swissbit®

Product Fact Sheet

Industrial CompactFlash™ Card

C-350 Series
up to UDMA4 / MDMA4 / PIO6, SLC

Commercial and Industrial
Temperature Grade

Date: January 19, 2022
Revision: 1.01

Made in Germany

swissbit®

Product Summary

- **Capacities:** 32 MBytes, 64 MBytes, 128 MBytes, 256 MBytes
- **Form Factor:** CompactFlash Card Type I (36.4 mm x 42.8 mm x 3.3 mm)
- **Compliance:** CompactFlash™ specification 3.0 (4.1 compatible)
- **Command Sets:** CFA feature set, HPA, Power Management, S.M.A.R.T.
- **High Performance:**
  - Read Performance: Sequential Read up to 19.8 MBytes/s, Random Read IOPS up to 2,900
  - Write Performance: Sequential Write up to 11.4 MBytes/s, Random Write IOPS up to 20
- **Operating Temperature Range:**
  - Commercial: 0 °C to 70 °C / Industrial: -40 °C to 85 °C
- **Storage Temperature Range:** -50 °C to 100 °C
- **Operating Voltage:** 3.3V ± 10% / 5V ± 10%
- **Power (Max Capacity):**
  - Read (Active): 110mA, Write (Active): 115mA, Idle: 2mA
- **Data Retention:** 10 Years @ Life Begin; 1 Year @ Life End
- **Endurance in TeraBytes Written (TBW):**
  - Sequential WL: up to 25 TBW
  - Enterprise WL: up to 0.76 TBW
- **Shock/Vibration:** 1,500 *g* / 20 *g*
- **High-Performance 32-Bit Processor with Integrated, Parallel Flash Interface Engines:**
  - Single-Level Cell (SLC) NAND Flash
  - Hardware RS-Code ECC (4 Bytes/528 Bytes correction)
- **High Reliability:**
  - Mean Time Between Failure (MTBF): > 3,000,000 hours @ 25°C
  - Data Reliability: < 1 non-recoverable error per 10^{14} bits read

Product Features

- SLC NAND Flash with long-term availability
- Highly-integrated memory controller
  - Up to UDMA4 / MDMA4 / PIO6 mode supported
  - PC Card ATA Interface supported
  - True IDE mode compatible
  - Fix drive (IDE mode) & removable drive (PCMCIA mode) as default in the same card
- Power saving mode (with automatic wake-up)
- S.M.A.R.T. support
- Wear Leveling: equal wear leveling of static and dynamic data
- Hot swappable in PCMCIA modes
- Controlled "Locked" BOM and Life Cycle Management
- 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 addressees 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.