

swissbit®

Product Fact Sheet

Industrial PCIe SSD (m.2 2280)

N-10m2 Series

PCIe 3.1



N-10m2 Series – Industrial PCIe Solid State Drive

Product Summary

- **Capacities:** 120 GBytes, 240 GBytes, 480 GBytes, 960 GBytes
- **Form Factor:** PCI Express® M.2 2280 (80 mm x 22 mm x 3.6 mm)
- **Compliance:** PCI Express Specification Revision 3.1
- **Interface:** Gen3 x 2 Lanes
 - Drive operates in x1 mode in x1 M.2 PCIe slots
 - Drive operates in x2 mode in x2 or x4 M.2 PCIe slots
- **Command Sets:** Supports NVMe 1.2
- **Performance:**
 - Read Performance: Sequential Read up to 1,600 MBytes/s, Random Read IOPs up to 197,000
 - Write Performance: Sequential Write up to 1,100 MBytes/s, Random Write IOPs up to 199,000
- **Operating Temperature Range*:**
 - Commercial: 0 °C to 70 °C | Industrial: -40 °C to 85 °C
- **Storage Temperature Range:** -40 °C to 85 °C
- **Operating Voltage:** 3.3 V ± 5%
- **Low Power Consumption**
- **Data Retention:** 10 Years @ Life Begin; 1 Year @ Life End
- **Shock/Vibration:** 1,500 g / 50 g
- **ECC:** LDPC – up to 120 bit corrections per 1 KByte page
- **Mean Time Between Failure:** > 2,000,000 hours
- **Data Reliability:** < 1 non-recoverable error per 10¹⁶ bits read

Product Features

- 3D NAND Flash Technology
- Dynamic and Static Wear Leveling
- Active and Passive Data Care Management
- Lifetime Enhancements
 - Dynamic Bad Block Remapping
 - Write Amplification Reduction
- On-Board Power Fail Protection
- Active State Power Management (ASPM) Support
- NVMe Security Command Support
- Reduced Latency
- In-Field Firmware Update
- Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.)
- Swissbit Life Time Monitoring (SBLTM) Tool and SDK for SBLTM (on request)

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.

* Adequate airflow is required to ensure the drive temperature, as reported in the S.M.A.R.T. data, does not exceed the specified maximum operating temperature.