**SX3e+ SSD Test System**

**Supported Protocols**
- PCIe 2.0, PCIe 3.0
- SATA 3/6 Gbps
- SAS 3/6/12 Gbps
- AHCI, NVMe

**Supported Form Factors**
- Edge Card (AIC) FHFL, FHHL, HHFL, HHHL
- 1.8", 2.5"
- U.2
- mSATA
- M.2

**System Scalability**
- **SX3e+**
  - Engineering Lab Chassis
  - Up to 32 Parallel DUTs
- **SX3-t**
  - Table-top Production Chassis
  - Up to 64 Parallel DUTs
- **SX3-4t1z**
  - 1-zone Production Chamber
  - Up to 256 Parallel DUTs
- **SX3-8t2z**
  - 2-zone Production Chamber
  - Up to 512 Parallel DUTs
- **SX3-16t4z**
  - 4-zone Production Chamber
  - Up to 1024 Parallel DUTs

**SX3e+ Bench-Top Engineering SSD Tester**

The SX3e+ is Neosem’s third generation SSD test system. Designed for SSD test from the ground up, the SX3e+ is optimized to meet the rapidly evolving test requirements in the SSD market space. The unique architecture of the SX3e+ provides the flexibility to test all current SSD protocols – and – easily adapts to support new protocols as they emerge. In addition to complete protocol testing, the SX3e+ also fully supports Out-of-Band signal (DevSlp, WAKE, CLKREQ,...) requirements and serial communications standards, such as for SMBus, UART, and others. The SX3e+ also supports running Oakgate Technology’s Storage Verification Framework (SVF) suite.

**Maximum Scalability**

Neosem engineered the SX3e+ for maximum scalability. The architecture’s basic components (Core Processor Boards, Protocol Boards, and DUT Signal and Power Boards) are repeated to offer the broadest range of parallelism. System layout and infrastructure assures distributed processing, no bandwidth loss, and no signal fidelity loss when scaling from the smallest engineering station to the largest HVM environmental chamber. The SX3e+ support DUT counts as low as 4 DUTs to a maximum count of 32 DUTs.

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Optimized Test Floor Operations

The integrated Test Board (TB) and Tray System from Neosem Technology is a revolutionary transport and test carrier solution specifically designed for SSD. Test Boards are hybrid assemblies of Signal and Power interface boards that are integrated into a durable framework, and can be designed to accommodate any DUT form factor. An EEPROM build on the Test Board stores the test results and can be output to a database.

TB assemblies are compatible with all Neosem production systems, and they serve to transport as many as 32 DUTs – and their test results – between test stations.

Customized Integration Solutions

Neosem Technology offers both proven, standardized solutions as well as custom integrated solutions. Neosem has worked with many of the Industry’s handler companies to integrate Neosem hardware. Production chambers with integrated temperature control are combined with SX3 electronics to allow parallel testing of as many as 1024 DUTs at -10 to 85C.

Neosem Technology environmental chamber configurations range from one to four independently controlled zones for maximum production flexibility.

## SX3e+ System Specifications

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</table>

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  - 2-zone Production Chamber
  - Up to 512 Parallel DUTs
- SX3-161tZ
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