

Fully Buffered DIMM (FB-DIMM) Design Considerations

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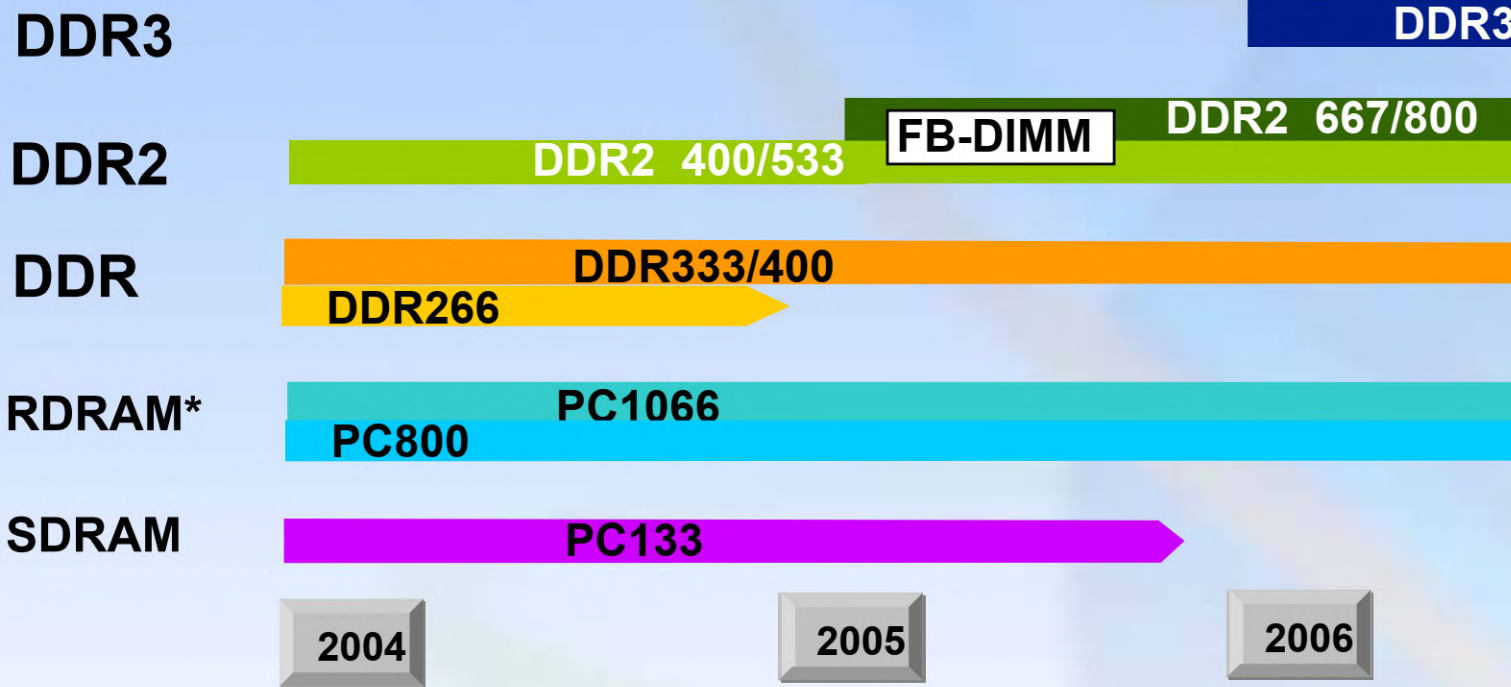
Feb 18, 2004



Agenda

- **FB-DIMM Architecture**
- **FB-DIMM Channel Electrical Characteristics**
- **FB-DIMM Physical Design**
- **FB-DIMM System Design Considerations**

