

#### **CXL MEMORY MODULE**

# **POWERING THE FUTURE OF AI SERVERS**

As Al servers require faster, more scalable, and higher-density memory, traditional DDR memory solutions are struggling to keep pace, resulting in limited memory bandwidth and underutilized memory resources. Innodisk's CXL Memory Modules solve these challenges with scalable, efficient memory solutions designed for the evolving needs of cloud data centers and high-performance computing.

### WHY WE NEED CXL MEMORY MODULES?



**Limited Memory Bandwidth** 

Traditional memory architectures cannot match the growing demand for multi-core CPUs



**Underutilized Memory Resources** 

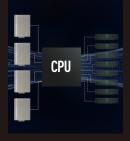
Low utilization rates of memory resources arise because they are not flexibly allocated in response to actual demand



Latency and Complexity

Varying protocols and interfaces between components cause delays and complicate the system architecture

## **INNODISK CXL MEMORY MODULE HIGHLIGHTS**



#### Instant 64GB Expansion per Module

- Supports 32GB/s of bandwidth via high-speed PCIe Gen5 x8
- Expands memory for AI servers without additional DIMM slots



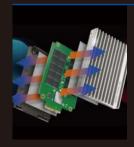
#### E3.S 2T Form Factor

The E3.S 2T is an EDSFF specification that allows flexible swapping and allocation of memory expansion devices



# Memory Pooling for Resource Sharing

Optimizes memory resource sharing between hosts and components to improve system efficiency



#### **Enhanced Heat Dissipation**

Incorporates a high-efficiency thermal interface material and aluminum alloy casing to maintain optimal performance



# Reducing Complexity and Latency

Optimizes communication protocol and hardware architecture to reduce latency and simplify system complexity



## Rigorous Testing and Renowned Industry Support

Provides customers with memory expansion at minimal cost on existing systems and is supported by Innodisk's technical support services

## **SPECIFICATIONS**

Density	64GB, 96GB, 128GB	- Vertical Markets	<ul><li>Cloud computing</li><li>Large cloud data centers</li><li>Edge computing</li><li>Network communication</li></ul>
CXL Compliance	CXL 1.1 and CXL 2.0		
CXL Protocol	Type 3 (CXL.mem and CXL.io)		
Interface	PCle Gen5 x8 (32GB/s)		
DRAM IC Generation	DDR5	- Applications	<ul> <li>Accelerating AI and machine learning</li> <li>Large-scale analytics and graph databases</li> <li>High-performance computing (HPC)</li> </ul>
Form Factor	E3.S 2T		
Connector	EDSFF 2C (84 pin)		
Operating Temperature	0°C ~ 70°C		