

DRAM At-a-Glance

The Innodisk Advantage

Customer Design Options

Innodisk offers hardware and firmware customization services to ensure successful application needs.

Anti-sulfuration

Anti-sulfuration effectively covers the resistors with a sulfur resistant material, ensuring smooth operation in harsh environments. It is available on all DDR4 modules.

Conformal Coating

Conformal coating is the chemical material layered over the components to protect against moisture, contaminants, and dust and acid-or-alkaline materials. The coating thickness ranges between 0.03mm and 0.13 mm and meets electronic components IPC-A-610 standards.

Rugged Design

Rugged DIMM modules are designed with a pair of mounting holes, 10 mm apart, for more secure mounting on the CPU board. They are resistant to shock and vibration for stable system operations.

Side Fill

Side fill technology improves the device's reliability and extend product life during strong tremors or stringent thermal cycling. Resin is applied to 3 sides of the DRAM IC reinforcing the BGA and the PCB joint, so it can tolerate 1.5 times the amount of tension.

Wide Temperature

Wide Temperature DRAM modules are designed for applications operating in harsh conditions. Industrial-grade SDRAM components are used with 30u" Gold fingers to ensure memory quality at temperatures ranging from -40°C to 85°C.

Warranty

Lifetime Warranty on DRAM products includes examination, repair and replacement parts.

DRAM Series

Innodisk's industrial-grade DRAM series, DDR4, DDR3, DDR2, DDR1, and SDRAM, are high-quality memory modules designed and developed for embedded and server needs providing a complete turnkey solution. They come with a warranty and value adds that include conformal coating, wide temperature, rugged design, and side fill allowing for customized design options.



Registered DIMM

Ideal for Server Applications

- Capacity: 8/16/32/64/128GB
- Generation: DDR3/DDR4
- Speed: 1333/1600/1866/2133/2400/2666 MT/s



Load Reduced DIMM

Ideal for High Performance Applications ¹

- Capacity: 32/64/128GB
- Generation: DDR4
- Speed: 2133/2400/2666 MT/s



Mini DIMM

Ideal for Networking and Telecommunication

- Capacity: 2/4/8/16GB
- Generation: DDR3/DDR4
- Speed: 1333/1600/2133/2400 MT/s
- Functionality: Registered, ECC, non-ECC



Very Low Profile Series

Ideal for Height-Constraint Platforms

- Capacity: 4/8/16GB
- Generation: DDR2/DDR3/DDR4
- Speed: 533/667/800/1333/1600/2133/2400/2666 MT/s
- Functionality: Registered, ECC, non-ECC



XRDIMM

Ideal for Aerospace and Defense

- Capacity: 4/8/16GB
- Generation: DDR3/DDR4
- Speed: 1333/1600/1866/2133/2400 MT/s
- 300pins Board-to-Board Connector
- Functionality: ECC, non-ECC



Wide Temperature Series

Ideal for Harsh and Wide Temp Environments

- Capacity: 2/4/8/16GB
- Generation: DDR1/DDR2/DDR3/DDR4
- Speed: 333/400/533/667/800/1333/1600/2133/2400/2666 MT/s
- Functionality: ECC, non-ECC

¹ LRDIMM is sold in the US and may not be available in other markets

DRAM Series



ECC series

Ideal for IPC and Embedded Systems

- Capacity: 512MB, 1/2/4/8/16GB
- Generation: DDR2/DDR3/DDR4
- Speed: 667/800/1333/1600/2133/2400 MT/s
- Functionality: ECC

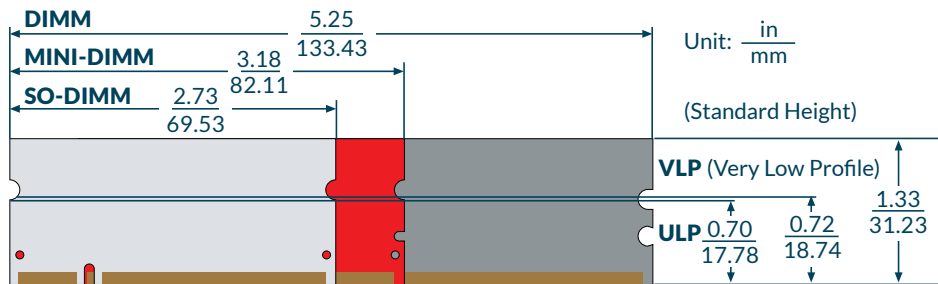
Non-ECC series

Ideal for IPC and Embedded Systems

- Capacity: 128/256/512MB, 1/2/4/8/16GB
- Generation: SDRAM/DDR1/DDR2/DDR3/DDR4
- Speed: 100/133/333/400/533/667/800/1333/1600/2133/2400 MT/s
- Functionality: non-ECC

Side Fill

Side fill is an efficient and cost effective technology that applies resin along the sides of the DRAM integrated circuits (IC) and PCB dramatically increasing the modules ability to withstand mechanical and thermal stress.



DDR4 JEDEC MODULE DIMENSIONS



Conformal Coating

Ideal protection against moisture, contaminants, dust, corrosion, electrical/thermal conduction, and acid or alkaline materials; in line with IPC-A-610 standards for electronic components.



Anti-sulfuration

In industries struggling with sulfur contamination, modules can easily be affected. Corrosion results in potential field failures and high temperature will accelerate sulfuration and shorten product lifespan. By covering the resistors with a sulfur resistant material, anti-sulfuration ensures smooth operation in harsh environments.

DRAM Vertical Markets



About Innodisk

Innodisk is a service-driven provider of flash memory, DRAM modules and embedded peripherals for industrial and enterprise applications.

Founded in 2005 and headquartered in Taipei, Taiwan, Innodisk services clients globally with engineering experts and sales teams providing service to satisfied customers across the embedded, aerospace and defense, cloud storage markets and more. Demonstrating technical experience, a commitment to dependable products and unparalleled service, Innodisk develops products with excellent quality, remarkable performance and the highest reliability.

For more information about Innodisk, please visit <http://www.innodisk.com>.