

DDRIII SDRAM 1866 / 1600 / 1333 UNBUFFERED ECC DIMM 16GB 1Gx8

DESCRIPTION:

This document describes Aplus 2G x 72-bit 16GB DDR3 SDRAM (Synchronous DRAM) Dual In-Line Memory Module. The components on this module include eighteen 1GB 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
- 1.35V \pm 0.075V power supply V_{DDQ}
- 3.0V to 3.6V V_{DDSPD}
- Fast data transfer rates: PC3-10600, PC3-12800, PC-149000
- Nominal and dynamic on-die termination (ODT) for data strobe and mask signals
- Dual rank
- On-board I²C temperature sensor with integrated serial presence-detect (SPD) EEPROM
- 8 inter selectable burst chop BC4 and burst length BL8 on- the-fly (OTF)
- Supports ECC error correction and detection
- Gold edge contacts
- Terminated control, command, and address bus

Options

- Operating temperature1
- Commercial (0°C \leq TA \leq +70°C)

Frequency/CAS latency

- 1.07ns @ CL = 13 (DDR3-1866)
- 1.25ns @ CL = 11 (DDR3-1600)
- 1.5ns @ CL = 9 (DDR3-1333)

Industry Nomenclature	Data Rate (MT/s)				^t RCD (ns)	^t RP (ns)	^t RC (ns)	Module Bandwidth	Memory Clock/ Data Rate	Clock Cycles (CL- ^t RC D- ^t RP)
	CL=13	CL=11	CL=10	CL=9						
PC3-14900	1866	1600	1333	1333	13.125	13.125	47.125	14.9 GB/s	1.07ns/1866 MT/s	13-13-13
PC3-12800		1600	1333	1333	13.125	13.125	48.125	12.8 GB/s	1.25ns/1600 MT/s	11-11-11
PC3-10600			1333	1333	13.125	13.125	49.125	10.6 GB/s	1.5ns/1333 MT/s	9-9-9

240PIN DDR3 ECC DIMM

