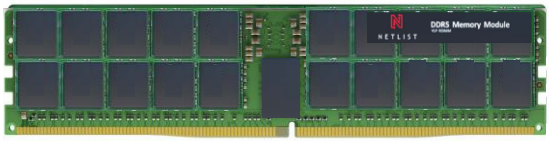
NETLIST

Netlist Ultra Low Latency DDR5 RDIMM: Unleashing Extreme Performance for Servers and Workstations

DIMM Capacities 16GB to 128GB



Netlist's Ultra Low Latency DDR5 RDIMM products are the ultimate solution for Data Center Workloads like AI Inference, Video Editing, Gaming Development, and Database

Netlist's Ultra Low Latency RDIMM family delivers extreme performance and unrivaled speed, empowering users to maximize their computing systems' potential without any modifications.

Netlist is a leading manufacturer of high-performance memory and the Netlist Ultra Low Latency (ULL) JEDEC DDR5 RDIMMs offer extremely low latency and high speed on a JEDEC RDIMM. DDR5 is the latest generation, cutting-edge memory technology for Servers and Workstations and Netlist ULL JEDEC DDR5 RDIMMs integrate all the enhanced features of DDR5 into a standard JEDEC form factor. Netlist ULL memory delivers superior speed, stability, and efficiency.

The Netlist Ultra Low Latency RDIMMs are available as individual modules, not paired kits, in 16GB, 32GB, 64GB and 128GB capacities. They operate at a data rates up to 6800 Mbps, one of the highest in the market. The most impressive feature of these DIMMs is their low latency, which is achieved using a dual-channel architecture and advanced DRAM and memory logic technology. These features enable faster data transfer and lower response time, which are crucial for performance-oriented applications.

The Netlist DDR5 memory is designed for the latest AMD and Intel processors supporting the DDR5 standard. With Plug and Play functionality profiles, memory automatically operates to the highest published DDR5 JEDEC data rates up to 6800 Mbps, with no changes to the BIOS, CPU Core, and voltage. DDR5 memory is ideal for AI Inference, Video Editing, Simulation, Gaming Development, and Database workloads giving your system a boost in performance without having to overclock the processor or memory. System performance is boosted by up to 12% depending on workload.

HIGHLIGHTS

PERFORMANCE

Overall, a significant reduction in Latency up to 6800 Mbps

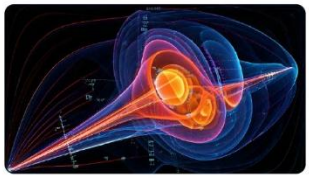
Value Proposition

- Instantly default up to F+1 on locked AMD & Intel Systems
- Compatibility and Stability
- Boosted Performance on many demanding workloads
- Cost Optimized OEM Solution

PRODUCT HIGHLIGHTS

- Multiple capacities: 16GB,32GB,64GB, 128GB
- x80 ECC DIMM
- Heat Spreader Option

Boosted system performance results for demanding workloads

AI Inference	Video Editing	Gaming Development	Simulation	Database
				
~12% ↑	~7% ↑	~6% ↑	~6% ↑	~4% ↑

LEARN MORE: EMAIL US AT SALES@NETLIST.COM OR VISIT NETLIST.COM/PRODUCTS

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The Memory Storage Company™

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Workstation and Server Low Latency RDIMM

DIMM Capacities 16GB to 128GB

DDR5 Ultra Low Latency RDIMM Features

Features	Description	Features	Description
Data Rate (Mbps)	6000~6400	Sideband bus access	IxC Hub in SPD
Voltage (VDDQ)	1.1 (Native)	Channel Architecture	40-bit data channel, 32 data+ 8 ECC 2 channel per DIMM
Clock Driver	@6400Mbps	DFE Support	RCD and DRAM
Power Supply	PMIC on DIMM	PCB Mechanical Outline	JEDEC (Height 31.25mm)
Temp sensor device	2 or 3 per DIMM	Environmental	0°C – 95°C, RoHS Compliant and Halogen-Free
Side bus protocol	Legacy SMBus, I2C, I3C		

DDR5 Ultra Low Latency RDIMM Capacity & Latency Timing Profiles with Ordering Information

Capacity	Speed	Latency	Part Number	Comment
16GB 1Rx8	6000Mbps	42-42-42 @1.1V	NLR4G0054G0760100HA	JEDEC Compliant "AN"
32GB 1Rx4			NLR5G0054G0360100HA	
32GB 2Rx8			NLR5G0054G0760100HA	
64GB 2Rx4			NLR6G0054G0360100HA	
128GB 2Rx4			NLR7G0055G0360100HA	
16GB 1Rx8	6400Mbps	46-46-46 @1.1V	NLR4G0054G0764100HA	JEDEC Compliant "AN"
32GB 1Rx4			NLR5G0054G0364100HA	
32GB 2Rx8			NLR5G0054G0764100HA	
64GB 2Rx4			NLR6G0054G0364100HA	
128GB 2Rx4			NLR7G0055G0364100HA	

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