



## **SPC BENCHMARK 1™**

### **EXECUTIVE SUMMARY**

# **HUAWEI TECHNOLOGIES CO., LTD. HUAWEI OCEANSTOR™ DORADO6000 V3**

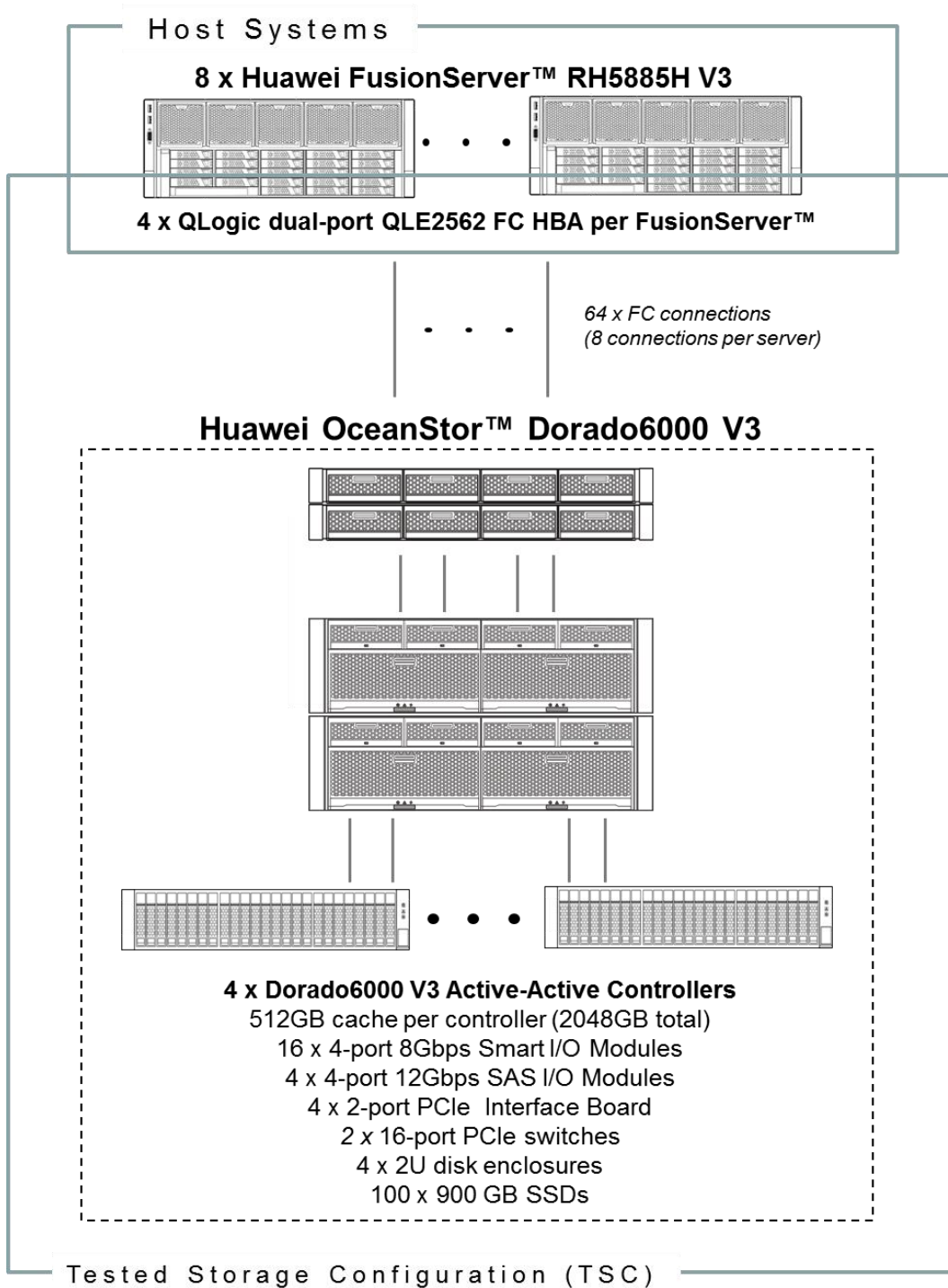
<b>SPC-1 IOPS™</b>	<b>1,000,560</b>
<b>SPC-1 Price-Performance™</b>	<b>\$0.46/SPC-1 IOPS™</b>
SPC-1 IOPS™ Response Time	0.472 ms
SPC-1 Overall Response Time	0.380 ms
SPC-1 ASU Capacity	36,078 GB
SPC-1 ASU Price	\$12.59/GB
SPC-1 Total System Price	\$453,882.94
Data Protection Level	Protected 2 (RAID-5 and full redundancy)
Physical Storage Capacity	89,402 GB
Pricing Currency / Target Country	U.S. Dollars / USA

**SPC-1 V3.4.0**

**SUBMISSION IDENTIFIER: A31006**

**SUBMITTED FOR REVIEW: JUNE 5, 2017**

### Benchmark Configuration Diagram



## Tested Storage Product Description

Purpose built for mission-critical services, the OceanStor Dorado V3 all-flash storage system provides high-performance, high-reliability, and high-efficiency storage services.

