

Datasheet

M.2 (P30)

4TE3 series

- M.2 type 2230 M key
- PCIe Gen4 x4, NVMe 1.4
- Excellent data transfer speed
- Standard/Wide-temperature
- End-to-end Data Path Protection
- 256-bit AES hardware-based encryption
- Support TCG Opal Function (Optional)



Introduction

Innodisk M.2 (P30) 4TE3 is a NVM Express DRAM-less SSD designed with PCIe interface and industrial 3D TLC NAND Flash. M.2 (P30) 4TE3 supports PCIe Gen.4 x4 and it is compliant with NVMe 1.4 providing excellent top and also sustained performance. 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. It offers an ideal solution for embedded, automotive, medical, gaming and most industrial applications.

Innodisk M.2 (P30) 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.

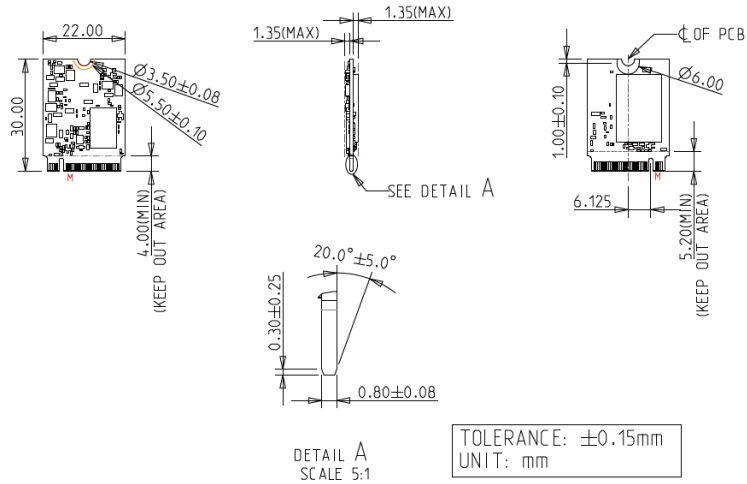
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4TE3 series

Contact us for more information about the M.2 (P30) 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.

Diagram (ST)



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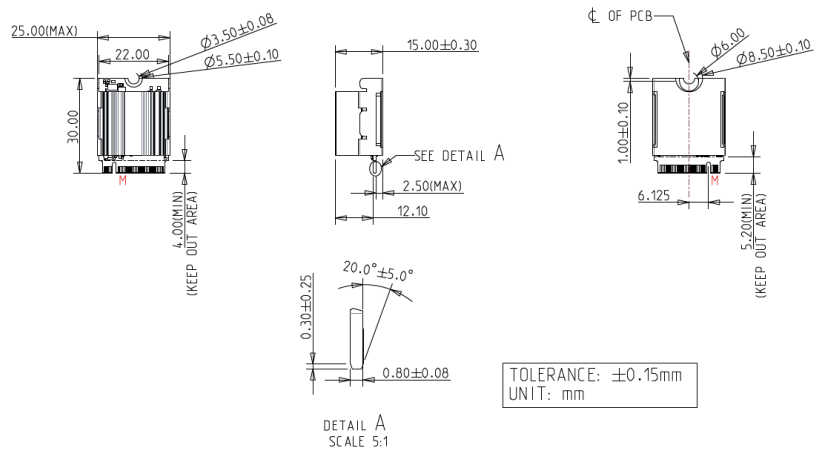
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20240508

Diagram (WT)



Specifications

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20240508

Interface	PCIe Gen4 x2
Flash Type	3D TLC
P/E cycle	3,000
Capacity	128GB~1TB
Max. Channels	2
Sequential R/W (MB/sec, max.)	1,800/1,450
Max. Power Consumption	3.1W
Thermal Sensor	√
External DRAM Buffer	NA
AES	√
TCG Opal	√ (optional)
H/W Write Protect	√ (optional)
ATA Security	√
Dimension (WxLxH)	WT with heatsink: 25.0 X 30.0 X 15.0 mm (Pure M.2: 22.0 X 30.0 X 3.4 mm)
Environment	Vibration: 20G @7~2000Hz Shock: 1500G @ 0.5ms Storage Temperature: -40°C ~ +85°C MTBF: >3,000,000 hour

Ordering Information

Operation Temp.	128GB	256GB	512GB	1TB
Standard Grade (0°C ~ +70°C)	DEM23-A28DH1KCBDF	DEM23-B56DH1KCBDF	DEM23-C12DH1KCBDF	DEM23-01TDH1KCBDF
Industrial Grade (-40°C ~ +85°C)	DEM23-A28DH1KWBDFFH	DEM23-B56DH1KWBDFFH	DEM23-C12DH1KWBDFFH	DEM23-01TDH1KWBDFFH

For TCG OPAL function, the PN Code 10th~12th will be DH2.

