SAMSUNG

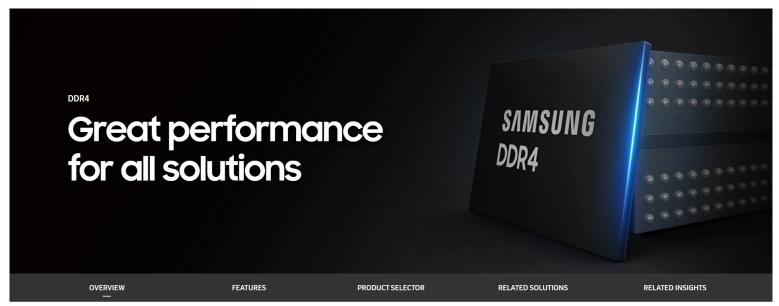
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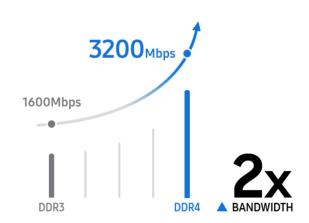
Exceptional speed, high reliability, low energy consumption

High-performing memory empowers faster, powerful solutions. Samsung DDR4 delivers top speed with better bandwidth and reliability using less energy.

An evolution in performance

- Increased bandwidth, up to 3,200 Mbps

Easily processing massive workloads with enhanced speed, the DDR4 transfers more data faster than ever before, offering 4 bank groups (total 16 banks) to reduce interleaving delays, plus 3,200 Mbps bandwidth and 1 TB/s system memory.





Less energy, greater efficiency

- Advanced process technology
- Reduce core and on/off power

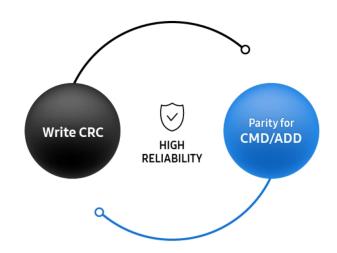


Samsung's industry-first 1x nm process technology enables DDR4 to consume less power while boosting performance, reducing TCO. The 1.2 V low operating voltage and Pseudo Open Drain (POD) interface enables lower power consumption, using 25% less energy.

Improved reliability

- Safe CRC transmission
- Parity bit to prevent errors

System reliability is ever more critical as data centers process ever more traffic. Advanced features of the Samsung DDR4 ensure superior data transmission, including Write CRC to help recognize multibit failures and parity checks for CMD/ADD to prevent system malfunctions.



Product selector

Density	Org.	Speed	Voltage	Temp.	Package	
☐ 32 Gb	☐ 512M x 8	☐ 3200 Mbps	□ 1.2 V	□ 0 ~ 85 °C	☐ 96FBGA	
☐ 16 Gb	☐ 512M x 16	☐ 2666 Mbps		☐ -40 ~ 95 °C	☐ 78FBGA	
□ 8 Gb	☐ 4G x 8	☐ 2400 Mbps				
☐ 4 Gb	☐ 2G x 8	☐ 2133 Mbps				
	□ 2G x 4					
	☐ 2G x 16					
	☐ 256M x 16					
	☐ 1G x 8					
	☐ 1G x 16					
4						

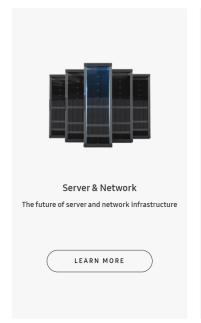
Part Number ▼	Density ▼	Org. ▼	Speed ▼	Voltage ▼	Temp. ▼	Package ▼
K4A4G085WE-BIRC	4 Gb	512M x 8	2400 Mbps	1.2 V	-40 ~ 95 °C	78FBGA
K4A4G085WE-BITD	4 Gb	512M x 8	2666 Mbps	1.2 V	-40 ~ 95 °C	78FBGA
K4A4G085WF-BCTD	4 Gb	512M x 8	2666 Mbps	1.2 V	0 ~ 85 °C	78FBGA

	K4A4G085WF-BITD	4 Gb	512M x 8	2666 Mbps	1.2 V	-40 ~ 95 °C	78FBGA
	K4A4G165WE-BCWE	4 Gb	256M x 16	3200 Mbps	1.2 V	0 ~ 85 °C	96FBGA
	K4A4G165WE-BIRC	4 Gb	256M x 16	2400 Mbps	1.2 V	-40 ~ 95 °C	96FBGA
	K4A4G165WE-BITD	4 Gb	256M x 16	2666 Mbps	1.2 V	-40 ~ 95 °C	96FBGA
	K4A4G165WE-BIWE	4 Gb	256M x 16	3200 Mbps	1.2 V	-40 ~ 95 °C	96FBGA
	K4A4G165WF-BCTD	4 Gb	256M x 16	2666 Mbps	1.2 V	0 ~ 85 °C	96FBGA
	K4A4G165WF-BITD	4 Gb	256M x 16	2666 Mbps	1.2 V	-40 ~ 95 °C	96FBGA ▼
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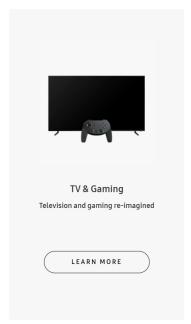
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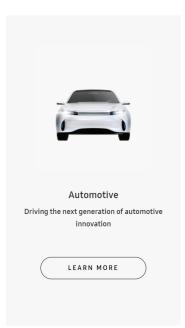
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Related solutions

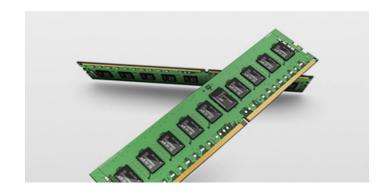


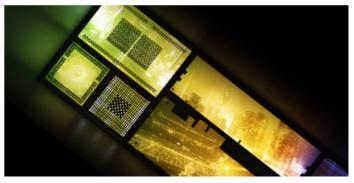






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Samsung Announces Industry's First EUV DRAM with Shipment of First Million Modules

Samsung's new EUV-based DRAM modules have completed global customer evaluations.

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 $Samsung \'s new-generation\ processors\ and\ memory\ solutions\ set\ to\ power innovation\ across\ mobile, home,\ data\ center,\ and\ automotive\ markets.$

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All product specifications reflect internal test results and are subject to variations by user's system configuration. All product images shown are for illustration purposes only and may not be an exact representation of the product. Samsung reserves the right to change product images and specifications at any time without notice.

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eStorage	Technology	Product Finder	Exynos ⊅	Climate Action	Careers
MCP (Multi Chip Package)		Technical Resources	ISOCELL 7	Reduce and Reuse	
Exynos Processor		Storage TCO Calculator	LED 7	Preserving Nature	
ISOCELL Image Sensor		OpenMPDK	Display ↗	Safety First	
Security Solution		Consumer SSD Download 🗷	Worker Safety ↗	Staying Healthy	
Display IC		Contact Us	B2B Workplace ↗	Education for All	
Power IC			Samsung Foundry 7	Growing Together	
			Samsung Business ⊅		
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