

# DDRIII SDRAM 1866 204-PIN SO\_DIMM Industrial 8GB 512Mx8

#### **DESCRIPTION:**

This document describes Aplus 1GB x 64-bit 8GB DDR3 SDRAM (Synchronous DRAM) Dual In-Line Memory Module. The components on this module include sixteen 512M x 8-bit DDR3 SDRAMs in FBGA packages and a 2048-bit serial EEPROM. Those components were mounted on a 204-pin printed circuit board. This 204-pin SO\_DIMM is used to be mounted into 204-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:**

Extra-thick 30µ gold-plated contact PINS
RoHS compliant products
JEDEC standard 1.5V ± 0.075V power supply
1.5V ± 0.075V power supply VDDQ
3.0V to 3.6V VDDSPD

Fast data transfer rates: PC3-14900

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)

Terminated control, command, and address bus 100% tested for performance and reliability

### DDR3 DRAM Speed

DDR3-1866 1866Mbps CL-tRCD-tRP 13-13-13

### **PERFORMANCE:**

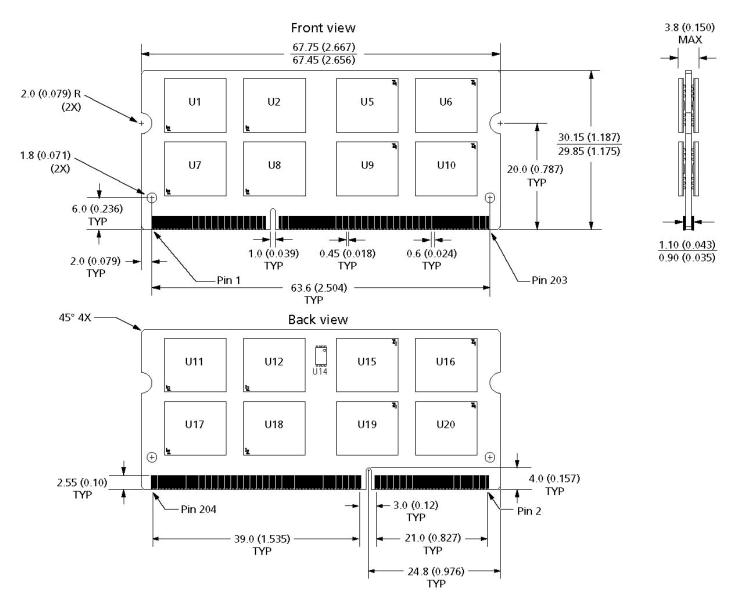
Clock Cycle Time (tCK) CL(1) 933
Row Cycle Time (tRC) 47.125ns for 1866
REFRESH Row Cycle Time (tRCD) 13.125ns
Memory Clock/Data Rate: 1.07ns/1866MT/s

Operating Case temperature range: Industrial -40°C <=TC<= +95°C



## DDRIII SDRAM 1866 204-PIN SO\_DIMM Industrial 8GB 512Mx8

Operating Temperature  $-40^{\circ}$  to  $+95^{\circ}$  Storage Temperature  $-55^{\circ}$  to  $+100^{\circ}$ 



Notes: 1. All dimensions are in millimeters (inches); MAX/MIN or typical (TYP) where noted.

2. The dimensional diagram is for reference only.

PCB: 30µ