CF/CFast Comparison

	PATA	SATA
Data Connector	50-pin	7-pin
Power Connector		17-pin
Data Burst Rate	Up to 66MB/s	**Up to 150 MB/s (SATA I)** **Up to 300 MB/s (SATA II)**
Hot-swap Function	No	**Yes**
Intelligent power management	No	**Yes**

CFast Card Spec & Feature
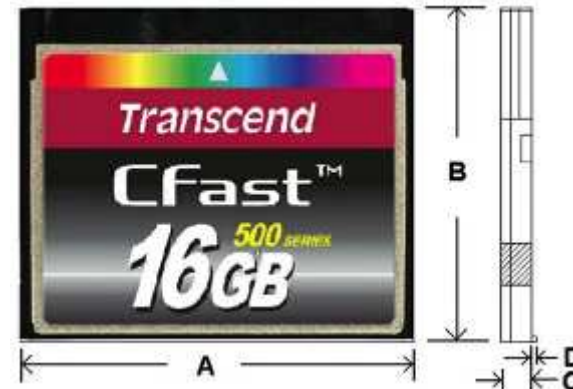
- Dimensions: 42.8 x 36.4 x 3.9mm (A x B x C+D)
- Compliant with **CFast 1.0** specifications
- Non-volatile **SLC Flash** Memory for outstanding data retention
- Built-in 8-bit/512Byte **ECC**
- Global **wear-leveling algorithm** extends product lifespan
- Supports **Static Data Refresh** & **Early Retirement** technologies
- Supports **S.M.A.R.T.** (Self-defined)
- **Shock Resistance, Anti-Vibration** and **Intelligent power management**
- **RoHS** compliant

CFast - SATA Interface CF Card

TS P/N: TS4G/8G/16GCFX500
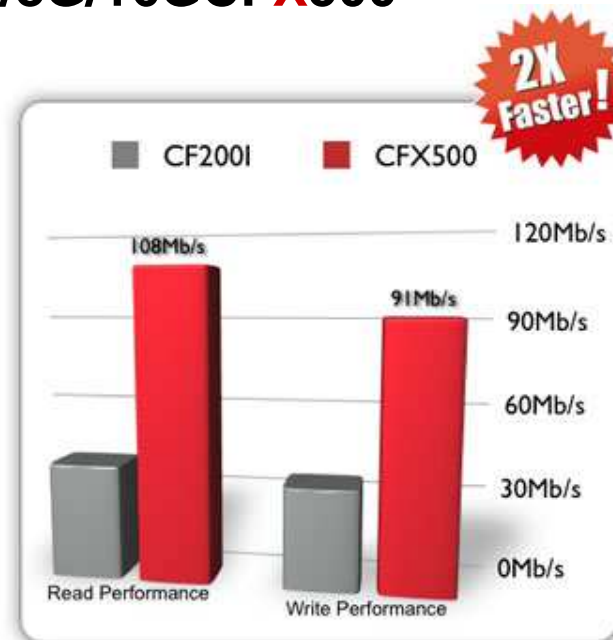
- **SATA interface:**
  SATA interface into the existing CF card form factor, fully compatible with devices and OS that support the SATA 3Gb/s standard.

- **Faster Transfer Rates:**
  CFast Cards deliver incredible read speeds up to 108MB/s – **2X** faster than CF45I/100I/200I

- **Data Protection Features:**
  Supports **ECC**, **Static Data Refresh, Early Retirement, S.M.A.R.T.** ,etc.

Industrial Grade CFast Card

TS P/N: TS4GCFX500I

- **Included all of CFast 500 features**

- **Wide Range Operating Temperature**
  High quality components provide industrial grade working temperature(-40°C ~ 85°C)

Industrial Grade Controller & NAND Flash

Industrial Grade Working Temperature

CFast Card Application

- **Transportation Systems**
- **Outdoor Vending Machines**
- **Embedded Automation Computers**
- **Gaming Platform Solutions**
- **Medical Computing**
- **Engineering Machines**
- **POS**
- **Set-Top Box**
- **Military System**

Industrial CF Cards Product Line

Item	CF45I	CF100I	CF200I	CFX500	CFX500I
Capacity	128M~8G	128M~16G	128M~32G	**4G~16G**	**4G**
NAND Flash	SLC	SLC	SLC	**SLC**	**SLC**
Flash Life Guard *	N/A	N/A	Yes	**Yes**	**Yes**
Static Data Refresh & Early retirement **	N/A	N/A	Yes	**Yes**	**Yes**
Speed	Up to 12MB/s	Up to 40MB/s	Up to 50MB/s	**Up to 108MB/s *****	**Up to 108MB/s *****
Transfer Mode(default)	PIO 4	UDMA 4	UDMA 4	**SATA II**	**SATA II**
Working Temperature	-40°C ~ 85°	-40°C ~ 85°C	-40°C ~ 85°C	**0°C ~ 70°C**	**-40°C ~ 85°C**

  * Flash Life Guard software can monitor bad block numbers in flash.
 ** Static Data Refresh & Early Retirement technology can monitor error bit level and react before data is corrupted.
*** Note: Actual transfer speed may vary due to host hardware, software and usage.

CFX500 Suggest Solution

P/N	Controller	Flash	PCB
TS4GCFX500	SM2242AC	SEC (42nm), 22-3620	29-3520
TS8GCFX500		SEC (42nm), 22-4640	
TS16GCFX500		SEC (51nm), 22-5641	
Industrial Grade Solution			
TS4GCFX500I	SM2242AC Industrial	SEC (42nm), 22-3720	29-3520