

## CF-SATA

## FEATURES

- Replace solution of CF
- **50pins SATA** interface
- Support industrial grade up to **64GB**
- High-reliability: anti-shock & vibration
- **Excellent data transfer speed**
- Static wear-leveling algorithm
- Support **Thermal Sensor**

SATA II  
3.0Gb/si SLC  
TechnologyWear  
LevelingR: 120MB  
W: 95MB

S.M.A.R.T

Thermal  
Sensor

LED

FCC CE RoHS

## Specifications

|                           |                                                      |
|---------------------------|------------------------------------------------------|
| Connector Type            | CF 50pin                                             |
| Flash Type                | iSLC (InnoDisk Single Level Cell)                    |
| Density                   | 2GB, 4GB, 8GB, 16GB, 32GB, 64GB                      |
| Transfer Mode             | SATA II 3.0Gb/s                                      |
| Sustained R/W Performance | Read : 120 MB/sec (max.)<br>Write : 95 MB/sec (max.) |

## Environmental

|                          |                                                              |
|--------------------------|--------------------------------------------------------------|
| DC Input                 | +5V DC $\pm$ 5%                                              |
| Power consumption (Max.) | Read: 230 mA<br>Write: 330 mA<br>Idle: 130 mA                |
| Operating Temperature    | 0°C~+70°C (Standard Grade)<br>-40°C~+85°C (Industrial Grade) |
| Storage Temperature      | -55°C~+95°C                                                  |
| Humidity                 | Relative Humidity: 10-95%, non-condensing                    |
| Flash Endurance          | 35,000 program/erase cycles                                  |
| MTBF                     | > 4,000,000 hours                                            |
| Certification            | CE, FCC, RoHS                                                |
| Warranty                 | 3 years                                                      |

## Mechanicals

|                       |                                |
|-----------------------|--------------------------------|
| Dimension (W x L x H) | 42.8mm x 36.4mm x 3.3mm        |
| Weight                | 9g $\pm$ 1g                    |
| Vibration             | 7 Hz to 2K Hz, 3 axes          |
| Shock                 | Duration: 1500G, 0.5ms, 3 axes |

## Health monitoring Tool

|              |                                        |
|--------------|----------------------------------------|
| S.M.A.R.T.   | Supported                              |
| i-S.M.A.R.T. | Supported (Utility for Windows, Linux) |

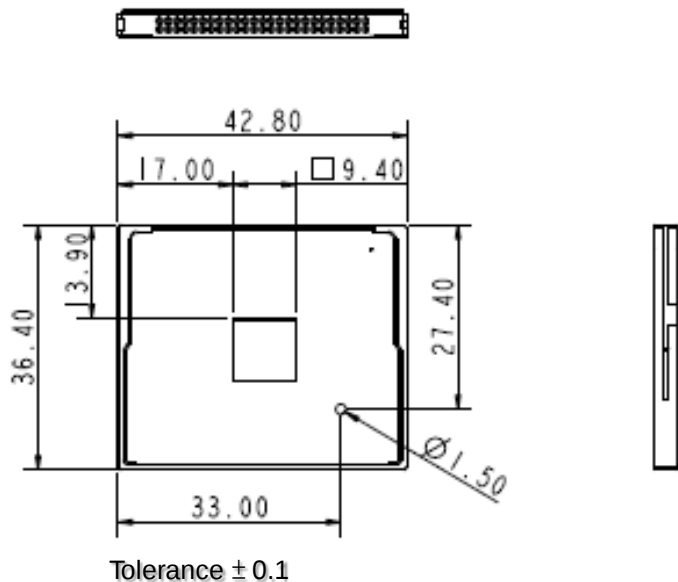
## Special Features

|                |                  |
|----------------|------------------|
| Security       | Write Protection |
| LED            | Supported        |
| Thermal Sensor | Supported        |

