

# DATASHEET

<b>Module TYPE</b>	<b>DDR3 16GB/8GB/4GB/2GB/1GB DIMM</b>
<b>Module speed</b>	<b>PC3-12800</b>
<b>CAS Latency</b>	<b>CL-11</b>
<b>Pin</b>	<b>240pin</b>
<b>SDRAM Operating Temp</b>	<b>0 °C ~ 85 °C</b>

# 1. Features

## Key Parameter

Industry Nomenclature	Speed Grade	Data Rate MT/s			tRCD	tRP	tRC
		CL=7	CL=9	CL=11	(ns)	(ns)	(ns)
<b>PC3-12800</b>	-	1066	1333	1600	13.75	13.75	13.75

JEDEC Standard 240-pin Dual In-Line Memory Module

- Intend for PC3-12800 applications
- Inputs and Outputs are SSTL-15 compatible
- VDD=VDDQ= 1.5 Volt ± 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

- 8 bit pre-fetch
- Two different termination values (Rtt\_Nom & Rtt\_WR)
- Auto & self refresh 7.8µs (TA ≤ +85°C)
- DRAM operating temperature range  
0°C ≤ TA ≤ +85°C
- Programmable Device Operation:
  - Burst Type: Sequential or Interleave
  - Device CAS# Latency: 7, 9, 11
  - Burst Length: switch on-the-fly:  
BL=8 or BC 4
- RoHS Compliant (*Section 14*)

# 2. PACKAGE DIMENSION

