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Product Fact Sheet

**Industrial
CompactFlash™ Card**

**C-50 Series**
**up to UDMA6 / MDMA4 / PIO6, MLC**

Standard and Industrial
Temperature Grade

Date:        January 28, 2019
Revision:    00

durabit™



64GB
Industrial
CompactFlashCard

made in germany

**swissbit®**

# Product Summary

- **Capacities:** 8 GBytes, 16 GBytes, 32 GBytes, 64 GBytes, 128 GBytes
- **Form Factor:** CompactFlash Type I Card (36.4mm x 42.8mm x 3.3mm)
- **Compliance:** CFA 5.0 (CFA 6.1 compatible)
  PCMCIA spec. 2.1 & PC Card ATA Interface spec. 8, 7, 6, and 5,
  ATA-7 standard compatible in True IDE mode,
  up to UDMA6 / MDMA4 / PIO6 support
- **Performance:**
  - Read Performance: Sequential Read up to 110 MBytes/s, Random Read IOPS up to 3,000
  - Write Performance: Sequential Write up to 44 MBytes/s, Random Write IOPS up to 850
- **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%
- **Data Retention:** 10 Years at Life Begin (JESD47), 1 Year at Life End
- **Shock/Vibration:** 1,500 $g$ / 20 $g$
- **Mean Time Between Failure:** > 3,000,000 hours
- **Data reliability:** < 1 non-recoverable error per $10^{16}$ bits read
- **Electromagnetic Compatibility Tests:** Radiated Emission; Radiated Immunity; Electrostatic Discharge

# Product Features

- MLC Flash with 3,000 Program/Erase Cycles and durabit™ Reduced Write Amplification
- Global, Dynamic and Static Wear Leveling to maximize system write endurance
- Page Mode Flash Translation Layer (FTL) for best in class write performance and endurance
- Data Care Management
  - Read Disturb Management and Dynamic Data Refresh for maximized retention
  - Passive: Background Media Scan
- Lifetime Enhancements
  - Dynamic Bad Block Remapping
  - Write Amplification Reduction
  - Intelligent Garbage Collection
- Management of unexpected power loss
- Up to UDMA6, MDMA4, PIO6 interface speed (max 133 MB/s burst)
- Security Feature Set Support
- Optimized for fast boot-up times
- In-Field Firmware Update without user data loss
- Detailed Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.)
- Life Cycle Management
- Controlled "Locked" BOM
- 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.

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