

Reach higher speeds and better performance with ValueRAM DDR2.

DDR2 is the next-generation evolution of DDR memory technology. DDR2 memory features faster speeds, higher data bandwidths, lower power consumption, and enhanced thermal performance.

DDR2 memory modules share the same module dimensions as equivalent DDR memory modules, but are not backward-compatible due to incompatible module connections (number of pins), voltage, and DRAM technology. DDR2 memory modules have a different key or notch than same-sized DDR modules to prevent their insertion into an incompatible memory socket.

DDR2 chips are also internally different from DDR memory chips. For example, DDR2 memory chips feature:

- 1.8-V operation, delivering over 50 percent less power usage as well as generating less heat compared to DDR
- Memory signal termination inside the memory chip (“On-Die Termination”) to prevent reflected signal transmission errors
- Operational enhancements to increase memory performance, efficiency, and timing margins
- DDR2 CAS Latencies: 3, 4, 5, and 6

Memory modules



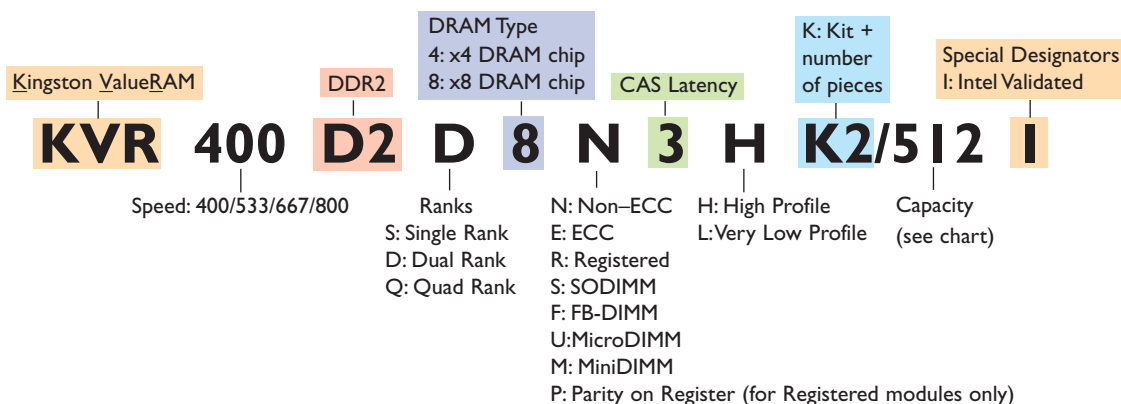
240-pin DDR2 DIMM



184-pin DDR DIMM

DIMM module key must match socket

DDR2 (PC2-3200, PC2-4200, PC2-5300, PC2-6400)



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INTEL VALIDATED PARTS

533 MHz DDR2 PC2-3200 DIMM		
512MB	KVR533D2E4/512I	512MB 533MHz DDR2 ECC CL4 DIMM
1GB	KVR533D2E4/1GI	1GB 533MHz DDR2 ECC CL4 DIMM
2GB	KVR533D2E4/2GI	2GB 533MHz DDR2 ECC CL4 DIMM Intel Validated
400 MHz DDR2 PC2-3200 DIMM		
512MB	KVR400D2S4R3/512I	512MB DDR2-400 Reg x4 Single Rank
	KVR400D2S8R3/512I	512MB 400MHz DDR2 ECC Reg CL3 DIMM Single Rank, x8
1GB	KVR400D2R3/1GI	Replaced by KVR400D2S4R3/1GI
	KVR400D2S4R3/1GI	1GB 400MHz DDR2 ECC Reg CL3 DIMM Single Rank, x4
	KVR400D2S8R3/1GI	1GB 400MHz DDR2 ECC Reg CL3 DIMM Single Rank, x8
2GB	KVR400D2D4R3/2GI	2GB 400MHz DDR2 ECC Registered CL3 DIMM Dual Rank, x4
	KVR400D2D8R3/2GI	2GB 400MHz DDR2 ECC Registered CL3 DIMM Dual Rank, x8
4GB	KVR400D2D4R3/4GI	4GB 400MHz DDR2 ECC Registered CL3 DIMM Dual Rank, x4

