

Industrial Grade CompactFlash™ Card

W7CFxxxA-H2 / W8CFxxxA-H2 Series

The Wintec Industries W7CFxxxA-H and W8CFxxxA-H2 series of RoHS Compliant Industrial Grade CompactFlash™ Memory Cards are constructed with Samsung NAND-type single-level-cell (SLC) flash memory devices paired to a powerful 32-bit RISC/DSP based system controller for virtual-to-physical address mapping and other flash management functions.

Wintec Industrial CompactFlash™ Memory Cards employ a variety of sophisticated error checking and flash management utilities allowing for maximum levels of data reliability and card endurance. Patented 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. Bad-block Management routines replace worn blocks with spare blocks reserved by the controller on card initialization. Reed-Solomon based ECC algorithms capable of detecting and correcting up to 6 bytes per 512 byte sector are implemented on the fly without performance degradation to ensure data reliability through user data transfers and background wear-leveling operations.

The card contains a 50-pin connector consisting of two rows of 25 female contacts each on 50 mils (1.27mm) centers. Industrial grade reliability, industry standard compatibility, and the ability to emulate IDE hard disk drives make Wintec CompactFlash™ Memory Cards ideal for industrial, military, and other high endurance applications.

Key Features

GENERAL

- Solid State Data Storage, Type I Density up to 16GB
- 32-bit RISC/DSP Controller
- Dual 3.3V / 5V Interface
- Specialized for High-Reliability
- RoHS 6/6 Compliant

PERFORMANCE

- True IDE Mode Capable:
 - PIO Mode 0~4; DMA Mode
- High Performance 16.7 MB/s Burst
- Low Power Consumption
- ATA-2 Compliant (with DMA Enable)

RELIABILITY

- > 2,000,000 Program/Erase Cycles
- Industrial Wear Leveling which includes Static Block Management
- Spares & Bad Block Management
- On-Board ECC: Corrects up to 6-bytes/ Sector
- High Environmental Tolerance
- 10-Year Data Retention

COMPATIBILITY

- CFA Spec, Revision 4.1, Feb 2007
- PCMCIA PC Card Standard, 7.0, February 1999
- PCMCIA PC Card ATA Spec, 7.0, Feb 1999



Configuration Options:

- Industrial Temperature
- Fixes/Removable Disk
- DMA Mode Enable
- Data Programming Services
- Custom Labeling

Product Ordering Information

WnCFxxxA-H2 /

CF Capacity	Part Number
128 MB	WnCF128M1(v)A(I)-H20Px-yyy.zz
256 MB	WnCF256M1(v)A(I)-H20Px-yyy.zz
512 MB	WnCF512M1(v)A(I)-H20Px-yyy.zz
1 GB	WnCF001G1(v)A(I)-H20Px-yyy.zz
2 GB	WnCF002G1(v)A(I)-H20Px-yyy.zz
4 GB	WnCF004G1(v)A(I)-H20Px-yyy.zz
8 GB	WnCF008G1(v)A(I)-H20Px-yyy.zz

(n) **Storage Type**

7: SLC Flash
8: SLC custom configuration

01D: 1-Nand, Dual Die, 1-CE
1D2: 1-Nand, Dual Die, 2-CE
1Q2: 1-Nand, Quad Die, 2-CE

(v) **Disk/Interface Options**

X: Removable Disk True IDE Capable
T: Fixed Disk True IDE

002: 2-Nand Flash chips
02D: 2-Nand, Dual Die, 1-CE
2D2: 2-Nand, Dual Die, 2-CE

(x) **Component Flash IC Die Revision**

2Q2: 2-Nand, Quad Die, 2-CE
4D2: 4-Nand, Dual Die, 2-CE
4Q2: 4-Nand, Quad Die, 2-CE

(yyy) **Component Flash type**

001: 1-Nand Flash chip

(zz) **Firmware Options**

Contact Us (US & International):

Wintec Industries OEM Sales

675 Sycamore Drive

Milpitas, CA 95035

Ph: 408-856-0500

Fax: 408-856-0501

oemsales@wintecind.com

<http://www.wintecind.com/oem>

For detail specs, please contact Wintec-OEM representative.

About Wintec Industries, Inc.

Wintec Industries, Inc, founded in 1988, is headquartered in Milpitas, California. Wintec, an ODM/OEM solution provider, specializes in product designs and manufacturing, including Flash modules (CF, SD, USB, embedded Flash, etc), DRAM modules (FBDIMM, RDIMM, SODIMM, UDIMM), wireless products, modem products (embedded, USB), Advanced Digital Display products (ADD2 DVI, HDMI, digital signage), and so on. With experienced engineering team in Silicon Valley, Wintec provides a wide range of services and solutions for customers. Wintec is ISO9001- 2000 certified.

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