

# DDR5

## Industrial DRAM Module

DDR5 is designed with new specifications for higher speed, lower power, and more robust data integrity for high-performance computing. The DDR5 DRAM module specification shows notable enhancements in capacity, speed rate, and voltage.

The Power Management IC (PMIC) is integrated into the DIMM, reducing unnecessary power management circuitry on the motherboard for unused DIMM slots from previous generations. DDR5 utilizes a new device integrating the Serial Presence Detect EEPROM with extra hub features that can manage access to the external controller and decoupling the memory load on the internal bus from external.

From JEDEC standard, DDR5 brings a maximum potential capacity to 128GB per DIMM, which maximum transfer speed is 6400MT/s, doubling the transfer speed rate of DDR4 with improved power consumption at 1.1V. DDR5 can increase 50% in bandwidth compared to DDR4 that tops out at 300MT/s. At 1.1V, DDR5 also consumes 20% less power than DDR4, which components at 1.2V with significant advantage for enterprise servers.

Server DDR5 DIMMs add temperature sensors to monitor thermal conditions across the length of the DIMM. It allows for more precise control of system cooling and better throttling performance seen in DDR4 modules.

### Features :

- Fully Tested and Optimized for Stability and Performance
- Uses Original IC to Meet Strict Industrial Standards
- On module Power Management IC
- Operating Environment : Standard 0°C to 85°C
- On-die ECC
- Optional Anti-Sulfuration Protection
- Optional Conformal Coating Protection
- RoHS Compliance; CE/FCC Certification

Module Type	Memory Tech.	Speed	Density	Voltage	Pin Count	Std. Opr Temp	Ext. Opr Temp
UDIMM SODIMM	DDR5	4800 MT/s	8GB ~ 32GB	1.1 v	288 Pins (U) 262 Pins (S)	0 ~ 85 c	N.A.

Module Type	Memory Tech.	Speed	Density	Voltage	Pin Count	Std. Opr Temp	Ext. Opr Temp
ECC UDIMM ECC SODIMM	DDR5	4800 MT/s	16GB ~ 32GB	1.1 v	288 Pins (U) 262 Pins (S)	0 ~ 85 c	N.A.



UD INFO Corporation  
TEL : +886-2-7713-6050 ; FAX : +886-2-8511-3151  
Address: 3F-4, No. 8, Ln. 609, Sec. 5, Chongxin Rd., Sanchong Dist.,  
New Taipei City, 241, Taiwan