

## Alliance Memory's new Monolithic High-Speed, Low Voltage 1G x 8 CMOS DDR3L SDRAM



A new monolithic high-speed, low-voltage CMOS double data rate 3 synchronous DRAM (DDR3L SDRAM) with an 8-Gb density in the 78-ball, 9-mm by 13.2-mm, lead (Pb)-free FBGA package. Delivering increased power efficiency for high-end computer and storage systems, the 1G x 8 AS4C1G8MD3L offers a double data rate architecture for extremely fast transfer rates of up to 1600 Mbps/pin and clock rates of 800 MHz.

## **Key Specifications and Benefits:**

- Internally configured as eight banks of 1G x 8 bits
- Offered in the 78-ball, 9-mm by 13.2-mm FBGA package
- Extremely fast transfer rates of up to 1600 Mbps/pin
- Clock rates of 800 MHz
- Operates from a single +1.35-V power supply
- Available with an extended commercial temperature range of 0 °C to +95 °C (AS4C1G8MD3L-12BCN)
- Fast 64-ms, 8192-cycle refresh from 0 °C to +85 °C and 32 ms from +85 °C to +95 °C
- Fully synchronous operation
- Programmable read or write burst lengths of 4 or 8
- Auto precharge function provides a self-timed row precharge initiated at the end of the burst sequence
- Easy-to-use refresh functions include auto- or self-refresh
- Programmable mode register allows the system to choose the most suitable modes to maximize performance
- Lead (Pb)-free

## **Target Applications:**

Industrial, medical, networking, telecom, and aerospace applications

Datasheets and additional information can be found on www.alliancememory.com