

Datasheet

# CFexpress 4TE3 series

- PCIe Gen3 x2, NVMe 1.4 SSD
- Standard/Wide-temperature
- iPowerguard
- iDataguard
- Hybrid Write Mode with SLC cache Enable
- Dynamic Thermal Management
- Support Write Protection (optional)
- Support AES & TCG OPAL Function (optional)



## Introduction

Innodisk CFexpress 4TE3 adopts CFexpress Version 1.0 type B Form-Factor. With PCIe interface and 3D TLC NAND Flash, CFexpress 4TE3 supports PCIe Gen3 x2 and is compliant with NVMe 1.4, providing excellent top and sustained performance. Moreover, it adopts 3D TLC NAND Flash providing high endurance and reliability. With sophisticated error detection and correction (ECC) functions, the module can provide full End-to-end Data Path Protection that secures the data transmission between the host system and NAND Flash.

Innodisk CFexpress 4TE3 is a small and removable memory card providing low latency and extreme speed but with low power consumption. It is ideal for gaming, edge computing and professional digital recording.

Innodisk M.2 (P80) 4TE3 is designed with AES engine, which is a built in controller. When controller receives the data package from host, AES engine encrypts the data package and saves the encrypted data into NAND flash. Thus, unauthorized personal has no access to decrypt the data in NAND flash.

# CFexpress

## 4TE3 series

Contact us for more information  
about the CFexpress 4TE3.

Innodisk is a service-driven provider of industrial embedded flash and DRAM storage products and technologies, with a focus on the cloud computing, industrial/embedded, and aerospace and defense industries.

### Headquarters (Taiwan)

5F., No. 237, Sec. 1, Datong Rd., Xizhi  
Dist., New Taipei City 221, Taiwan  
Tel: +886-2-7703-3000  
Email: sales@innodisk.com

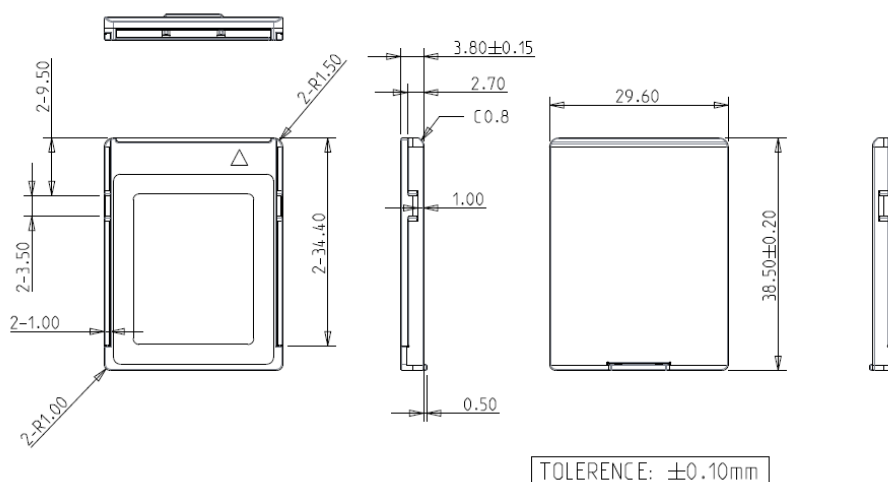
### Branch Offices:

USA  
[usasales@innodisk.com](mailto:usasales@innodisk.com)  
+1-510-770-9421  
Europe  
[eusales@innodisk.com](mailto:eusales@innodisk.com)  
+31-40-3045-400  
Japan  
[jpsales@innodisk.com](mailto:jpsales@innodisk.com)  
+81-3-6667-0161  
China  
[sales\\_cn@innodisk.com](mailto:sales_cn@innodisk.com)  
+86-755-21673689  
[www.innodisk.com](http://www.innodisk.com)

© 2022 Innodisk Corporation.  
All right reserved. Specifications are  
subject to change without  
prior notice.

20230821

## Diagram



## Specifications

|                               |                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Interface                     | PCIe Gen3 x2                                                                                                    |
| Flash Type                    | 3D TLC                                                                                                          |
| P/E cycle                     | 3,000                                                                                                           |
| Capacity                      | 128GB~2TB                                                                                                       |
| Max. Channels                 | 4                                                                                                               |
| Sequential R/W (MB/sec, max.) | 1,750/1,500                                                                                                     |
| Max. Power Consumption        | 3W                                                                                                              |
| Thermal Sensor                | √                                                                                                               |
| External DRAM buffer          | -                                                                                                               |
| H/W Write Protect             | √ (optional)                                                                                                    |
| AES                           | √                                                                                                               |
| TCG OPAL                      | √ (optional)                                                                                                    |
| Dimension (WxLxH)             | 29.6 X 38.5 X 3.8 mm                                                                                            |
| Environment                   | Vibration: 20G @7~2000Hz<br>Shock: 1500G @ 0.5ms<br>Storage Temperature: -40°C ~ +85°C<br>MTBF: 3 million hours |

## Ordering Information

| Operation Temp.                     | 128GB                | 256GB                | 512GB                | 1TB                  | 2TB                  |
|-------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Standard Grade<br>(0°C ~ +70°C)     | DECFX-A28DH1KCADL(W) | DECFX-B56DH1KCAQL(W) | DECFX-C12DH1KCAQL(W) | DECFX-01TDH1KCAQL(W) | DECFX-02TDH1KCAQQ(W) |
| Industrial Grade<br>(-40°C ~ +85°C) | DECFX-A28DH1KWADL(W) | DECFX-B56DH1KWAQL(W) | DECFX-C12DH1KWAQL(W) | DECFX-01TDH1KWAQL(W) | DECFX-02TDH1KWAQQ(W) |

W: HW Write Protect

For TCG OPAL function, the PN Code 10<sup>th</sup>~12<sup>nd</sup> will be DH2.



[www.innodisk.com](http://www.innodisk.com)