Intel Platform Memory Technology Roadmap

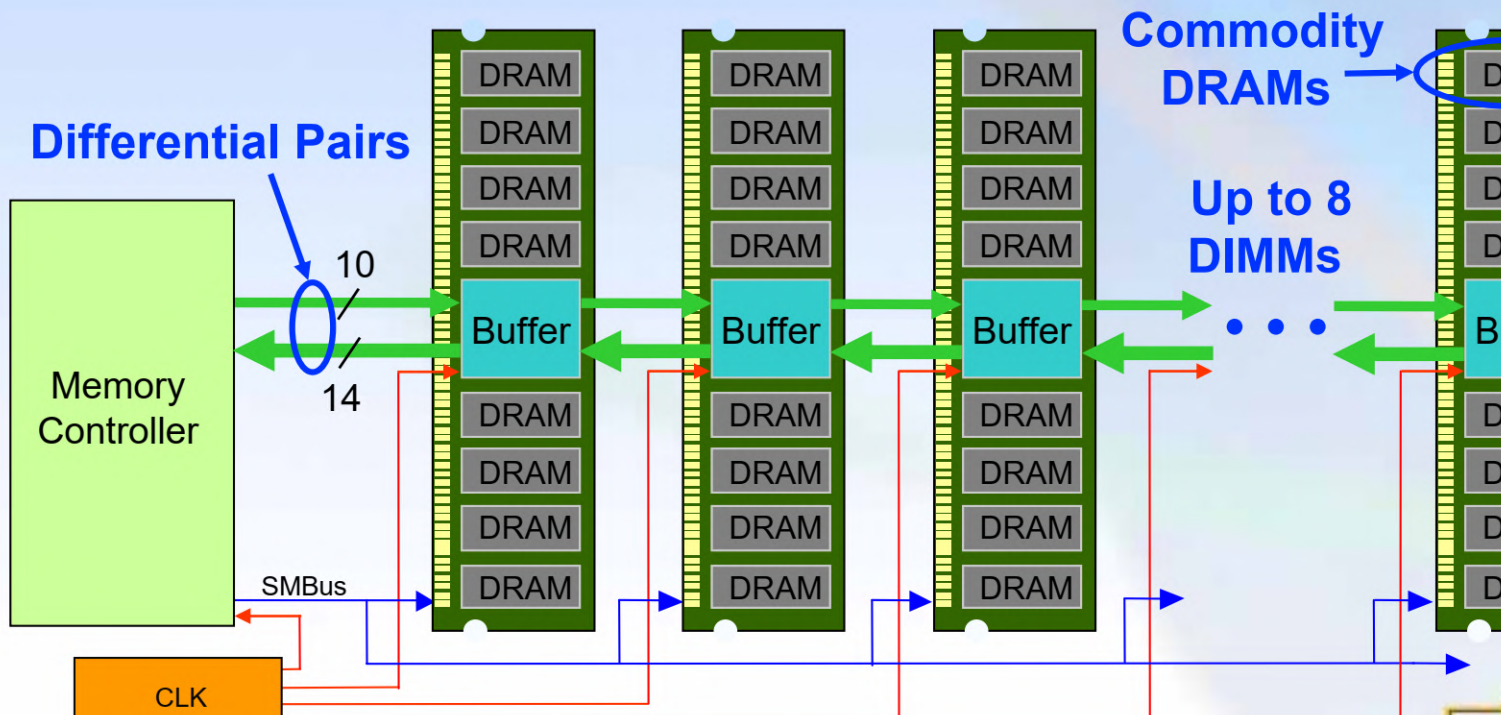


- DDR2 400/533 support in all main IA segments in 2004
 - with DDR flexibility
- FB-DIMM new server interconnect in 2005
- Low Power SDRAM moving to low power DDR
- RDRAM still used in specific applications

