

30 Pin SIMM

The 30 Pin SIMM was the first generation of the SIMM memory family.

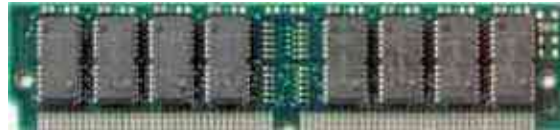
They are typically found in older Intel 286 and 386 desktop computer systems. They come in both 8 bit and 9 bit (parity) configurations, with memory ranges of 256K to 8 megabyte, 60ns to 80ns and are 5 Volts only. The DRAM types supported are mostly Page Mode and Nibble Mode DRAM which comes in both DIP, PLCC and SOJ packages.



72 Pin SIMM

The 72 Pin SIMM was the second generation of the SIMM family.

They are typically found in the Intel 486, 486DX, 586 and some early Pentium desktop computer systems. They come in both 32 bit and 36 bit (parity) configurations, with memory ranges of 4, 8, 16 and 32 megabytes. These were normally produced in two voltage, 5V and 3.3V, and their speeds ranged from 60ns to 70ns.



Both Fast Page Mode (FPM) and Extended Data Out (EDO) were standard DRAM types offered in 72 pin configurations. DRAM chip packaging consisted of DIP, PLCC and SOJ packages.

168 Pin DIMM

The 168 PIN DIMM is what is found in most desktop computers today.

Early on there were three memory types offered in the 168 Pin DIMM form factor, FPM, EDO and Synchronous DRAM (SDRAM). Their configurations include 64bit, 72bit and 80bit, ECC and Non-ECC, and memory sizes included 16, 32, 64, 128, 256, 512 and 1,024 megabytes. Available voltages included 3.3v and 5v for FPM and EDO, and 3.3v for SDRAM.



72 Pin SODIMM

72 Pin SODIMM's are typically found in Pentium II Laptop computer. They come in 64 bit configurations, with memory ranges of 8, 16 and 32 megabyte. These modules are designed around lower power consumption and only one voltage is offered, FPM and EDO at 3.3v. FPM and EDO are the standard DRAM types offered and the packaging is referred to as SOJ.



144 Pin SODIMM

144 Pin SODIMM's are typically used in PC 66 and PC 100 SDRAM Laptop compatible computers. It comes in both 64 bit and 72bit ECC versions and the memory ranges were 16 to 256 megabyte. The SDRAM chips used in 144 Pin SODIMM's are typically SDRAM in the form of TSOP packaging and available in 3.3v only.



184 Pin RIMM

The 184 pin RIMM is used on motherboards using the latest Intel i820/i840 chipsets and is referred to as Rambus. The 184 pin RIMM module comes in both 16bit and 18bit ECC configurations, operating frequencies of 600MHz, 700MHz and 800 MHz and are available with memory ranges of 64 through 512 megabytes. The Rambus packaging is referred to as the Ball Grid Array (BGA) form factor. The Rambus modules only require 2.5 volts. There is a 1 GHz Rambus chip under development that was slated for release in 2001.



184 Pin DIMM

DDR SDRAM is the newest of the memory types under development that will be available in the 184 Pin DIMM form factor. The principle difference between conventional SDRAM and DDR SDRAM is its ability to read/write data on both edges of a clock, therefore resulting in faster data transfer. DDR SDRAM will be available in two frequencies, 200Mhz and 266Mhz, and operational voltage is 2.5v. There is speculation (these have not been released to manufacturing as of this writing) that these modules will be available in both 64 bit and 72bit ECC configurations, with memory ranges of 64 megabytes through to 1 gigabyte. The DDR SDRAM chips used are of the TSOP package.



200 Pin SODIMM

The 200 Pin SODIMM module comes in both 64 bit and 72bit ECC configurations, with memory ranges of 64 megabyte through 512 megabyte. DDR SODIMM modules are slated for use in next-generation DDR Laptop applications. The DDR SDRAM chips used on the 200 DIMM are typically in TSOP packaging.

