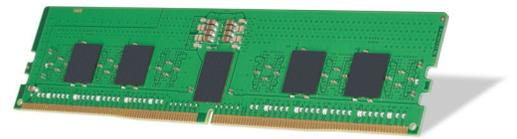


DuraMemory[™]

DDR5 Memory Modules

DDR5 is designed to meet increasing needs for efficient performance in a wide range of applications including cloud computing, and data center processing. The DDR5 specification provides developers with twice the performance (4.8 to 6.4 Gbps data rate) and improved power efficiency in comparison to DDR4 by using an on-DIMM 12V voltage regulator (PMIC) and 1.1 I/O Voltage.

DDR5 also improves scaling performance without degrading channel efficiency at higher speeds. This increased performance is achieved by doubling the burst length to BL16 and bank-count to 32 from 16. For increased reliability and efficiency, a DDR5 DIMM boasts two 40-bit fully independent sub-channels on the same module. DDR5 memory modules have a maximum die density of 64Gb and hence are capable of having a much higher DIMM storage capacity.



Applications

- High Performance Computing
- Cloud Computing and Storage
- Enterprise Networking

Features

- Command/Address and Control bus is double data rate
- Generates CRC checksum in READ data frames
- Default burst length increased to BL16 – Single burst = 64B of data
- Integrated Temperature Sensor (MR4)
- DDR5 DRAM contain 256 mode registers

Benefits

- Higher Bandwidth, DDR5 initial designs 4800 MHz
- Lower Power
- Better power efficiency and scalability
- Higher memory efficiency, lower latency
- Higher capacity DIMMs

Ordering Information

288 PIN - DDR5 RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4098RD520805SB	32GB	31.25	4Gb x80	2Gx8	4800MT/s	1.1V	0°C to +70°C

288-PIN - DDR5 ECC UDIMM							
SMART Part Number	Density	Height (mm)	Module Config.	Device Type	Speed	Voltage	Temperature
ST2047UD520805SB	16GB	31.25	2Gb x72	2Gx8	4800MT/s	1.1V	0°C to +70°C

288-PIN - DDR5 RDIMM - Value Memory Modules							
SMART Part Number	Density	Height (mm)	Module Config.	Device Type	Speed	Voltage	Temperature
ST8198RD540405-SB	64GB	31.25	8Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
ST4098RD540405-SB	32GB	31.25	4Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C



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