

everbit™

swissbit®

Product Fact Sheet

**Industrial  
microSD / SDHC / SDXC  
Memory Card**

**S-46u Series**  
UHS-I Interface, pSLC

Extended and Industrial  
Temperature Grade

Date: March 29, 2019  
Revision: 1.01



## Product Summary

- **Capacities:** 2 GBytes, 4 GBytes, 8 GBytes, 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 2.0 and 3.0 and MICRO SD Memory Card Addendum 4.00
  - SD/SDHC/SDXC default/high speed mode and UHS supported
  - Up to speed class 10 and U3 according SD3.0 specification
  - FAT16, FAT32 or exFAT preformatted
- **Performance:** High performance 3.0 specification
  - SD Default speed, SD High speed, SD UHS-I
  - Read Performance: Sequential Read up to 46 MBytes/s, Random Read IOPS up to 1,433
  - Write Performance: Sequential Write up to 41 MBytes/s, Random Write IOPS up to 1,249
- **Operating Temperature Range\*:**
  - Extended: -25 to 85 °C
  - Industrial: -40 to 85 °C
- **Storage Temperature Range:**
  - Extended: -25 to 100 °C
  - Industrial: -40 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
- High reliability
  - S-46u cards with pseudo SLC (pSLC) feature higher write performance and endurance than MLC based cards (S-45u)
  - The product is optimized for long life cycle and provides excellent data retention in high temperature mission profiles.
  - Number of card insertions/removals up to 20,000
  - SIP (System In Package) process for extreme dust, water and ESD proof
  - Selected AEC-Q100 qualification
- Manufactured in a TS 16949 certified factory
- Controlled BOM & PCN process
- Customized options like CID registers, CPRM keys, firmware incl. settings and marking by projects
- 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.

---

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

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Memory Cards](#) category:*

*Click to view products by [Swissbit](#) manufacturer:*

Other Similar products are found below :

[SQF-ISDS1-8G-21C](#) [USDCOEM-32GB](#) [LMEX1L128GG2](#) [LMEX1L256GG2](#) [LMEX1L016GG2](#) [LMEX1L032GG2](#) [LMEX1L064GG2](#)  
[SDSDQAF4-032G-I](#) [SDSDQAF4-256G-I](#) [AP-CF016GKBNS-ETNRG](#) [CFLSH-016SDG](#) [MS-C6-8G](#) [HMC-EF283](#) [SDCFXPS-032G-X46](#)  
[SDCFXSB-128G-G46](#) [SDSDQB-032G-B35](#) [SDSDQM-032G-B35A](#) [SDU4GDMGRB](#) [SDU4GDPGRB](#) [5788667-1-CUT-TAPE](#) [RP-](#)  
[SMLE32DA1](#) [SDC4GDPGRB](#) [2729389](#) [VTDCFBPI004G](#) [SDSDAF3-016G-XI](#) [2403484](#) [VTDS41PI008G](#) [SDSDAF3-016G-I](#)  
[VSFCS2CC060G](#) [SDSDAF3-032G-XI](#) [SDSDAD-016G](#) [SDSDAF3-008G-XI](#) [SDSDAF3-008G-I](#) [SDSDQAB-016G-J](#) [VTDCFBPI008G](#)  
[M1A0-0160R12](#) [M1A0-0320R12](#) [M1A4-0320R12](#) [M1AA-0160R12](#) [M1AA-0320R12](#) [M1AA-0640R12](#) [M1AA-1280R12](#) [SDCFXPS-256G-](#)  
[X46](#) [SDSDXPK-128G-GN4IN](#) [SDSDXXG-032G-GN4IN](#) [SDSDXXY-064G-GN4IN](#) [SDSDXXY-128G-GN4IN](#) [SDSDXXY-512G-GN4IN](#)  
[SDSQXA1-128G-GN6MA](#) [SDSQXA1-256G-GN6MA](#)