VALUERAM PRODUCT LIST

800 MHz DDR2 PC-6400 DIMM		
512MB	KVR800D2N5/512I	512MB 800MHz DDR2 Non-ECC CL5 DIMM
1GB	KVR800D2N5/1GI	1GB 800MHz DDR2 Non-ECC CL5 DIMM
	KVR800D2N5K2/1GI	1GB 800MHz DDR2 Non-ECC CL5 DIMM (Kit of 2)
2GB	KVR800D2N5K2/2GI	2GB 800MHz DDR2 Non-ECC CL5 DIMM (Kit of 2)
677 MHz DDR2 PC-5300 DIMM		
256MB	KVR667D2E5/256	256MB 667MHz DDR2 ECC CL5 DIMM
	KVR667D2N5/256	256MB 667MHz DDR2 Non-ECC CL5 DIMM
512MB	KVR667D2E5/512I	512MB 667MHz DDR2 ECC CL5 DIMM
	KVR667D2E5K2/512I	512MB 667MHz DDR2 ECC CL5 DIMM (Kit of 2)
	KVR667D2N5/512I	512MB 667MHz DDR2 Non-ECC CL5 DIMM
	KVR667D2N5K2/512I	512MB 667MHz DDR2 Non-ECC CL5 DIMM (Kit of 2)
	KVR667D2S8P5/512I	512MB 667MHz DDR2 ECC Reg with Parity CL5 DIMM Single Rank, x8
1GB	KVR667D2D8P5/1GI	1GB 667MHz DDR2 ECC Reg with Parity CL5 DIMM Dual Rank, x8
	KVR667D2E5/1GI	1GB 667MHz DDR2 ECC CL5 DIMM
	KVR667D2E5K2/1GI	1GB 667MHz DDR2 ECC CL5 DIMM (Kit of 2)
	KVR667D2N5/1GI	1GB 667MHz DDR2 Non-ECC CL5 DIMM
	KVR667D2N5K2/1GI	1GB 667MHz DDR2 Non-ECC CL5 DIMM (Kit of 2)
2GB	KVR667D2E5K2/2GI	2GB 667MHz DDR2 ECC CL5 DIMM (Kit of 2)
	KVR667D2N5/2GI	2GB 667MHz DDR2 Non-ECC DIMM
	KVR667D2N5K2/2GI	2GB 667MHz DDR2 Non-ECC CL5 DIMM (Kit of 2)
677 MHz DDR2 PC-5300 SDRAM (SODIMM)		
256MB	KVR667D2S5/256	256MB 667MHz DDR2 Non-ECC CL5 SODIMM
512MB	KVR667D2S5/512I	512MB 667MHz DDR2 Non-ECC CL5 SODIMM
1GB	KVR667D2S5/1GI	1GB 667MHz DDR2 Non-ECC CL5 SODIMM
533 MHz DDR2 PC2-4200 DIMM		
128MB	KVR533D2N4/128	128MB 533MHz DDR2 PC2-4200 DIMM
256MB	KVR533D2E4/256	256MB 533MHz DDR2 ECC CL4 DIMM
	KVR533D2M4/256	256MB 533MHz DDR2 ECC Registered CL4 MiniDIMM
	KVR533D2N4/256	256MB 533MHz DDR2 Non-ECC CL4 DIMM
	KVR533D2U4/256	256MB 533MHz DDR2 Non-ECC CL4 MicroDIMM
512MB	KVR533D2E4/512I	512MB 533MHz DDR2 ECC CL4 DIMM
	KVR533D2E4K2/512I	512MB 533MHz DDR2 ECC CL4 DIMM (Kit of 2)
	KVR533D2M4/512I	512MB 533MHz DDR2 ECC Registered CL4 MiniDIMM
	KVR533D2N4/512I	512MB 533MHz DDR2 Non-ECC CL4 DIMM
	KVR533D2N4K2/512I	512MB 533MHz DDR2 Non-ECC CL4 DIMM (Kit of 2)
	KVR533D2S4R4/512I	512MB 533MHz DDR2 ECC Registered CL4 DIMM Single Rank, x4
	KVR533D2S8F4/512I	512MB 533MHz DDR2 ECC Fully Buffered CL4 DIMM Single Rank, x8
	KVR533D2S8R4/512I	512MB 533MHz DDR2 ECC Registered CL4 DIMM Single Rank, x8
	KVR533D2U4/512I	512MB 533MHz DDR2 Non-ECC CL4 MicroDIMM
1GB	KVR533D2D8F4/1GI	1GB 533MHz DDR2 ECC Fully Buffered CL4 DIMM Dual Rank, x8
	KVR533D2D8R4/1GI	1GB 533MHz DDR2 ECC Registered CL4 DIMM Dual Rank, x8
	KVR533D2E4/1GI	1GB 533MHz DDR2 ECC CL4 DIMM
	KVR533D2E4K2/1GI	1GB 533MHz DDR2 ECC CL4 DIMM (Kit of 2)
	KVR533D2N4/1GI	1GB 533MHz DDR2 Non-ECC CL4 DIMM
	KVR533D2N4K2/1GI	1GB 533MHz DDR2 Non-ECC CL4 DIMM (Kit of 2)
	KVR533D2S4/1GI	1GB 533MHz DDR2 Non-ECC CL4 SODIMM
	KVR533D2S4R4/1GI	1GB 533MHz DDR2 ECC Registered CL4 DIMM Single Rank, x4

