

PRODUCT BRIEF | DDR5

DDR5 MEMORY MODULES

Viking Technology’s DDR5 memory solutions represent a culmination of cutting-edge technological advancements and meticulous quality control measures. Leveraging our extensive expertise in advanced packaging techniques and bolstered by stringent BOM control, we ensure that every aspect of the manufacturing process adheres to the highest industry standards. Operating within AS9100, TL 9000, and ISO 14001 certified facilities, we guarantee the delivery of memory modules of unparalleled quality, tailored precisely to meet the diverse demands and rigorous requirements of both Enterprise and Embedded markets.

APPLICATIONS SERVED

Enterprise Computing & Storage	Artificial Intelligence (AI)	Embedded & Industrial
AdvancedTCA, MicroTCA	Single Board Computers (SBC)	High Performance Computing (HPC)

BENEFITS

Increased Capacity: More data can be stored in the memory, and with larger space, more applications can be run simultaneously without slowing down your system

Lower Latency: Faster response time

Require Less Power: With Vdd dropping from 1.2v (DDR4) to 1.1v (DDR5). Less energy, thus less heat

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Performance: Increased bandwidth and enhanced power efficiency

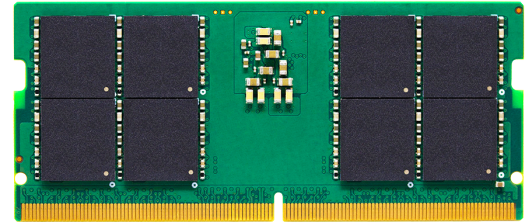


In comparing DDR5 technology to its predecessor, DDR4, the advantages are clear and profound. DDR5 offers enhanced capacity, reduced latency, and significantly faster data transfer rates, operating at effective speeds of up to 6400Mhz. One of the most notable advancements is DDR5’s transition from a single 64-bit data channel to two 32-bit sub-channels. This architectural shift not only enhances data transfer agility but also contributes to improved power efficiency, making DDR5 an optimal choice for energy-conscious applications.

Furthermore, DDR5’s doubling of the number of banks from 16 to 32 effectively creates a supercharged data highway, facilitating seamless and rapid data transmission.

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Each DDR5 module undergoes a comprehensive testing regimen within Viking Technology’s state-of-the-art facilities. This meticulous testing process ensures compatibility with a wide array of systems, including blade servers, AdvancedTCA, MicroTCA, Single Board Computers (SBC), and an array of enterprise-grade appliances. By subjecting our modules to rigorous testing, we provide our customers with the assurance of reliability and performance under even the most demanding conditions.



32GB MiniRDIMM DDR5

DRAM FEATURES

- ▶ Broadest DRAM Offering
- ▶ JEDEC Standard
- ▶ Customized Testing
- ▶ Locked Bill of Materials (BOM)
- ▶ Extending Burn-in Testing
- ▶ Thermal Modeling
- ▶ Ultra Small Form Factors
- ▶ Short lead times and minimum order quantities

