The Seagate® Nytro® 1000 SATA SSD Series is a cost-effective, enterprise-grade solution for data center and cloud server applications. It is designed to deliver high, sustained, and consistent performance for improved QoS and enhanced user experience.

SSDs with the SATA storage interface meet the high performance and reliability requirements without disrupting legacy storage infrastructures or involving additional investments in software and hardware.

**Optimized for Performance, Integration, and Cost**
- Boost the performance of applications that require faster random access performance
- Maintain fast, consistent performance for read-intensive and mixed workloads
- Take advantage of easy deployment and more processing power without investment in new hardware
- Require less energy to run 24×7, and save on cooling and overall energy cost

**Wide Range of Storage and Security Options**
- Receive endurance, security, and capacity options for enterprise applications
- Choose the capacity and endurance to fit a range of application and workload needs
- Achieve peace of mind through Seagate Secure™ data protection

**Enterprise-Grade Feature Set**
- Maintain high data integrity in the event of unexpected power loss
- Leverage Seagate’s reliability and system compatibility test infrastructure
- Attain end-to-end data protection with Seagate SHIELD™ and Seagate RAISE technologies

**Key Features and Benefits**
- SATA 6Gb/s interface for easy deployment
- Seagate DuraWrite™ lossless data reduction technology
- Tunable capacity for performance- or capacity-optimized SSD solutions
- Seagate Secure options
- Power loss data protection circuit
- Enterprise-class reliability with 2M-hr. MTBF and a 5-year limited warranty

**Best-Fit Applications**
- Public and private cloud
- Web servers
- Tiered storage analytics
- Databases (OLTP)
<table>
<thead>
<tr>
<th>Specifications</th>
<th>Nytro 1351 SATA SSD—Light Endurance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td>3.84TB</td>
</tr>
<tr>
<td><strong>Standard Model</strong></td>
<td>XA3840LE10063</td>
</tr>
<tr>
<td><strong>Seagate Secure SED Model</strong></td>
<td>XA3840LE10083</td>
</tr>
<tr>
<td><strong>Seagate Secure SED Model (TCG OPAL)</strong></td>
<td>XA3840LE10103</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td></td>
</tr>
<tr>
<td><strong>NAND Flash Type</strong></td>
<td>3D TLC</td>
</tr>
<tr>
<td><strong>Form Factor</strong></td>
<td>2.5 in × 7mm</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sequential Read (MB/s)</strong></td>
<td>564</td>
</tr>
<tr>
<td><strong>Sequential Write (MB/s)</strong></td>
<td>536</td>
</tr>
<tr>
<td><strong>Random Read (IOPS)</strong></td>
<td>90,000</td>
</tr>
<tr>
<td><strong>Random R70R (IOPS)</strong></td>
<td>46,000</td>
</tr>
<tr>
<td><strong>Random Write (IOPS)</strong></td>
<td>22,000</td>
</tr>
<tr>
<td><strong>Average Read Latency (μs)</strong></td>
<td>172</td>
</tr>
<tr>
<td><strong>Average Write Latency (μs)</strong></td>
<td>58</td>
</tr>
<tr>
<td><strong>Endurance/Reliability</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Lifetime Endurance (Drive Writes per Day)</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Bytes Written to Flash (TB)</strong></td>
<td>12,300</td>
</tr>
<tr>
<td><strong>Nonrecoverable Read Errors per Bits Read</strong></td>
<td>1 per 10E17</td>
</tr>
<tr>
<td><strong>Mean Time Between Failures (MTBF, hours)</strong></td>
<td>2,000,000</td>
</tr>
<tr>
<td><strong>Warranty, Limited (years)</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Power Management</strong></td>
<td></td>
</tr>
<tr>
<td><strong>+5/+12V Overall Average Active Power (W)</strong></td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Average Idle Power (W)</strong></td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Temperature, Operating Internal (°C)</strong></td>
<td>0°C – 70°C</td>
</tr>
<tr>
<td><strong>Temperature, Nonoperating (°C)</strong></td>
<td>-40°C – 85°C</td>
</tr>
<tr>
<td><strong>Temperature Change Rate/Hr, Max (°C)</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>Shock, 0.5ms (Gs)</strong></td>
<td>1000</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Height (mm/in, max)</strong></td>
<td>7.0mm/0.276in</td>
</tr>
<tr>
<td><strong>Width (mm/in, max)</strong></td>
<td>70.10mm/2.760in</td>
</tr>
<tr>
<td><strong>Depth (mm/in, max)</strong></td>
<td>100.25mm/3.947in</td>
</tr>
<tr>
<td><strong>Weight (g/lb)</strong></td>
<td>82.0g/0.1808lb</td>
</tr>
<tr>
<td><strong>Carton Unit Quantity</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

