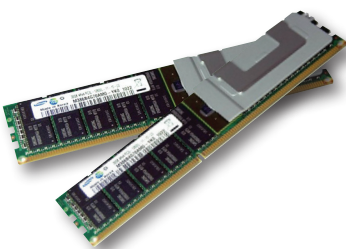


RDIMM **LRDIMM**

Note: Ideal Condition = 2P server
Max 3 DIMMs per channel

Samsung DDR3 LRDIMM Key Features and Specifications

- Power Supply: 1.35V and 1.5V
- Speed: 1600 Mbps, 1333 Mbps, 1066 Mbps
- Compatibility: Industrial RDIMM Compatible
- Sample Availability: 2011
- Lineup: 32GB (4Gb DDP), 16GB (2Gb DDP)
- Target Applications: Mission Critical Servers, Financial Analysis, Weather Analysis



Samsung DDR3 LRDIMM

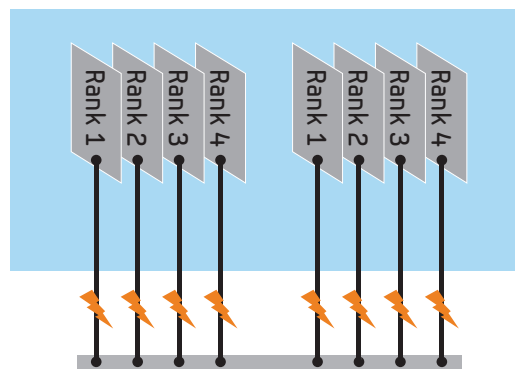
What is a Load Reduced Dual-inline Memory Module (LRDIMM)?

LRDIMM reduces loading while delivering high-performance.

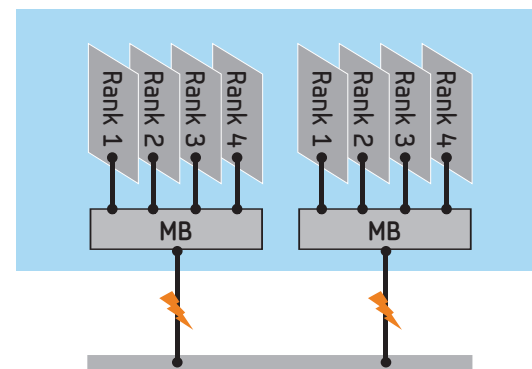
In server applications, higher performance and greater capacity are essential for improving main memory. Today, RDIMMs are used for the main memory in many server systems with a 32GB RDIMM (4Gb quad rank) now representing the highest capacity DIMM in the world. However, there is typically a tradeoff in main memory between performance and capacity, which could prevent a performance gain at a 32GB capacity. When more slots are

populated on a circuit board, the supportable operating frequency is lowered. Therefore, signal integrity worsens with heavier loading, as can be seen in the diagrams below. But, a LRDIMM can serve as an independent memory buffer for a module's PCB to help hide the loading on each DRAM behind the memory buffer. So why not eliminate the tradeoff and improve two critical criteria at the same time: performance and high capacity?

LRDIMM SERVES AS AN INDEPENDENT MEMORY BUFFER FOR A MODULE'S PCB



RDIMM Case
(8 Rank = 8 Loading)



LRDIMM Case
(8 Rank = 2 Loading)

Samsung Semiconductor, Inc.

3655 North First St., San Jose, CA 95134-1713
TEL: 408-544-4000 FAX: 408-544-4950
www.usa.samsungsemi.com

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