DDR5 PART NUMBERS

FORM FACTOR	BUFFERING	DENSITY	ORG	SPEED	ECC	DRAM I/O	RANK	PROFILE	P/N	TEMP
288-pin DIMM	Unbuffered	16GB	2Gbx64	4800MT/s	None	x8	1	LP	VR2MU2G6418KBSB	0° to 85°C
288-pin DIMM	Unbuffered	16GB	2Gbx64	4800MT/s	None	x8	1	LP	VR2MU2G6418KBASB	-40° to 95°C
288-pin DIMM	Unbuffered	16GB	2Gbx64	5600MT/s	None	x8	1	LP	VR2MU2G6418KBCSB	0° to 85°C
288-pin DIMM	Unbuffered	16GB	2Gbx64	5600MT/s	None	x8	1	LP	VR2MU2G6418KBCSBT	-40° to 95°C
288-pin DIMM	Unbuffered	32GB	4Gbx64	4800MT/s	None	x8	2	LP	VR2MU4G6418KBASB	0° to 85°C
288-pin DIMM	Unbuffered	32GB	4Gbx64	4800MT/s	None	x8	2	LP	VR2MU4G6418KBASBT	-40° to 95°C
288-pin DIMM	Unbuffered	32GB	4Gbx64	5600MT/s	None	x8	2	LP	VR2MU4G6418KBCSB	0° to 85°C
288-pin DIMM	Unbuffered	32GB	4Gbx64	5600MT/s	None	x8	2	LP	VR2MU4G6418KBCSBT	-40° to 95°C
288-pin DIMM	Unbuffered	16GB	2Gbx64	4800MT/s	ECC	x8	1	LP	VR2MU2G6418KBSB	0° to 85°C
288-pin DIMM	Unbuffered	16GB	2Gbx64	4800MT/s	ECC	x8	1	LP	VR2MU2G7218KBASB	-40° to 95°C
288-pin DIMM	Unbuffered	16GB	2Gbx64	5600MT/s	ECC	x8	1	LP	VR2MU2G7218KBCSB	0° to 85°C
288-pin DIMM	Unbuffered	16GB	2Gbx64	5600MT/s	ECC	x8	1	LP	VR2MU2G7218KBCSBT	-40° to 95°C
288-pin DIMM	Unbuffered	32GB	4Gbx64	4800MT/s	ECC	x8	2	LP	VR2MU4G7218KBASB	0° to 85°C
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288-pin DIMM	Unbuffered	16GB	2Gbx72	4800MT/s	ECC	x8	1	LP	VR2VU2G7218KBASB	0° to 85°C
288-pin DIMM	Unbuffered	16GB	2Gbx72	4800MT/s	ECC	x8	1	LP	VR2VU2G7218KBASBT	-40° to 95°C
288-pin DIMM	Unbuffered	16GB	2Gbx72	5600MT/s	ECC	x8	1	LP	VR2VU2G7218KBCSB	0° to 85°C
288-pin DIMM	Unbuffered	16GB	2Gbx72	5600MT/s	ECC	x8	1	LP	VR2VU2G7218KBCSBT	-40° to 95°C
288-pin DIMM	Unbuffered	32GB	4Gbx72	4800MT/s	ECC	x8	2	LP	VR2VU4G7218KBASB	0° to 85°C
288-pin DIMM	Unbuffered	32GB	4Gbx72	4800MT/s	ECC	x8	2	LP	VR2VU4G7218KBASBT	-40° to 95°C
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FORM FACTOR	BUFFERING	DENSITY	ORG	SPEED	ECC	DRAM I/O	RANK	PROFILE	P/N	TEMP
288-pin DIMM	Registered	16GB	2Gbx64	4800MT/s	ECC	x8	1	LP	VR2MR2G8018KBASBS2	0° to 85°C
288-pin DIMM	Registered	32GB	4Gbx80	4800MT/s	ECC	x8	2	LP	VR2MR4G8018KBASBS2	0° to 85°C
288-pin DIMM	Registered	32GB	4Gbx80	4800MT/s	ECC	x8	2	VLP	VR2VR4G8018KBASBS2	0° to 85°C
262-pin SODIMM	Unbuffered	8GB	1Gbx64	4800MT/s	None	x16	1	LP	VR2VU2G7218KBASB	0° to 85°C
262-pin SODIMM	Unbuffered	8GB	1Gbx64	4800MT/s	None	x16	1	LP	VR2VU2G7218KBASBT	-40° to 95°C
262-pin SODIMM	Unbuffered	8GB	1Gbx64	5600MT/s	None	x16	1	LP	VR2VU2G7218KBSCB	0° to 85°C
262-pin SODIMM	Unbuffered	8GB	1Gbx64	5600MT/s	None	x16	1	LP	VR2FU1G6416KBSCBT	-40° to 95°C
262-pin SODIMM	Unbuffered	16GB	2Gbx64	4800MT/s	None	x8	1	LP	VR2FU2G6418KBASB	0° to 85°C
262-pin SODIMM	Unbuffered	16GB	2Gbx64	4800MT/s	None	x8	1	LP	VR2FU2G6418KBASBT	-40° to 95°C
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262-pin SODIMM	Unbuffered	16GB	2Gbx64	5600MT/s	None	x8	1	LP	VR2FU2G6418KBSCBT	-40° to 95°C
262-pin SODIMM	Unbuffered	32GB	4Gbx64	4800MT/s	None	x8	2	LP	VR2FU4G6418KBASB	0° to 85°C
262-pin SODIMM	Unbuffered	32GB	4Gbx64	4800MT/s	None	x8	2	LP	VR2FU4G6418KBASBT	-40° to 95°C
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262-pin SODIMM	Unbuffered	32GB	4Gbx72	5600MT/s	ECC	x8	2	LP	VR2MU4G7218KBSCBT	-40° to 95°C



Global Locations

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