The HyperMetro gateway-free active-active design delivers 99.9999% availability. Inline de-duplication and compression technologies reduce the initial purchase cost.

The offering meets the storage requirements of databases, virtual desktops, and virtual servers, smoothing the way for customers in finance, manufacturing, government, telecom, and other sectors in the all flash era.

For more details, visit:

<http://e.huawei.com/en/products/cloud-computing-dc/storage/unified-storage/dorado-v3>

## Priced Storage Configuration Components

<b>32 x QLogic dual-ported QLE2562 FC HBA</b>
<b>4 x Dorado6000 V3 Active-Active Controllers, each with:</b> <ul style="list-style-type: none"><li><b>512 GB cache (2048 GB total)</b></li><li><b>4 x 4-port 8Gbps Smart I/O Modules</b></li><li><b>1 x 4-port 12Gbps SAS I/O Modules</b></li><li><b>1 x 2-port 8Gbps PCIe Interface Board</b></li></ul>
<b>4 x 2U disk enclosures, each with:</b> <ul style="list-style-type: none"><li><b>25 x 900 GB SSD (100 total)</b></li></ul>
<b>2 x 16-port PCIe switches</b>

## Storage Configuration Pricing

	Description	Qty	Unit Price	Ext. Price	Disc.	Disc. Price
<b>Hardware &amp; Software</b>						
D6V3-1T-AC	Dorado6000 V3(3U, Dual Ctrl, AC240HVDC, 1024GB Cache, 2*4*12Gb SAS I/O module, SPE62C0300)	2	114,300.00	228,600.00	45%	125,730.00
DV3-SMARTIO8FC	4 port SmartIO I/O module(SFP+, 8Gb FC)	16	1,500.00	24,000.00	45%	13,200.00
DV3-LPU5PCIE	8G PCIe Interface Board (with 2 NT Ports)	4	1,300.00	5,200.00	44%	2,912.00
DV3-SSD-SAS-900G	900GB SSD SAS Disk Unit (2.5")	100	3,600.00	360,000.00	44%	201,600.00
DV3-SDAE25U2-AC	Dorado V3 SSD SAS Disk Enclosure (2U, AC240HVDC, 2.5", Expanding Module, 25 Disk Slots, without Disk Unit, DAE52525U2)	4	3,800.00	15,200.00	44%	8,512.00
N8GHBA000	QLOGIC QLE2562 HBA Card, PCIe, 8Gbps DualPort, Fiber Channel Multimode LC Optic Interface, English Manual, No Drive CD	32	1,000.00	32,000.00	0%	32,000.00
HS-SAS-3-01	High Speed Cable, Mini SAS HD Cable, 3m (SFF 8644 Plug) (28AWG*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, 2mm, 42mm DLC	64	11.00	704.00	0%	704.00
DV3-PCIESWITCH3	PCIe 3.0 Switch (AC240 DC, 8G Cache, 16 port, SWE1600P08)	2	7,650.00	15,300.00	0%	15,300.00
OQSFPM01	Quadwire 40 Gb/s Parallel AOC for PCIe 3.0	8	929.00	7,432.00	0%	7,432.00
D6V3-LBS	Basic Software License (Include DeviceManager, SmartThin, SmartMigration, SmartDedupe, SmartCompression, eService, SystemReporter, UltraPath)	1	10,300.00	10,300.00	43%	5,871.00
<b>Hardware &amp; Software Subtotal</b>						<b>414,797.00</b>
<b>Support &amp; Maintenance</b>						
88125ESH	OceanStor Dorado6000 V3 Installation Service - Engineering	1	5,657.43	5,657.43	30%	3,960.20
02350RMG-88134ULF-36	Dorado6000 V3 (3U, Dual Ctrl, AC240HVDC, 1024GB Cache, SPE62C0300)-Hi-Care Onsite Premier 24x7x4H Engineer Onsite Service - 36Month(s)	1	12,270.36	12,270.36	30%	8,589.25
02350SWJ-88134ULF-36	900GB SSD SAS Disk Unit(2.5") - Hi-Care Onsite Premier 24x7x4H Engineer Onsite Service - 36Month(s)	100	342.74	34,273.80	30%	23,991.66
88033NAR-88134UHK-36	Basic Software License (Include DeviceManager, SmartThin, SmartMigration, SmartDedupe, SmartCompression, eService, SystemReporter) - Hi-Care Application Software Upgrade Support Service - 36Month(s)	1	3,635.47	3,635.47	30%	2,544.83
<b>Support &amp; Maintenance Subtotal</b>						<b>39,085.94</b>
<b>SPC-1 Total System Price</b>						<b>453,882.94</b>
SPC-1 IOPS™						1,000,560
<b>SPC-1 Price-Performance™ (\$/SPC-1 IOPS™)</b>						<b>0.46</b>
SPC-1 ASU Capacity (GB)						36,078
<b>SPC-1 ASU Price (\$/GB)</b>						<b>12.59</b>