FB-DIMM Architecture

FB-DIMM Block Diagram

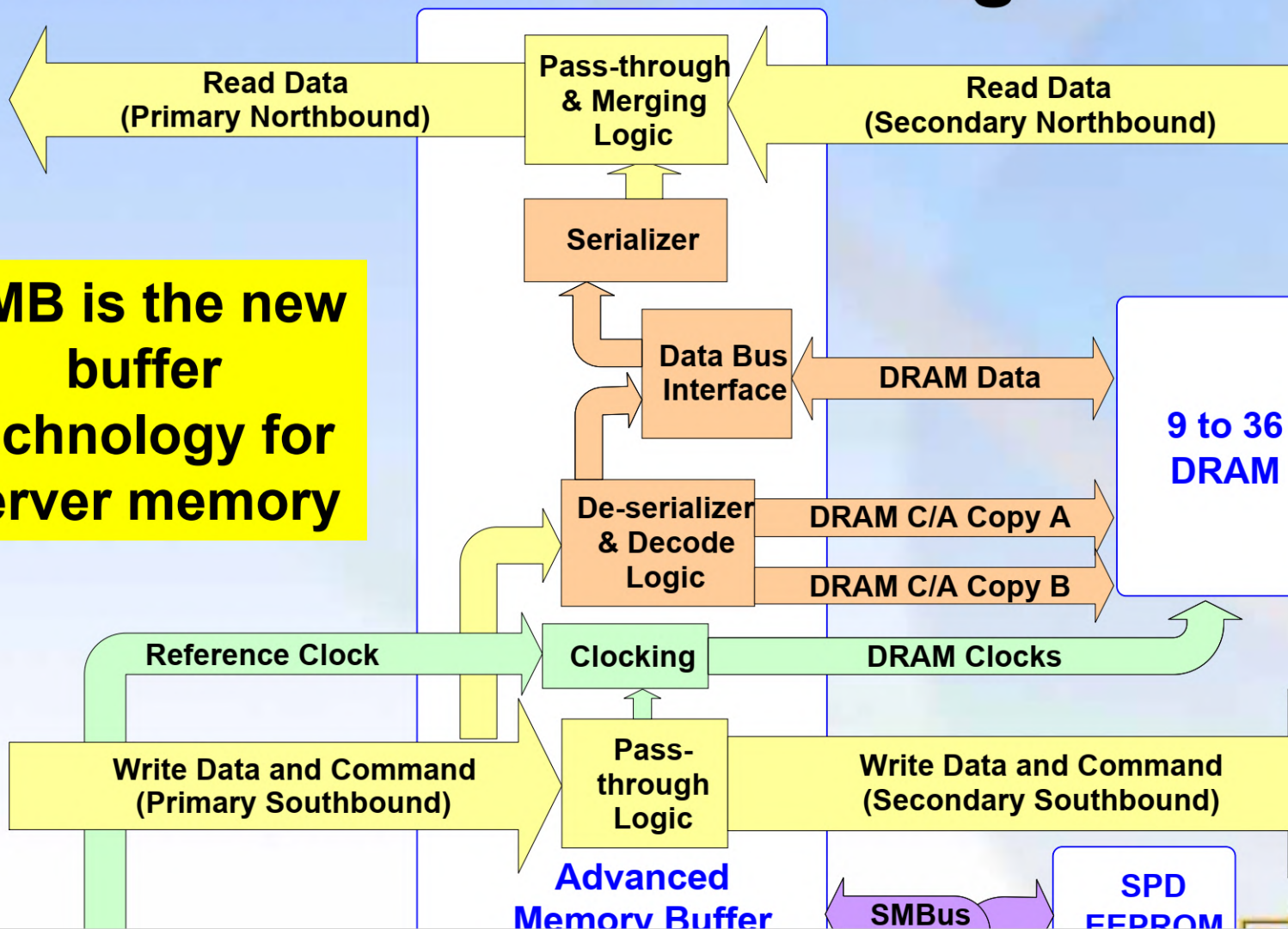
- DRAM interface is entirely behind the buffer
 - DDR2 DRAM scales from 533 to 800 MT/s, with 8 DIMMs (288 devices) per channel



FB-DIMM Architecture

FB-DIMM Module Block Diagram

**AMB is the new
buffer
technology for
server memory**



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