533 MHz DDR2 PC2-4200 DIMM (continued)		
2GB	KVR533D2D4F4/2GI	2GB 533MHz DDR2 ECC Fully Buffered CL4 DIMM Dual Rank, x4
	KVR533D2E4K2/2GI	2GB 533MHz DDR2 ECC CL4 DIMM (Kit of 2)
	KVR533D2E4/2GI	2GB 533MHz DDR2 ECC CL4 DIMM
	KVR533D2N4/2GI	2GB 533MHz DDR2 Non-ECC CL4 DIMM
	KVR533D2N4K2/2GI	2GB 533MHz DDR2 Non-ECC CL4 DIMM (Kit of 2)
4GB	KVR533D2E4K2/4GI	4GB 533MHz DDR2 ECC CL4 DIMM (Kit of 2)
	KVR533D2N4K2/4GI	4GB 533MHz DDR2 Non-ECC CL4 DIMM (Kit of 2)
533 MHz DDR2 PC2-4200 SDRAM (SODIMM)		
128MB	KVR533D2S4/128	128MB 533MHz DDR2 Non-ECC CL4 SODIMM
256MB	KVR533D2S4/256	256MB 533MHz DDR2 Non-ECC CL4 SODIMM
512MB	KVR533D2S4/512I	512MB 533MHz DDR2 Non-ECC CL4 SODIMM
400 MHz DDR2 PC2-3200 DIMM		
128MB	KVR400D2N3/128	512MB DDR2-400 Reg x4 Single Rank
	KVR400D2S3/128	128MB 400MHz DDR2 Non-ECC CL3 SODIMM
256MB	KVR400D2E3/256	256MB 400MHz DDR2 ECC CL3 DIMM
	KVR400D2N3/256	256MB 400MHz DDR2 Non-ECC CL3 DIMM
	KVR400D2R3/256	256MB 400MHz DDR2 ECC Registered CL3 DIMM
512MB	KVR400D2E3/512I	512MB 400MHz DDR2 ECC CL3 DIMM
	KVR400D2N3/512I	512MB 400MHz DDR2 Non-ECC CL3 DIMM
	KVR400D2N3K2/512I	512MB 400MHz DDR2 Non-ECC CL3 DIMM (Kit of 2)
	KVR400D2R3K2/512I	512MB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2)
	KVR400D2S4R3/512I	512MB 400MHz DDR2 ECC Registered CL3 DIMM Single Rank, x4
	KVR400D2S8R3/512I	512MB 400MHz DDR2 ECC Registered CL3 DIMM Single Rank, x8
1GB	KVR400D2D8R3/1GI	1GB 400MHz DDR2 ECC Registered CL3 DIMM Dual Rank, x8
	KVR400D2E3/1GI	1GB 400MHz DDR2 ECC CL3 DIMM
	KVR400D2E3K2/1GI	1GB 400MHz DDR2 ECC CL3 DIMM (Kit of 2)
	KVR400D2N3/1GI	1GB 400MHz DDR2 Non-ECC CL3 DIMM
	KVR400D2N3K2/1GI	1GB 400MHz DDR2 Non-ECC CL3 DIMM (Kit of 2)
	KVR400D2S4R3/1GI	1GB 400MHz DDR2 ECC Registered CL3 DIMM Single Rank, x4
	KVR400D2S4R3K2/1GI	1GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Single Rank, x4
	KVR400D2S8R3/1GI	1GB 400MHz DDR2 ECC Registered CL3 DIMM Single Rank, x8
