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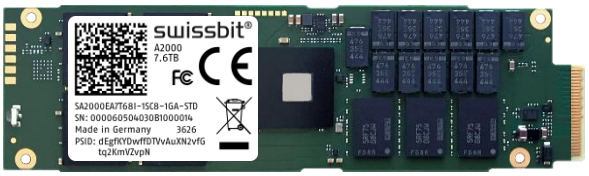
Preliminary
Product Fact Sheet

High Endurance E1.S PCIe SSD

A2000 Series
PCIe 4.0, 3D TLC

Industrial Temperature Grade

Date: August 20, 2026
Revision: 0.90



Made in Germany

Product Summary

- **Capacities:** 480 GBytes, 960 GBytes, 1.92 TBytes, 3.84 TBytes, 7.68 TBytes
- **Form Factor:** PCIe Express E1.S
  - Without Heatsink (111.49mm x 31.50mm x 5.9mm)
  - With Heatsink (118.75mm x 33.75mm x 9.5mm)
- **Compliance:**
  - PCI Express (PCIe) Specification Revision 4.0
  - NVM Express Specification Revision 1.4
- **Interface:** Gen4 x 4 Lanes
- **Command Sets:** Supports NVMe 1.4
- **Performance:**
  - Sequential Read up to 6,440 MB/s, Random Read up to 1,081,400 IOPS
  - Sequential Write up to 5,810 MB/s, Random Write up to 841,900 IOPS
- **Operating Temperature Range:**
  - Industrial -40 °C to 85 °C
- **Storage Temperature Range:**
  - -40 °C to 85 °C
- **Power:**
  - Thermal Throttling supported
- **Data Retention[1]:**
  - 10 Years @ Life Begin; 1 Year @ Life End, @40 °C
- **Shock/Vibration:**
  - 1,500 g / 50 g
- **High-Performance Processor with Integrated, Parallel Flash Interface Engines:**
  - Triple-Level Cell (TLC) 3D NAND Flash
- **High Reliability:**
  - Mean Time Between Failure (MTBF): > 2,500,000 hours
  - Data Reliability UBER: <1 Sector per 10^{17} Read
- **Endurance DWPD (3 years EP WL):** 0.3

[1] NAND Flash suppliers refer to JEDEC JESD47 and JESD22 for Data Retention testing. Based on the information provided by the NAND Flash suppliers, Data Retention is targeted as shown

Product Features

- Adaptive thermal control
- DRAM-Buffer
- 30 µinch (0.8 µm) Gold-Plated Connector (IPC-6012C Class 2 Compliant)
- powersafe™ Functionality (Power Loss Protection Level 3)
- In-Field Firmware Update[2]
- Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.)
- Swissbit Device Manager Tool (SBDM)
- Drive Self-Test
- Diagnostic Features
- Data Care Management
  - Active: Adaptive Read Refresh
  - Passive: Background Media Scan
- Sanitize Block and Crypto Erase
- Life End Read Only Mode
- RAID Engine
- Controlled "Locked" BOM
- RoHS / REACH Compliant

Security Features

- AES256 encryption
- TCG OPAL 2.0
- Crypto erase
- Secure Boot
  - RSA3072 & RSA4096 FW Image authentication support
  - SHA3-256 hash algorithm support



Why Swissbit?

Swissbit is focused on the design, development, manufacture, and support of leading edge memory and storage solutions for the worldwide OEM/ODM marketplace. As a global supplier, Swissbit recognizes and addresses the higher level of application requirements of today's industrial, Netcom, and automotive customers by providing best-in-class products and services, with uncompromised attention to driving overall value and quality.

[2] The support of In-Field FW update capabilities on host systems is recommended.