# **Rambus**

MEMORY + INTERFACES Server DIMM Chipsets Solution Overview



# Server DIMM Chipsets

Built for speed, power efficiency and reliability, the server DIMM chipsets for DDR3 and DDR4 RDIMM, LRDIMM, and DDR4 NVDIMM 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
- Frequencybased, low-power optimization

#### Superior Debug and Serviceability

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

Server DIMM Chipsets

#### Overview

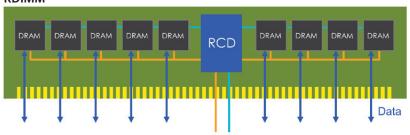
Built to meet the requirements of today's leading enterprise and data center servers, our DDR memory chipsets for RDIMM, LRDIMM and NVDIMM, are JEDEC-compliant chips made for speed, power efficiency and reliability. The chipsets feature industry-leading I/O performance and margin, and leverages advanced power management techniques to advance the critical data center and enterprise server infrastructure for demanding applications including real-time analytics, in- memory computing, virtualization and business intelligence.

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 the 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.

Used in DDR4 non-volatile dual inline memory modules (NVDIMM), the DDR4 nonvolatile register clock driver (NVRCD) enables NVDIMM-N persistent memory products and supports emerging NVDIMM-P architectures.

Product	Part Number	Data Rate
DDR4 Non-volatile Register Clock Driver	iDDR4NVRCD2	1600/1866/2133/2400/ 2666/2933/3200
DDR4 Register Clock Driver	iDDR4RCD-GS02	2400/2666
DDR4 Data Buffer	iDDR4DB2-GS02	2400/2666
DDR3 Register Clock Driver	INSSTE32882XV	1660/1866/2133
DDR3 Isolation Memory Buffer	iMB02-GS02B	1600/1866

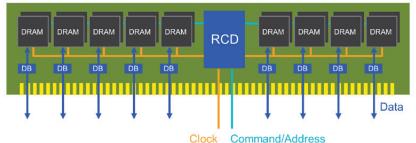
RDIMM



Clock

Command/Address

LRDIMM



rambus.com/dimmchipset

## **Chipset Features**

- Fully compliant with the latest JEDEC standards
- Used in DDR4 and DDR3 RDIMMs, LRDIMMs
- Enables DDR4 NVDIMMs
- Supports DDR3 operation up to 2133 Mbps and DDR4 up to 2666 Mbps.
- Supports DDR4 NVDIMM
  operation up to 3200 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
- Persistent memory architectures

