SANBlaze

SBExpress-RM5+

Gen 6-Ready Hardware

Data Sheet

SANBlaze SBExpress-RM5+ Gen6-Ready PCIe NVMe SSD Test System

Overview

The SANBlaze SBExpress-RM5+ is a complete turnkey PCIe® Gen 6-Ready NVMe SSD validation test system. The SBExpress-RM5+ is engineered to accept Gen6 hardware for a no-cost upgrade from Gen5 to Gen6, saving on CapEx and minimizing downtime.

The SBExpress-RM5+ feature set provides unique functions applicable to all aspects of a product lifecycle - from engineering development, through validation and QA, to manufacturing test environments.

Development, qualification, and certification test cycles can be highly automated, thus reducing overall test time, and rapidly surfacing errors and non-conformance.

The SANBlaze SBExpress-RM5+ hardware provides a rackmount chasis with sixteen dual or single port front-accessible drives. The hardware provides excellent air flow for thermal chamber testing.

Dimensions

Height: 3.5"
Width w/out Ears: 17 1/8"
Width w/ Ears: 19"

Depth w/out handles: 21 3/4
Depth with handles: 22 3/4

Thermal Characteristics

Temperature Rating	-5C to 70C
Humidity	95% RH Non-condensing

Power

AC input 100-127 Vac/200-240 Vac
Max 14A at 100V

System Features

- PCIe® Gen5 system engineered with PCIe® Gen6-ready components for a no cost future upgrade from Gen5 to Gen6
- Both Gen5 and Gen6 PCIe NVMe testing on a Gen5 host
- Multiple clocking architecture support (SRIS/SRNS)
- VDM, SPDM, OCP, TCG, FDP, ZNS
- Sixteen drives, all front accessible
- Hot plug, slot power, and drive presence under software control
- Standard iRiser6SE PCIe-to-EDSFF riser, can be paired with:
  - 660 M.2 adapter
  - 680 Standard U.2 adapter
  - 670 U.2 adapter (with PCIe glitching capability)
- Optional iRiser6 PCIe-to-EDSFF riser with additional PCIe lane glitching capability, can be paired with:
  - 660 M.2 adapter
- Field-installable riser cards support both single or dual port drives
- Measure voltage and power at each drive
- Optimal thermal design with unobstructed air flow
- Five fans speed-controlled through temperature sensing on each fan (user controllable through config file)
- 38 temperature monitoring points
- 25W per slot at 70C
- Voltage margining +/- 15%

Software Features

- Test coverage for all aspects of the NVMe specification
- UNH Conformance Testing supported
- NVMe-MI (Management Interface) testing over SMBus supported
- SGL, SR-IOV, full namespace control and reservations
- Drive multiple ports of traffic simultaneously
- Send specific or custom op codes in an easy to use scriptable format
- Read / write / compare testing
- Error injection
- Vendor-unique commands supported
- Drive and test single or multiple NVMe target devices
- SBCert (Certified by SANBlaze) test suite

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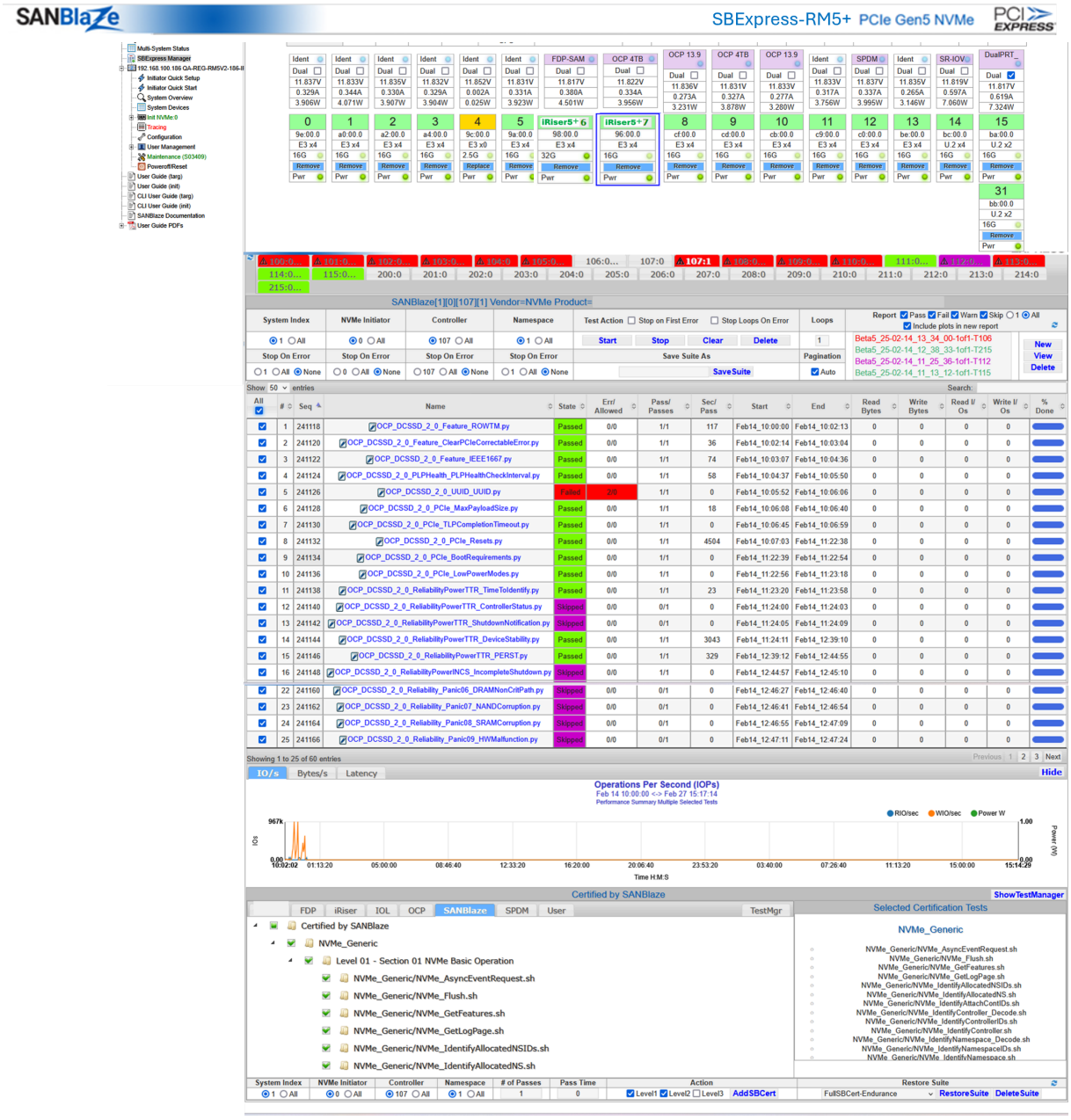

Certified by SANBlaze (SBCert)

- Hundreds of out-of-the-box tests available
- Enables IOL testing in the customer's lab, before undergoing official testing
- Widely recognized industry benchmark
- SR-IOV, SPDM, ZNS, VDM, OCP, and TCG Opal verification available as add-ons
- UNH-IOL INTERACT software available as an upgrade

All information in this document is subject to change. Configurations rely on host system BIOS support and may be restricted by the host. Contact SANBlaze for additional information.

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