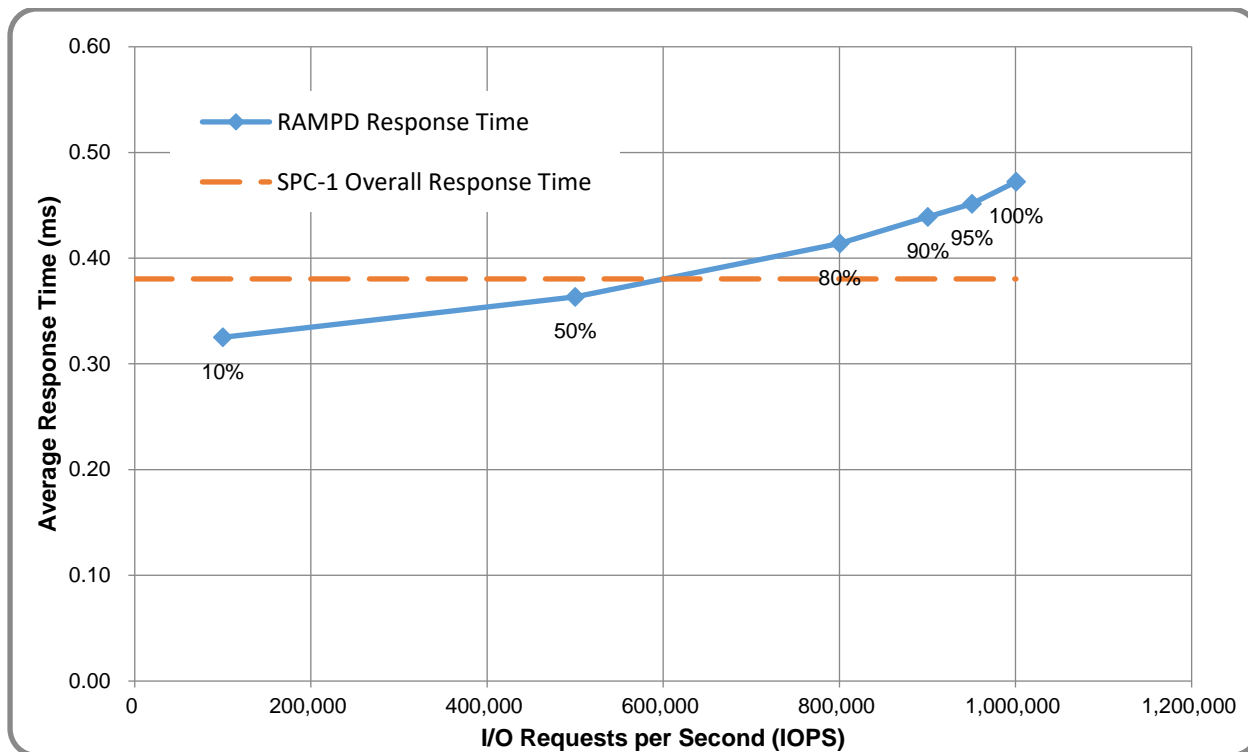
**Third-Party Reseller:** Huawei Technologies Co., Ltd. only sells its products to third-party resellers who, in turn, sell those products to U.S. customers. The above reflects the pricing quoted by one of those third-party resellers. See Appendix B of the Full Disclosure Report for a copy of the third-party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



Contact Information	
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Revision Information	
<b>SPC Benchmark 1™ Revision</b>	V3.4.0
<b>SPC-1 Workload Generator Revision</b>	V3.00 build d34fb3c
<b>Publication Revision History</b>	Initial Publication