	KVR400D2S8R3K2/1GI	1GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Single Rank, x8
2GB	KVR400D2D4R3/2GI	2GB 400MHz DDR2 ECC Registered CL3 DIMM Dual Rank, x4
	KVR400D2D4R3H/2GI	2GB 400MHz DDR2 Dual Rank Reg ECC High Profile
	KVR400D2D8R3/2GI	2GB 400MHz DDR2 ECC Registered CL3 DIMM Dual Rank, x8
	KVR400D2D8R3K2/2GI	2GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Dual Rank, x8
	KVR400D2E3/2GI	2GB 400MHz DDR2 ECC CL3 DIMM
	KVR400D2E3K2/2GI	2GB 400MHz DDR2 ECC CL3 DIMM (Kit of 2)
	KVR400D2N3/2GI	2GB 400MHz DDR2 Non-ECC CL3 DIMM
	KVR400D2N3K2/2GI	2GB 400MHz DDR2 Non-ECC CL3 DIMM (Kit of 2)
	KVR400D2R3/2GI	2GB 400MHz DDR2 PC2-3200 Reg ECC DIMM
	KVR400D2S4R3/2GI	2GB 400MHz DDR2 ECC Registered CL3 DIMM Single Rank, x4
	KVR400D2S4R3K2/2GI	2GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Single Rank, x4
	KVR400D2S8R3K2/2GI	2GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Single Rank, x8
4GB	KVR400D2D4R3/4GI	4GB 400MHz DDR2 ECC Registered CL3 DIMM Dual Rank, x4
	KVR400D2D4R3H/4GI	4GB Kit 400MHz DDR2 Dual Rank Reg ECC High Profile
	KVR400D2D4R3K2/4GI	4GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Dual Rank, x4
	KVR400D2D8R3K2/4GI	4GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Dual Rank, x8
	KVR400D2E3K2/4GI	4GB 400MHz DDR2 ECC CL3 DIMM (Kit of 2)
	KVR400D2N3K2/4GI	4GB 400MHz DDR2 Non-ECC CL3 DIMM (Kit of 2)
	KVR400D2R3K2/4GI	4GB 400MHz DDR2 PC2-3200 Reg ECC DIMM (Kit of 2)
	KVR400D2S4R3K2/4GI	4GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Single Rank, x4
8GB	KVR400D2D4R3K2/8GI	8GB 400MHz DDR2 ECC Registered CL3 DIMM (Kit of 2) Dual Rank, x4
400 MHz PC2-3200 SDRAM (SODIMM)		
256MB	KVR400D2S3/256	256MB 400MHz DDR2 Non-ECC CL3 SODIMM
512MB	KVR400D2S3/512I	512MB 400MHz DDR2 Non-ECC CL3 SODIMM
1GB	KVR400D2S3/1GI	1GB 400MHz DDR2 Non-ECC CL3 SODIMM

For a complete list of ValueRAM parts, please visit valueram.com

