

# Apacer

The Most **Reliable**  
Storage For Industries

**SM220-CFast**



## SM220-CFast

### Overview

Apacer SM220-CFast is the latest enhancement of conventional CFast form factor that delivers various technological advantages. This new flash memory card comes with SATA 6.0 Gbps interface for higher performance and consists of SATA-based 7-pin signal segment and 17-pin for power and control purposes. For data efficiency, the internal controlling unit of the SM220-CFast 2.0 is engineered with DRAM for enhanced random performance which achieves data transfer rates up to 540 MB/s in sequential access and 76,000 IOPS in 4KB random access. In addition, Apacer CFast cards come with S.M.A.R.T. for lifetime monitoring and customization support if write protection is required. Apacer SM220-CFast 2.0 guarantees reliability of applications in harsh environments by implementing intelligent Flash Management algorithms and Error Correction. Together with its small form factor nature, Apacer SM220-CFast is definitely the ideal solution to replace conventional PATA-based CompactFlash for applications in industrial computing systems, mobile computers and video processing instruments.



\*The actual available memory on the device is less than what is listed on the package. This is due to small discrepancies in file formats and algorithms used by various operating systems. In addition, a portion of memory space is reserved for system files and data sectors for better performance

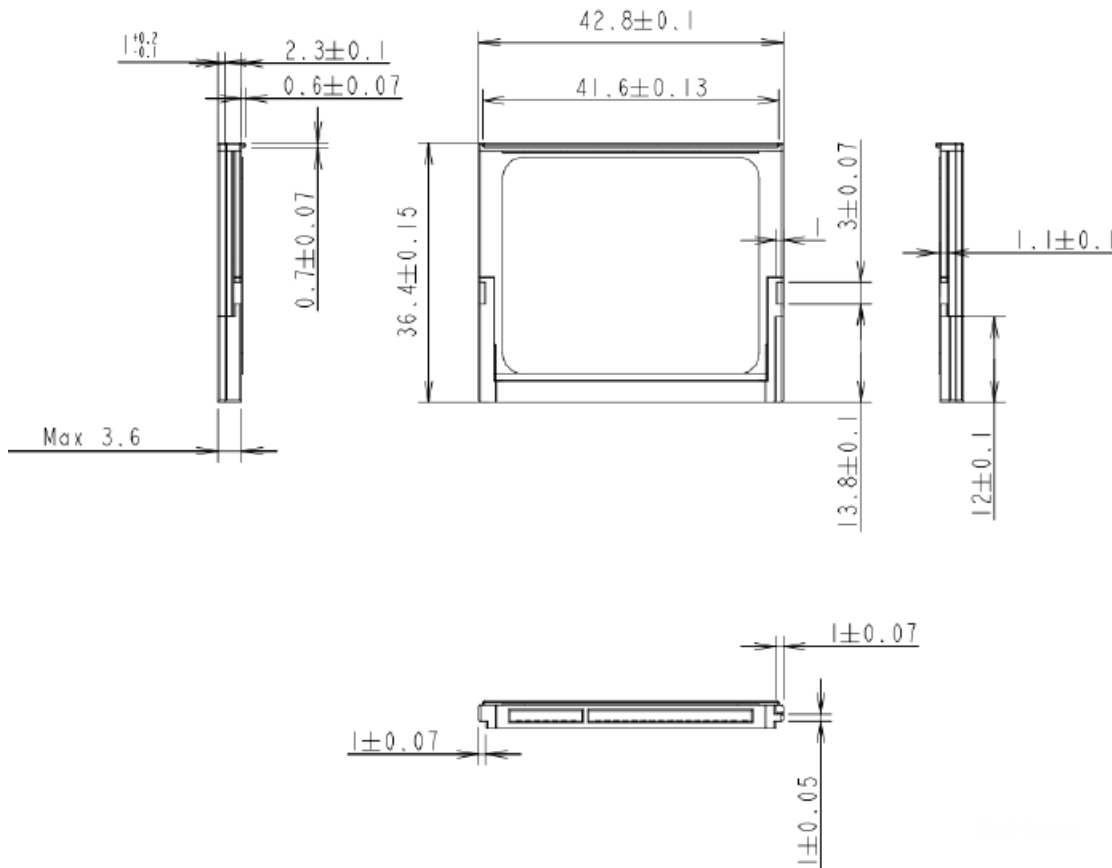
## Feature

- Built-in hardware ECC
- Global wear-leveling
- Flash bad-block management
- S.M.A.R.T.
- Power failure management
- ATA secure erase
- TRIM
- Lock switch design for write-protection(Optional)

## Specifications

<b>Model</b>	SM220-CFast
<b>Interface</b>	SATA 3.0 (6Gb/s)
<b>Connector</b>	(7+17) pin female
<b>Form Factor</b>	CFast
<b>Transfer Mode</b>	PIO Mode-6, MWDMA Mode-4, UDMA Mode-6
<b>NAND Flash Type</b>	MLC
<b>Capacity</b>	8GB~256GB
<b>Sustained Read Performance (MB/sec)</b>	Up to 540
<b>Sustained Write Performance (MB/sec)</b>	Up to 355
<b>ECC Engine</b>	Built-in 72-bit per 1K bytes BCH ECC
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Extended Operating Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-40 ~ + 100
<b>H/W Write Protect</b>	Optional
<b>Shock</b>	Operation: 50G, 11ms Non-operation: 1500G, 0.5ms
<b>Vibration</b>	Operation: 7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 15 G, 10 ~ 2000 Hz/sine
<b>Operating Voltage</b>	3.3 V ± 5%
<b>Power Consumption</b>	Active mode: 435 mA, Standby mode: 105 mA
<b>Dimension (L x W x H )</b>	36.4mm x 42.8mm x 3.6mm
<b>MTBF (hours)</b>	>1,000,000

## Mechanical Specification



Unit: mm

**For more information,  
contact your Apacer representative**

### Global Presence

Taiwan (Headquarters)  
Apacer Technology Inc.  
Tel: +886-2-2267-8000  
Fax: +886-2-2267-2261

Europe  
Apacer Technology B.V.  
Tel: +31-40-267-0000  
Fax: +31-40-290-0686

U.S.A.  
Apacer Memory America, Inc.  
Tel: +1-408-518-8699  
Fax: 1-510-249-9551

China  
Apacer Electronic(Shanghai)  
Co., Ltd.  
Tel: +86-21-6228-9939

Japan  
Apacer Technology Corp.  
Tel: +81-3-5419-2668  
Fax: +81-3-5419-0018

India  
Apacer Technologies Pvt. Ltd.  
Tel: +91-80-41529061~3  
Fax: +91-80-41700215