

DESCRIPTION:

This document describes Aplus 256M x 64-bit 2GB DDR2-800 CL5 SDRAM (Synchronous DRAM) memory module. The components on this module include sixteen 128M x 8-bit (4Banks) DDR2-800 SDRAM in FBGA packages. This 240-pin DIMM uses gold contact fingers and requires +1.8V. The electrical and mechanical specifications are as follows:

FEATURES:

- JEDEC standard 1.8V \pm 0.1V Power supply
- All inputs and outputs SSTL_1.8 compatible
- Max clock Freq: 400Mhz
- Double-data-rate architecture; two data transfers per clock cycle
- Bidirectional data strobe (DQS)
- Differential clock inputs (CK and CK)
- DLL aligns DQ and DQS transition with CK transition
- Programmable Read latency 5 (clock)
- Programmable Burst length (4,8)
- Programmable Burst type (sequential & interleave)
- Timing Reference: CL-tRCD-tRP (5-5-5)
- Edge aligned data output, center aligned data input
- Auto & Self refresh, 7.8us refresh interval (8K/64ms refresh)
- OCD (Off-chip driver impedance adjustment)
- ODT (On-die termination)
- Serial presence detect with EEPROM

PERFORMANCE:

Clock Cycle Time (tCK)	2.5ns (min.) /8ns (max.)
Row Cycle Time (tRC)	51.5ns (min.)
Refresh Row Cycle Time (tRFC)	105ns (min.)
Row Active Time (tRAS)	39ns (min.) /70,000ns (max.)
Operating Temperature	0°C ~ 85°C
Storage Temperature	-55°C ~ +100°C

