

EVERbit™

swissbit®

Product Fact Sheet

Industrial USB Flash Drive Module

U-56 Series

USB 3.1 SuperSpeed, pSLC

Commercial and Industrial Temperature Grade

Date: January 26, 2023
Revision: 1.01



Product Summary

- **Capacities:** 4 GBytes, 8 GBytes, 16 GBytes, 32 GBytes
- **Form Factor:** 26.65 x 36.8mm with 2.54mm or 2.00mm connector with keyed pin9
- **Compliance:** Fully compliant with USB specification 3.1 Gen 1 (backward compliance with USB 2.0/1.1)
- **Performance:**
 - Read performance: sequential read up to 175 MBytes/s, random read IOPS up to 3,200
 - Write performance: sequential write up to 110 MBytes/s, random write IOPS up to 1,100
- **Operating Temperature Range:**
 - Commercial: 0 °C to 70 °C
 - Industrial: -40 °C to 85 °C
- **Storage Temperature Range:** -40 °C to 100 °C
- **Operating Voltage:** 3.1 to 5.5V
- **Data Retention:** 10 years @ life begin; 1 year @ life end
- **Endurance in TeraBytes Written (TBW) @ Max Capacity:** 652 (seq. write 128KB); 40 (random write 4KB)
- **Shock/Vibration:** 1,500 *g* / 50 *g* (JESD22-B110 / MIL-STD-883H M2007.3)
- **Mean Time Between Failure:** > 3,000,000 hours
- **Data Reliability (UBER):** 10^{-16} bits read

Product Features

- Pseudo SLC Flash with 20,000 Program/Erase Cycles and **everbit™** Reduced Write Amplification
- Designed with sophisticated firmware architecture for industrial and NetCom market especially 24/7 application
- Patented power-off reliability technology
- Near Miss ECC technology
- Read Disturb Management
- Wear Leveling technology
- Data Care Management
- Mounting hole electrically not connected (optional grounded)
- Fixed drive (USB hard drive, optional removable)
- LED for operation indication
- Write protect switch (optional)
- In-field firmware update
- 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.