

## 204 PIN DDR3 SODIMM

512Mx64 DDR3 SDRAM DIMM based on 512x8, 8Banks,  
8K Refresh, 1.5V Synchronous DRAMs with SPD

### Description

The Hypertec Hyperam 4GB DDR3 SODIMM 512x8 memory module is organised as 512 Meg x 64 bits in a 204 pin memory module. The 4GB memory module uses 8 pieces 512M x 8 DDR3 SDRAMs. The x64 modules are ideal for use in high performance computer systems where increased memory density and fast access are required. The SPD is programmed to JEDEC standard latency and timing at 1.5V, this SODIMM uses gold edge contacts.

### Features

- Programmable CAS Latency: 11, 9
- 204-pin, small outline dual in-line memory module (SODIMM)
- Fast data transfer rates: PC3-12800, PC3-10600
- 4GB (512 Meg x 64)
- $VDD = VDDQ = +1.5V \pm 0.075V$
- $VDDSPD = +3.0V$  to  $+3.6V$
- Reset pin for improved system stability
- Nominal and dynamic on-die termination (ODT) for data, strobe and mask signals
- Single Rank
- 8 internal device banks for concurrent operation
- Fixed burst length (BL) of 8 and burst chop (BC) of 4 via the mode register
- Adjustable data-output drive strength
- Serial presence-detect (SPD) EEPROM
- Gold edge contacts
- Lead-free and ROHS compliant
- Lifetime warranty

**PLEASE NOTE:** The Hypertec Hyperam module defined in this specification is one of several configurations available under this part number. All configurations are compatible, however, the DRAM combination and/or memory module height may vary.