WINSYSTEMS®

Features

General
- 128MB to 32GB density
- Type 1 Solid State fixed drive
- SMART Functionality

Performance
- Sustained read up to 65 MB/s
- Sustained write up to 50 MB/s

Environment
- -40°C to +85°C Operating Temperature Range
- Shock: 10g's for 11ms, MIL-STD-810, Method 516.6
- Vibration: 20Hz to 2,000Hz, 7.7GRMS, MIL-STD-810, Method 514.6
- Humidity: 5 – 95% RH, non-condensing
- Altitude: 80,000 feet
- Compliant with European Union Directive 2002/95/EC (RoHS)

Reliability
- Data Retention:
  – 10 Years when up to 10% of the P/E cycles have been consumed
  – 1 year when 100% of the P/E cycles have been consumed
- Static and Global Wear Leveling
- BCH ECC error correction
  – 6 or 8 bit / 512 Byte sector
  – 24 bit /1024 Byte double-sector with additional CRC
- Power loss detection and sudden power fail management
- Read disturb management
- MTBF: 2,000,000 hours at 0°C

Product Description

The CF-DC-B-XXG-I is a USA-made product line of Industrial SLC-based CompactFlash (CF) memory cards. These robust CompactFlash cards provide performance while featuring robust features needed for industrial applications. These cards contain a locked-down Bill of Materials to ensure consistent product performance and future compatibility.

WINSYSTEMS' Industrial CompactFlash Cards provide sophisticated error checking and flash management utilities such as SMART functionality. Static and dynamic wear-leveling methods ensure even wear of flash blocks across the entire card capacity. Background operations track erase counts, prioritize new writes to blocks with lower wear, and relocate static data to blocks with higher wear. ECC algorithms capable of detecting and correcting up to 6 or 8 bits per 512 Byte sector or 24 bits per 1024 Bytes sector are implemented on the fly without performance degradation to ensure data reliability through user data transfers and background wear-leveling operations.

Industrial grade reliability, industry standard compatibility, and the ability to emulate IDE hard disk drives make WINSYSTEMS' CompactFlash Cards ideal for industrial, military, and other high endurance applications.

CF-DC-B-XXG-I

Technical Specifications

COMPACTFLASH	**CF-DC-B-XXG-I** Type I CompactFlash card
MEMORY TYPE	• 128MB to 32GB density, SLC-based memory
POWER	• 3.3 and 5 VDC
SOFTWARE	• Compatible with Linux, Android, Windows 10 IoT Core
ENVIRONMENTAL	• Operational from -40°C to +85°C (-40 to +185°F) • Storage temperature: -50°C to 100°C • Shock: 10g's for 11ms, MIL-STD-810, Method 516.6 • Vibration: 20Hz to 2,000Hz, 7.7GRMS, MIL-STD-810, Method 514.6 • Humidity: 5 - 95% RH, non-condensing • Altitude: 80,000 feet • RoHS compliant
MECHANICAL	• Dimensions – 1.433 in x 1.685 in x .130 in. (36.4 mm x 42.8mm x 3.3mm) • Weight – 0.42 oz (12.0 g)

Order Information

PART NUMBER			
	CF-DC-B-128M-I	128 MB	Industrial SLC CompactFlash
	CF-DC-B-256M-I	256 MB	Industrial SLC CompactFlash
	CF-DC-B-512M-I	512 MB	Industrial SLC CompactFlash
	CF-DC-B-1G-I	1 GB	Industrial SLC CompactFlash
	CF-DC-B-2G-I	2 GB	Industrial SLC CompactFlash
	CF-DC-B-4G-I	4 GB	Industrial SLC CompactFlash
	CF-DC-B-8G-I	8 GB	Industrial SLC CompactFlash
	CF-DC-B-16G-I	16 GB	Industrial SLC CompactFlash
	CF-DC-B-32G-I	16 GB	Industrial SLC CompactFlash

Expansion and Customization Options

WinSystems provides additional cables, expansion cards, power supplies, and solid-state drives to complete your embedded computing solution including data acquisition, communications, location, and other features via PCIe/104 and M.2 interfaces. Our Application Engineers are available to guide you through product selection and customized options.

Contact an Application Engineer or visit our website for more information.

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Rev. 200930