1 Windows Hardware Quality Labs (WHQL) certification for Opal configurations is not available at this time.
2 Performance data is based on testing under certain workload conditions and is subject to change. Performance assumes 20% data compressibility as set with VDBench.
3 System variations and HBA used will affect measured results.
4 Performance varies by capacities and endurance.
5 Refer to Product Manual for more detailed warranty information.
6 3.84TB, 1.92TB, 960GB capacity points require 12V in addition to 5V power.
## Specifications

### Nytro 1551 SATA SSD—Mainstream Endurance

<table>
<thead>
<tr>
<th>Capacity</th>
<th>3.84TB</th>
<th>1.92TB</th>
<th>960GB</th>
<th>480GB</th>
<th>240GB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Model</td>
<td>XA3840ME10063</td>
<td>XA1920ME10063</td>
<td>XA960ME10063</td>
<td>XA480ME10063</td>
<td>XA240ME10003</td>
</tr>
<tr>
<td>Seagate Secure SED Model (TCG Enterprise)</td>
<td>XA3840ME10083</td>
<td>XA1920ME10083</td>
<td>XA960ME10083</td>
<td>XA480ME10083</td>
<td>XA240ME10023</td>
</tr>
<tr>
<td>Seagate Secure SED Model (TCG OPAL)</td>
<td>XA3840ME10103</td>
<td>XA1920ME10103</td>
<td>XA960ME10103</td>
<td>XA480ME10103</td>
<td>XA240ME10043</td>
</tr>
</tbody>
</table>

### Features

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NAND Flash Type</td>
<td>3D TLC</td>
<td>3D TLC</td>
<td>3D TLC</td>
<td>3D TLC</td>
<td>3D TLC</td>
</tr>
<tr>
<td>Form Factor</td>
<td>2.5 in × 7mm</td>
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<td>2.5 in × 7mm</td>
<td>2.5 in × 7mm</td>
<td>2.5 in × 7mm</td>
</tr>
</tbody>
</table>

### Performance

| Sequential Read (MB/s) Sustained, 128KB QD2,3,4 | 564 | 564 | 564 | 564 | 564 |
| Sequential Write (MB/s) Sustained, 128KB QD2,3,4 | 536 | 537 | 537 | 536 | 333 |
| Random Read (IOPS) Sustained, 4KB QD2,3,4 | 92,000 | 94,000 | 93,000 | 82,000 | 57,000 |
| Random R70R (IOPS) Sustained, 4KB QD2,3,4 | 61,000 | 66,000 | 57,000 | 45,000 | 32,000 |
| Random Write (IOPS) Sustained, 4KB QD2,3,4 | 41,000 | 48,000 | 59,000 | 48,000 | 30,000 |
| Average Read Latency (μs), 4KB QD2,3,4 | 162 | 150 | 148 | 148 | 148 |
| Average Write Latency (μs), 4KB QD2,3,4 | 38 | 38 | 38 | 38 | 37 |

### Endurance/Reliability

| Lifetime Endurance (Drive Writes per Day) | 3 | 3 | 3 | 3 | 3 |
| Total Bytes Written to Flash (TB) | 28,700 | 14,300 | 7170 | 3580 | 1790 |
| Nonrecoverable Read Errors per Bits Read | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 | 1 per 10E17 |
| Mean Time Between Failures (MTBF, hours) | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 |
| Warranty, Limited (years) | 5 | 5 | 5 | 5 | 5 |

### Power Management

| 3.84TB/1.92TB/960GB Overall Average Active Power (W) | 3.5 | 3.4 | 3.2 | 2.7 | 2.3 |
| Average Idle Power (W) | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 |

### Environmental

| Temperature, Operating Internal (°C) | 0°C – 70°C | 0°C – 70°C | 0°C – 70°C | 0°C – 70°C | 0°C – 70°C |
| Temperature, Nonoperating (°C) | -40°C – 85°C | -40°C – 85°C | -40°C – 85°C | -40°C – 85°C | -40°C – 85°C |
| Temperature Change Rate/Hr, Max (°C) | 20 | 20 | 20 | 20 | 20 |
| Shock, 0.5ms (Gs) | 1000 | 1000 | 1000 | 1000 | 1000 |

### Physical

| Height (mm/in, max) | 7.0mm/0.276in | 7.0mm/0.276in | 7.0mm/0.276in | 7.0mm/0.276in | 7.0mm/0.276in |
| Width (mm/in, max) | 70.10mm/2.760in | 70.10mm/2.760in | 70.10mm/2.760in | 70.10mm/2.760in | 70.10mm/2.760in |
| Depth (mm/in, max) | 100.25mm/3.947in | 100.25mm/3.947in | 100.25mm/3.947in | 100.25mm/3.947in | 100.25mm/3.947in |
| Weight (g/lb) | 82.0g/0.1808lb | 77.0g/0.1698lb | 77.0g/0.1698lb | 75.0g/0.1653lb | 75.0g/0.1653lb |
| Carton Unit Quantity | 10 | 10 | 10 | 10 | 10 |

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