

# Data Sheet

<b>Module Type</b>	<b>DDR3 VLP UDIMM</b>
<b>Capacity</b>	<b>2GB/4GB/8GB</b>
<b>Module speed</b>	<b>Up to 1866MT/s</b>
<b>Pin</b>	<b>240 pin</b>
<b>Cl-tRCD-tRP</b>	<b>13-13-13</b>
<b>Operating Temp</b>	<b>0°C ~85°C</b>

**The Total Solution For  
Industrial Flash Storage**

Rev 1.0

## 1. Features

### Key Parameter

Industry Nomenclature	Speed Grade	Data Rate MT/s			CL	tRCD	tRP
		CL=9	CL=11	CL=13			
<b>PC3-14900</b>	<b>T</b>	1333	1600	1866	13	13	13

- JEDEC Standard 240-pin Dual In-Line Memory Module
- Intend for PC3-14900 applications
- Inputs and Outputs are SSTL-15 compatible
- VDD=VDDQ= 1.35 Volt (-0.067/+0.1V),or 1.5 Volt (+0.075/-0.075)
- Bi-directional Differential Data Strobe
- DLL aligns DQ and DQS transition with CK transition
- SDRAMs have 8 internal banks for concurrent operation
- Normal and Dynamic On-Die Termination support.
- SDRAMs are 78-ball BGA Package
- Height 18.75mm
- 8 bit pre-fetch
- Two different termination values (Rtt\_Nom & Rtt\_WR)
- Self refresh 7.8 $\mu$ s ( $T_c \leq +85^{\circ}C$ )
- Operating temperature range  $0^{\circ}C \leq T_c \leq +85^{\circ}C$
- Programmable Device Operation:
  - Burst Type: Sequential or Interleave
  - Device CAS# Latency: 6,7,8,9,10,11,13
  - Burst Length: switch on-the-fly: BL=8 or BC 4
- RoHS and Halogen free

## 2. Ordering Information

Density	Component Composition	Part Number	Description
2GB	256Mx8	M3U0-2GSJNLPC	DDR3 1600 1Rx8 UDIMM VLP 1.5V/1.35V
4GB	256Mx8	M3U0-4GSJGLPC	DDR3 1600 2Rx8 UDIMM VLP 1.5V/1.35V
4GB	512Mx8	M3U0-4GSSNLPC	DDR3 1600 1Rx8 UDIMM VLP 1.5V/1.35V
8GB	512Mx8	M3U0-8GSSGLPC	DDR3 1600 2Rx8 UDIMM VLP 1.5V/1.35V
2GB	256Mx8	M3U0-2GSJNLQE	DDR3 1866 1Rx8 UDIMM VLP 1.5V/1.35V
4GB	512Mx8	M3U0-4GSSNLQE	DDR3 1866 1Rx8 UDIMM VLP 1.5V/1.35V