

DESCRIPTION:

This document describes Aplus 512M x 64-bit 4GB DDR3 SDRAM (Synchronous DRAM) Dual In-Line Memory Module. The components on this module include sixteen 256M x 8-bit DDR3 SDRAMs in FBGA packages and a 2048-bit serial EEPROM. Those components were mounted on a 240-pin printed circuit board. This 240-pin DIMM is used to be mounted into 240-pin edge connector sockets and data I/O transactions could be apply on both edges of DQS. The electrical and mechanical specifications are as follows:

FEATURES:

RoHS compliant products

JEDEC standard 1.5V \pm 0.075V power supply

1.5V \pm 0.075V power supply VDDQ

3.0V to 3.6V VDDSPD

Fast data transfer rates: PC3-10600, PC3-8500

Nominal and dynamic on-die termination (ODT) for data strobe and mask signals

Single Rank

On-board IIC temperature sensor with integrated serial presence-detect (SPD) EEPROM

8 inter selectable burst chop BC4 and burst length BL8 on- the-fly (OTF)

Gold edge contacts

Terminated control, command, and address bus

DDR3 DRAM Speed

DDR3-1066 1066Mbps CL-tRCD-tRP 7-7-7

DDR3-1333 1333Mbps CL-tRCD-tRP 9-9-9

PERFORMANCE:

Clock Cycle Time (tCK) CL(2) 533

Clock Cycle Time (tCK) CL(1) 667

Row Cycle Time (tRC) 49.125ns for 1333

50.625ns for 1066

REFRESH Row Cycle Time (tRCD) 13.125ns

Memory Clock/Data Rate: 1.5ns/1333MT/s, 1.87ns/1066MT/s