## Ordering Information

| Capacity | Standard Grade                     | Industrial Grade                   |
|----------|------------------------------------|------------------------------------|
| 2GB      | DC1M- <u>02G</u> J301 <u>C</u> 1SN | DC1M- <u>02G</u> J301 <u>W</u> 1SN |
| 4GB      | DC1M- <u>04G</u> J301 <u>C</u> 1DN | DC1M- <u>04G</u> J301 <u>W</u> 1DN |
| 8GB      | DC1M- <u>08G</u> J301 <u>C</u> 1QN | DC1M- <u>08G</u> J301 <u>W</u> 1QN |
| 16GB     | DC1M- <u>16G</u> J301 <u>C</u> 1QN | DC1M- <u>16G</u> J301 <u>W</u> 1QN |
| 32GB     | DC1M- <u>32G</u> J301 <u>C</u> 1QN | DC1M- <u>32G</u> J301 <u>W</u> 1QN |
| 64GB     | DC1M- <u>64G</u> J301 <u>C</u> 1QN | DC1M- <u>64G</u> J301 <u>W</u> 1QN |

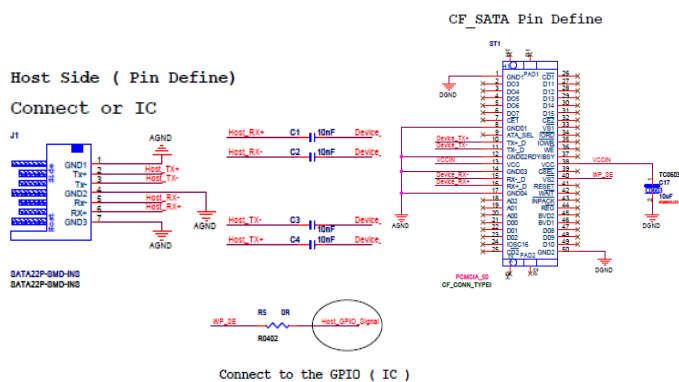
## Mechanical Dimension



## CF SATA signal

| SATA Signal |                          |                  |
|-------------|--------------------------|------------------|
| Pin         | Pure IDE Mode Definition | CF_SATA Protocol |
| 1           | DGND                     | DGND             |
| 8           | DGND                     | AGND             |
| 10          | DGND                     | TX+              |
| 11          | DGND                     | TX-              |
| 12          | DGND                     | AGND             |
| 13          | VCC5                     | VCC5             |
| 14          | DGND                     | AGND             |
| 15          | DGND                     | RX-              |
| 16          | DGND                     | RX+              |
| 17          | DGND                     | AGND             |
| 38          | VCC5                     | VCC5             |

## Host Reference Circuit Design



## CF SATA advantage

1. CF SATA complies with **Serial ATA** by extracting unusual pins from CF50 pin
2. InnoDisk CF-SATA has the same mechanical design with Compact Flash card
3. CF SATA performance has triple times than CF Card

## CF-SATA & CF Card & CFast

|                    | CFast D150Q                                  | CF 4000                           | CF SATA                                         |
|--------------------|----------------------------------------------|-----------------------------------|-------------------------------------------------|
| Controller         | ID101                                        | F3                                | ID101                                           |
| Capacity           | 2GB~64GB                                     | 2GB~16GB                          | 2GB~64GB                                        |
| Interface          | 7pin SATA signal + 17 power supply           | 50pin Compact Flash               | 50pin Compact Flash<br>4 pin SATA from reserved |
| Transfer rate      | SATA II                                      | UDMA 0-6/PIO 0-4                  | SATA II                                         |
| Data Transfer Rate | Read: 120MB/sec<br>Write: 100MB/sec          | Read: 40MB/sec<br>Write: 20MB/sec | Read: 120MB/sec<br>Write: 100MB/sec             |
| Operation Temp.    | 0°C~70 °C(Standard) -40°C~+85 °C(Industrial) |                                   |                                                 |
| Operation Voltage  | 3.3V                                         | 5V                                | 5V                                              |
| Dimension          | 36.4x42.8x3.6mm(LxWxH)                       | 36.4x42.8x3.3mm(LxWxH)            | 36.4x42.8x3.3mm(LxWxH)                          |