Like DDR4 and its predecessors, the new generation DDR5 aims to drive memory density and frequency to new heights. The DDR5's improved design comprises 32 banks distributed over 8 bank groups. The burst length on DDR5 is doubled from 8 to 16. DDR5 comes equipped with the same Bank Refresh Function (SBRF), allowing the PC to tap into other banks while one is operating.

DDR5 enables up to 4 times higher capacity per module in comparison to DDR4. DDR4 modules handle 16Gb x8 chips and max out at 32GB, while DDR5, can leverage 64Gb components which push the maximum capacity on a single module from 32GB up to 128GB. And DDR5 supports die stacking, so memory vendors can potentially stack up to 16 dies onto one chip. As a result, a single Load-Reduced DIMM (LRDIMM) can come with a capacity of up to 4TB.

Last but not least, DDR5 starts where DDR4 left off, ranging from 3,200MT/s to 6,400MT/s which is double the maximum bandwidth of DDR4.

IM's industrial DDR5 memory modules are designed to meet increasing needs for efficient performance in a wide range of industrial applications such as industrial PCs, big data computing and processing centers. IM offers both 4800MT/s and 5600MT/s solutions, longevity support, and additional valuable features (e.g. conformal coating) for industrial use. IM offers low profile DIMMs (LPDIMMs) with rigorous manufacturing and testing processes to ensure our DDR5 modules can reliably function in the toughest operating environments.

DDR5 Modules

DIMM Type	Form Factor	Capacity	Max. Speed	Temperature	Height
VLP ECC UDIMM	288pin VLP DIMM	32GB	PC5-44800 (5600MT/s)	0°C to +95°C tC	0.738" x8
ECC UDIMM	288pin DIMM	32GB, 16GB	PC5-44800 (5600MT/s)	0°C to +95°C tC	1.23" x8
VLP Non-ECC UDIMM	288pin VLP DIMM	32GB	PC5-44800 (5600MT/s)	0°C to +95°C tC	0.738" x8
Non-ECC UDIMM	288pin DIMM	32GB, 16GB	PC5-44800 (5600MT/s)	0°C to +95°C tC	1.23" x8
ECC SODIMM	262pin SODIMM	32GB, 16GB	PC5-44800 (5600MT/s)	0°C to +95°C tC	1.18" x8
Non-ECC SODIMM	262pin SODIMM	32GB, 16GB	PC5-44800 (5600MT/s)	0°C to +95°C tC	1.18" x8
RDIMM	288pin DIMM	32GB, 16GB	PC5-44800 (5600MT/s)	0°C to +95°C tC	1.23" x8

*Commercial = 0°C to +95°C / Industrial = -40°C to +95°C / High = -40°C to +105°C

KEY FEATURES

- Fully RoHS Industrial Modules
- Comprehensive form factors
- VLP DIMMs designed for server data centers
- Longevity support and 3 Years Warranty
- 100% System Tested
- Support Locked BOM
- PCN and EOL Notification System
- Environmental Compliance, longevity and assembly service available
- Fully tested in applications environment for stability and performance
- Conformal coating, underfill and anti-sulfide available upon request