Server DIMM Chipsets

Built for speed, power efficiency and reliability, the DDR4 and DDR3 chipsets for RDIMM and LRDIMM server modules delivers the top-of-the-line performance and capacity needed to meet the growing demands on enterprise and data center systems.

Industry-leading Performance
- Fully-compliant with the latest JEDEC standards
- Operational speeds up to 2666 Mbps

Enhanced Margin
- Wide margin I/O design with advanced programmability
- Exceed JEDEC reliability standards for ESD and EOS

Optimized Power
- Advanced power management
- Frequency-based, low-power optimization

Superior Debug and Serviceability
- Integrated tools for bring-up and debug
- Works out-of-the-box with no BIOS changes required
Overview

Built to meet the requirements of today’s leading enterprise and data center servers, our DDR4 and DDR3 chipsets for RDIMM and LRDIMM, are JEDEC-compliant chips made for speed, power efficiency and reliability. The chipsets feature industry-leading I/O performance and margin, and leverages advanced power management techniques to advance the critical data center and enterprise server infrastructure for the growing demands of big data.

Used in DDR3 and DDR4 registered dual inline memory modules (RDIMMs) and load reduced dual inline memory modules (LRDIMMs), the DDR4 Register Clock Driver (RCD) and Data Buffer (DB) and DDR3 RCD and Isolation Memory Buffer chips enable top-of-the-line performance and capacity with improved power efficiency for a wide array of memory-intensive applications including real-time analytics, in-memory computing, virtualization and business intelligence.

Chipset Features

- Fully compliant with the latest JEDEC standards
- Used in DDR4 and DDR3 RDIMMs and LRDIMMs
- Supports DDR3 operation up to 2133 Mbps and DDR4 up to 2666 Mbps
- Multi-setting frequency-based power optimization
- Wide temperature range: -5° C - 125° C
- ROHS compliant
- Improved ESD/EOS beyond JEDEC requirements

Applications

High-performance, high-capacity systems including:
- Data centers
- Enterprise servers
- Workstations
- Storage
- Communications

<table>
<thead>
<tr>
<th>Product</th>
<th>Part Number</th>
<th>Data Rate</th>
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<tbody>
<tr>
<td>DDR4 Register Clock Driver</td>
<td>iDDR4RCD-GS02</td>
<td>2400/2666</td>
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<tr>
<td>DDR4 Data Buffer</td>
<td>iDDR4DB2-GS02</td>
<td>2400/2666</td>
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<tr>
<td>DDR3 Register Clock Driver</td>
<td>INSSTE32882XV</td>
<td>1660/1866/2133</td>
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<tr>
<td>DDR3 Isolation Memory Buffer</td>
<td>iMB02-GS02B</td>
<td>1600/1866</td>
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RDIMM

![RDIMM diagram]

LRDIMM

![LRDIMM diagram]

[rambus.com/dimmchipset]