

swissbit®

Product Fact Sheet

Secure Data Protection microSDHC / SDXC Memory Card

PS-66u DP Series

UHS-I Interface, pSLC

Industrial Temperature Grade

Date: November 14, 2023
Revision: 1.00



Product Summary

- **Capacities:** 16 GBytes, 32 GBytes, 64 GBytes
- **Form Factor:** Standard microSD Memory card form factor – 15.0mm x 11.0mm x 0.7mm (1.0mm)
- **Compliance:** Fully compliant with SD Memory Card specification 6.10
 - SDHC default/high speed mode and UHS supported
 - Speed class 10/U3/V30/A1 according SD6.10 specification
 - 16–32GB / FAT32 and 64GB / exFAT
- **Performance:**
 - SD Default speed, SD High speed, SD UHS-I
 - Read Performance: Sequential Read up to 47 MBytes/s, Random Read IOPS up to 1500
 - Write Performance: Sequential Write up to 46 MBytes/s, Random Write IOPS up to 1400
- **Operating Temperature Range¹:**
 - Industrial: –40 °C to 85 °C
- **Storage Temperature Range:**
 - Industrial: –40 °C to 100 °C
- **Operating Voltage:** 2.7...3.6V normal operating voltage (Low-power CMOS technology)
- **Data Retention:** 10 Years @ Life Begin / 1 Year @ Life End
- **Humidity:** 85% RH @85°C 1000h
- **Electromagnetic Compatibility Test:** Radiated Emission; Radiated Immunity; Electrostatic Discharge

Product Features

- Optimized FW algorithms especially for high read access and long data retention applications
 - Patented power-off reliability technology, Wear Leveling technology
 - Write Endurance technology, Read Disturb Management
 - Data Care Management, Near miss ECC technology
 - Diagnostic features with Life Time Monitoring tool support
 - Number of card insertions/removals 20,000
- **AES 256 bit flash memory encryption**
- **Encrypted security activation**
- **User PIN and administrator login**
- **Implicit and replay safe secure authentication against password theft**
- **Configurable retry counter**
- **Unique ID**
- **Counterfeit protection by authenticity and integrity check**
- **Fast crypto wipe**
- **CD-ROM Emulation**
- **Private Partition**
- **Hidden Storage**
- **CmReady – Prepared for out-of-the-box use with Wibu-Systems CodeMeter (software protection & license management)**
- **Manufactured in a TS 16949 certified factory**
- **Swissbit Life Time Monitoring (SBLTM) Tool and SDK for SBLTM (on request)**

¹ High Temperature storage without operation reduces the data retention, in operation the data will be refreshed, if data error issues were detected

Ordering Information

Product Type	Product Series	Capacity	Part Number
microSD	PS-66u DP	16 GBytes	SFSD016GN1PT1MT-I-5E-02P-SW4
microSD	PS-66u DP	32 GBytes	SFSD032GN1PT1MT-I-6F-02P-SW4
microSD	PS-66u DP	64 GBytes	SFSD064GN1PT1MT-I-7G-02P-SW4

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.