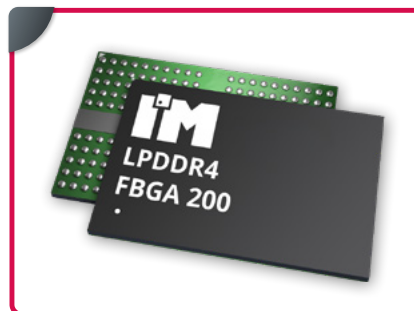


# LPDDR4/4X DRAM COMPONENTS

**Intelligent Memory's** Low Power Double Data Rate DRAMs offer an advantage over the traditional DDR for achieving low power in applications where it makes a critical difference, such as tablets, SSD cards, mobile devices, and automotive systems.

**IM's** LPDDR4x is available in densities from 4Gb - 64Gb in a 200-ball FBGA package. The LPDDR4x boasts improved features, such as its maximum data rate performance increasing up to 4266 Mbps by adding termination and calibration options, while its biggest change is its operating I/O (VDDQ) voltage which has been reduced to 0.6V.

**IM's** LPDDR4 ECC components are available in densities from 4Gb - 16Gb, in a 200-ball FBGA package with a maximum data rate up to 3200Mbps. Fully JEDEC compliant, IM's LPDDR4 have ECC error correction capabilities available that consume less energy than its predecessors and operates over Industrial and High temperature ranges.



For more information or to request samples, please visit us at [www.intelligentmemory.com](http://www.intelligentmemory.com)

You may also contact our sales team directly at [sales@intelligentmemory.com](mailto:sales@intelligentmemory.com)

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## KEY FEATURES

- Densities from 4Gb up to 64Gb
- 1 channel (x16), 1 rank
- 2 channels (x32), 1 rank or 2 ranks
- Low voltage power supply:
  - LPDDR4
    - 1.8V VDD1
    - 1.1V VDD2
    - 1.1V VDDQ
  - LPDDR4X
    - 1.8V VDD1
    - 1.1V VDD2
    - 0.6V VDDQ
- High data transfer rates: Support up to 4266Mbps
- Integrated error correction (ECC) available for 4Gb and 8Gb



## APPLICATIONS

- **Aerospace & Defense:** Avionics systems, satellite communication systems, and military-grade computing platforms
- **Automotive Systems:** Infotainment systems, advanced driver-assistance systems (ADAS), and in-vehicle networking
- **Embedded Systems:** Industrial IoT devices, smart sensors, and control systems
- **Industrial Automation:** Programmable logic controllers (PLCs), robotics, and machine vision systems
- **Medical Devices:** Patient monitors, diagnostic equipment, and imaging systems
- **Networking Infrastructure:** Routers, switches, and gateways
- **Portable Electronics:** Tablets, laptops, POS
- **Test & Measurement Instruments:** Oscilloscopes, spectrum analysers, and data loggers

LPDDR4/4x		Density (Ranks)							
Configuration	Family	64Gb (2)	32Gb (2)	32Gb (1)	24Gb (1)	16Gb (2)	16Gb (1)	8Gb (1)	4Gb (1)
x32, 2 Channels	LPDDR4x	✓	✓	✓	✓		✓	✓	
	LPDDR4	✓	✓	✓			✓	✓	✓
x16, 1 Channel	LPDDR4x					✓	✓	✓	✓
	LPDDR4						✓		✓

ECC Option available



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