

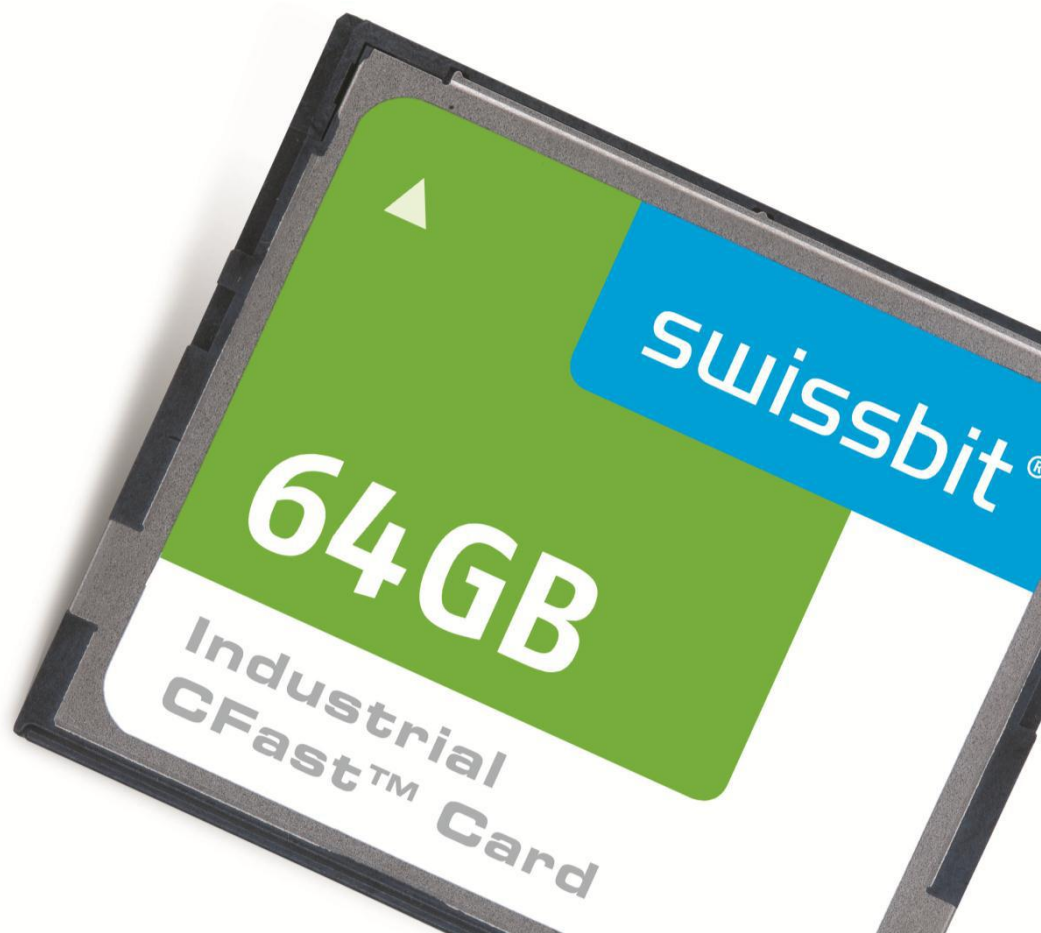
swissbit®

Product Fact Sheet

**Industrial
CFast™ Card**

F-600 Series

SATA III – 6.0 Gbit/s



F-600 Series – Industrial CFast™ Card

Product Summary

- **Capacities:** 8 GBytes, 16 GBytes, 32 GBytes, 64 GBytes
- **Form Factor:** CFast-Sized Solid State Drive (36.4 mm x 42.8 mm x 3.6 mm)
- **Compliance:** SATA Rev 3.1 – 6 Gbit/s (3 Gbit/s and 1.5 Gbit/s backward compatible)
- **Command Sets:** Supports ATA/ATAPI-8 and ACS-2
- **Performance:**
 - Read Performance: Sequential Read up to 520 MBytes/s, Random Read IOPs up to 76,000
 - Write Performance: Sequential Write up to 245 MBytes/s, Random Write IOPs up to 54,000
- **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%
- **Power (Max Capacity):** Read (Active): 1.6 W; Write (Active): 2.4 W; Idle: 347 mW; Slumber: 115 mW
- **Data Retention:** 10 Years @ Life Begin; 1 Year @ Life End
- **Endurance in TeraBytes Written (TBW) Max Capacity†:** Client > 3120; Embedded > 1920; Enterprise > 480
- **Shock/Vibration:** 1,500 g/20 g (MIL-STD810)
- **Hardware BCH Code ECC:** up to 66 bit correction per 1 KByte page
- **Mean Time Between Failure:** > 2,000,000 hours
- **Data Reliability:** < 1 non-recoverable error per 10¹⁶ bits read

Product Features

- Dynamic and Static Wear Leveling
- Data Care Management
 - Active: Adaptive Read Refresh
 - Passive: Background Media Scan
- Lifetime Enhancements
 - Dynamic Bad Block Remapping
 - Write Amplification Reduction
- On-Board Power Fail Protection
- AHCI, TRIM, and NCQ Support
- ATA Security Feature Set Support
- DEVSLP Compatible
- In-Field Firmware Update
- Enterprise-Grade Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.)
- AES256 Encryption (on request)
- 30 µinch Gold-Plated Connector (on request)
- 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.

† According to JEDEC (JESD471), the time to write the full TBW is 18 months. Higher average daily data volume reduces the specified TBW.