**SPC Benchmark 1™**

**Executive Summary**

**Huawei Technologies Co., Ltd. Huawei OceanStor™ Dorado5000 V3**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPC-1 IOPS™</td>
<td>800,465</td>
</tr>
<tr>
<td>SPC-1 Price-Performance™</td>
<td>$471.45/SPC-1 KIOPS™</td>
</tr>
<tr>
<td>SPC-1 IOPS™ Response Time</td>
<td>0.507 ms</td>
</tr>
<tr>
<td>SPC-1 Overall Response Time</td>
<td>0.341 ms</td>
</tr>
<tr>
<td>SPC-1 ASU Capacity</td>
<td>27,058 GB</td>
</tr>
<tr>
<td>SPC-1 ASU Price</td>
<td>$13.95/GB</td>
</tr>
<tr>
<td>SPC-1 Total System Price</td>
<td>$377,376.61</td>
</tr>
<tr>
<td>Data Protection Level</td>
<td>Protected 2 (RAID 6 and full redundancy)</td>
</tr>
<tr>
<td>Physical Storage Capacity</td>
<td>50,791 GB</td>
</tr>
<tr>
<td>Pricing Currency / Target Country</td>
<td>U.S. Dollars / USA</td>
</tr>
</tbody>
</table>

**SPC-1 V3.5.0**

**Submission Identifier: A31010**

**Submitted For Review: December 5, 2017**
Benchmark Configuration Diagram

Host Systems

8 x Huawei FusionServer™ RH5885H V3

2 x QLogic dual-port QLE2562 FC HBA per FusionServer™

32 x FC connections
(4 connections per server)

Huawei OceanStor™ Dorado5000 V3

2 x Dorado5000 V3 Enclosures (each with)
2 x Dorado5000 V3 Active-Active Controllers (each with)
256GB cache
1 x 4-port 8Gbps Smart I/O Module
1 x 4*8Gbps FC port on board
1 x 2-port PCIe Module
25 x 1TB NVMe SSDs

2 x 16-port PCIe switches

Tested Storage Configuration (TSC)
Tested Storage Product Description

Huawei’s OceanStor™ Dorado™ V3 all-flash storage is the ideal choice for enterprises’ mission-critical business. It is the industry’s first commercial use of NVMe all-flash storage, and it delivers high-performing, reliable, and efficient storage services.

The HyperMetro gateway-free active-active solution ensures 99.9999% availability, and 3:1 data reduction guarantee reduces TCO by 50%.

The Dorado satisfies the storage requirements of databases, Virtual Desktop Infrastructure (VDI) and Virtual Server Infrastructure (VSI), smoothing the way to the all-flash era.

For more details, visit:


Priced Storage Configuration Components

<table>
<thead>
<tr>
<th>16 x QLogic dual-ported QLE2562 FC HBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x Dorado5000 V3 Enclosures (each with)</td>
</tr>
<tr>
<td>2 x Dorado5000 V3 Active-Active Controllers (each with)</td>
</tr>
<tr>
<td>256GB cache</td>
</tr>
<tr>
<td>1 x 4-port 8Gbps Smart I/O Module</td>
</tr>
<tr>
<td>1 x 4*8Gbps FC port on board</td>
</tr>
<tr>
<td>1 x 2-port PCIe Module</td>
</tr>
<tr>
<td>25 x 1TB NVMe SSDs</td>
</tr>
<tr>
<td>2 x 16-port PCIe 2.0 switches</td>
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</tbody>
</table>
## Storage Configuration Pricing

<table>
<thead>
<tr>
<th>Description</th>
<th>Qty</th>
<th>Unit Price</th>
<th>Ext. Price</th>
<th>Disc.</th>
<th>Disc. Price</th>
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</thead>
<tbody>
<tr>
<td><strong>Hardware &amp; Software</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D5V3-512G-NAC-8</td>
<td>2</td>
<td>123,590.82</td>
<td>247,181.64</td>
<td>45%</td>
<td>135,949.90</td>
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<tr>
<td>DV3-LPU5PCIE</td>
<td>4</td>
<td>1,929.20</td>
<td>7,716.80</td>
<td>45%</td>
<td>4,244.24</td>
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<tr>
<td>D5V3-SSD-NVME-1T</td>
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<td>4,971.40</td>
<td>248,570.00</td>
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<tr>
<td>NBGHB-A000</td>
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<td>SN2F01FCPC</td>
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<td>DV3-PCIESWITCH</td>
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<td>ACC-QSFP41G</td>
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<tr>
<td>D5V3-LBS</td>
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<td>7,196.00</td>
<td>44%</td>
<td>4,029.76</td>
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<tr>
<td><strong>Support &amp; Maintenance</strong></td>
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<tr>
<td>02351GSA-88134ULF-36</td>
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<td>88033NAM-88134UK-36</td>
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<tr>
<td>8812102575</td>
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<td>9,620.68</td>
<td>9,620.68</td>
<td>10%</td>
<td>8,658.61</td>
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**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

Test Sponsor Primary Contact
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SPC Auditor
 InfoSizing – [www.sizing.com](http://www.sizing.com)
 Francois Raab – francois@sizing.com

Revision Information

<table>
<thead>
<tr>
<th>SPC Benchmark 1™ Revision</th>
<th>V3.5.0</th>
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<tr>
<td>SPC-1 Workload Generator Revision</td>
<td>V3.0 build d34fb3c</td>
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Publication Revision History

- First Edition: December 5, 2017
- Second Edition: February 15, 2018
  - Updated SPC-1 Price-Performance™ metric based on SPC-1 v3.6.0 definition.