,022
SPC-1 Price-Performance™ (\$/SPC-1 IOPS™)						0.34
SPC-1 ASU Capacity (GB)						25,428
SPC-1 ASU Price (\$/GB)						10.42

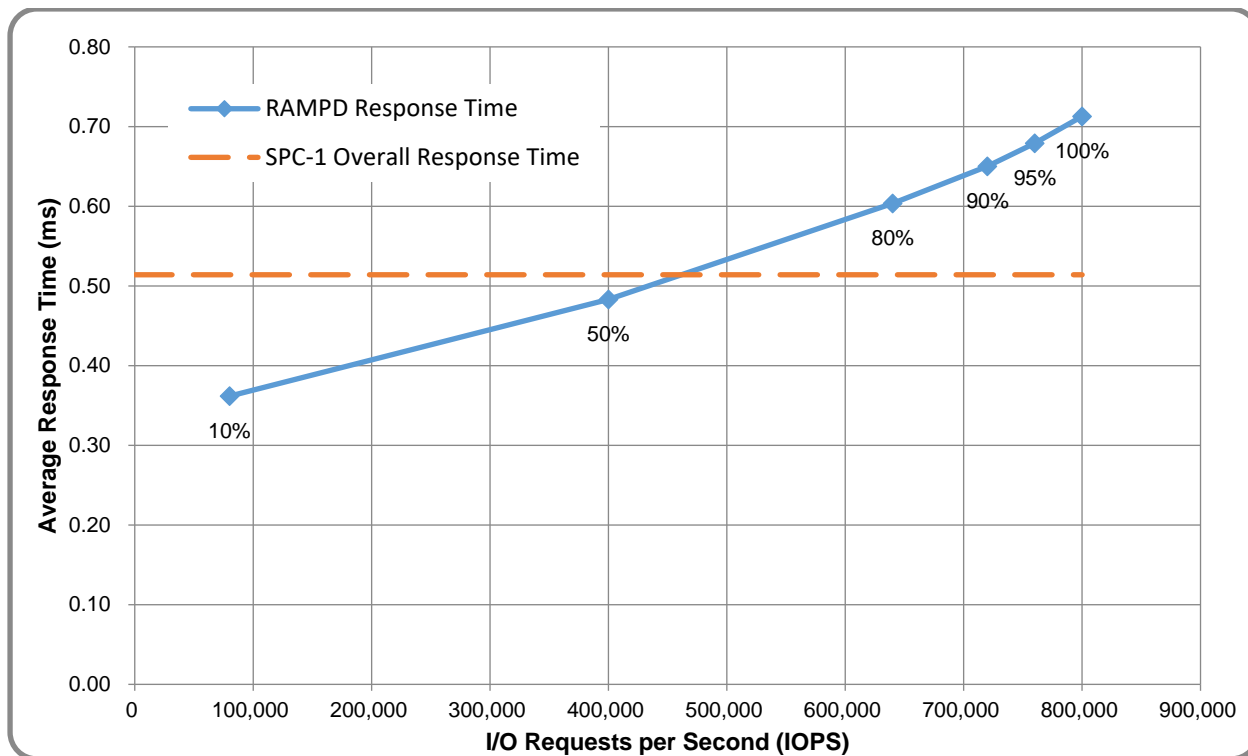
Third-Party Reseller: Huawei Technologies Co., Ltd. only sells its products to third-party resellers who, in turn, sell those products to U.S. customers. The above reflects the pricing quoted by one of those third-party resellers. See Appendix B of the Full Disclosure Report for a copy of the third-party reseller's quotation.

Discount Details: The discounts shown are based on the storage capacity purchased and are generally available.

Warranty: Hi-Care Premier On-Site Service include: 7x24 Technical Assistance Center Access. Access to all new software updates and Online Support. 24x7 with 4-hour On-site Hardware Replacement.

Availability Date: Currently available.

Response Time and Throughput Graph



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Revision Information	
SPC Benchmark 1™ Revision	V3.2.0
SPC-1 Workload Generator Revision	V3.0 build d34fb3c
Publication Revision History	Initial Publication