# swissbit<sup>®</sup>

**Product Fact Sheet** 

Industrial CompactFlash™ Card

C-56 Series
up to UDMA6 / MDMA4 / PIO6, pSLC

Commercial and Industrial Temperature Grade

Date: January 19, 2022 Revision: 1.02



everbit™

#### Product Fact Sheet C-56 Series



### **Product Summary**

- Capacities: 4 GBytes, 8 GBytes, 16 GBytes, 32 GBytes, 64 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:
  - o Read Performance: Sequential Read up to 115 MBytes/s, Random Read IOPS up to 5,000
  - o Write Performance: Sequential Write up to 66 MBytes/s, Random Write IOPS up to 3,300
- Operating Temperature Range1:

Commercial: 0 °C to 70°CIndustrial: -40 °C to 85°C

- Storage Temperature Range:
  - o -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<sup>16</sup> bits read
- Electromagnetic Compatibility Tests: Radiated Emission; Radiated Immunity; Electrostatic Discharge

#### **Product Features**

- MLC Flash in pSLC mode with 20,000 Program/Erase Cycles and everbit™ 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.

<sup>&</sup>lt;sup>1</sup> 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.



Page 2 of 2

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

#### Swissbit:

 SFCF008GH1AF2TO-I-GS-52P-STD
 SFCF016GH1AF2TO-I-GS-52P-STD
 SFCF032GH1AF2TO-I-LT-52P-STD

 SFCF4096H1AF1TO-C-GS-52P-STD
 SFCF064GH1AF4TO-I-LT-52P-STD
 SFCF4096H1AF1TO-I-GS-52P-STD

 SFCF008GH1AF2TO-C-GS-52P-STD
 SFCF016GH1AF2TO-C-GS-52P-STD
 SFCF032GH1AF2TO-C-LT-52P-STD

 SFCF064GH1AF4TO-C-LT-52P-STD
 SFCF032GH1AF2TO-C-LT-52P-STD