innodisk

DRAM At-a-Glance



The Innodisk Advantage

Customer Design Options

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

Conformal Coating

Innodisk conformal coating is the chemical material layered on to components. The coating thickness ranges between 0.03 mm and 0.13 mm and protects against moisture, contaminants, dust and acid-oralkaline materials, while meeting 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. Compliant with JEDEC standards, 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 while it's operating during strong tremors or stringent thermal cycling. By applying resin to three sides of the DRAM IC and reinforcing the BGA and the PCB joints, it can tolerate 1.5 times the amount of tension.

Wide Temperature

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

Warranty

Innodisk offers a Lifetime Warranty on DRAM products that includes examination, repair and replacement parts.

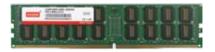
Innodisk's industrial-grade DRAM series, DDR4, DDR3, DDR2, DDR1, and SDRAM, are high-quality memory modules designed and developed for embedded and server needs providing a complete turnkey solution. They come with a warranty and value adds that include conformal coating, wide temperature, rugged design,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



Registered DIMM

Ideal for Server Applications

- · Capacity: 1/2/4/8/16/32/64/128GB
- · Generation: DDR3/DDR4
- · Speed: 1333/1600/1866/2133/2400/2666 MT/s



Load Reduced DIMM

Ideal for High Performance Applications

- · Capacity: 32/64/128GB
- · Generation: DDR3/DDR4
- · Speed: 1333/1600/2133/2400/2666 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: 1/2/4/8/16GB
- · Generation: DDR2/DDR3/DDR4
- $\cdot \, \text{Speed:} \, 533/667/800/1333/1600/2133/2400 \, \text{MT/s}$
- $\cdot \, \mathsf{Functionality} \\ \mathsf{:} \, \mathsf{Registered}, \\ \mathsf{ECC}, \\ \mathsf{non}\\ \mathsf{:} \mathsf{ECC}$



XRDIMM

Ideal for Aerospace and Defense

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



Wide Temperature Series

Ideal for Harsh and Wide Temp Environments

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



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



Mounting Rugged SODIMM

Ideal for Harsh Vibration Heavy Environments

- · Capacity: 4/8/16GB
- · Generation: DDR3/DDR4
- · Speed: 1333/1600/2133/2400 MT/s
- · 2 Screw Hold Design



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.



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



Single Sided DIMM (Front/Back)

Ideal for Tight Space Constraint Platforms

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



32bit / 36bit

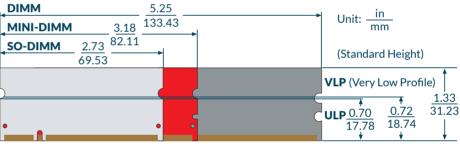
Ideal for Low Performance ARM-based CPUs

- · Capacity: 1/2/4GB
- · Generation: DDR3/DDR4
- · Speed: 1600/2133/2400 MT/s
- · Functionality: ECC, non-ECC



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.



DDR4 JEDEC MODULE DIMENSIONS

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.

