

Memory Module Specifications

NTBSD4P32SP-08

8GB (1Rx8 1G x 64-Bit/2R8 512M x 64Bit) PC4-3200 CL16 288-Pin DIMM

DESCRIPTION

NTBSD4P32SP-08 is a 1G x 64-bit (1R8) or 512M x 64-bit (2R8) SDRAM (Synchronous DRAM), memory module based on eight 1G x 8-bit or sixteen 512M x 8 FBGA components per module. The SPD is programmed to latency timing of 16-20-20 at 1.35V. support XMP, Each 288-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

FEATURES

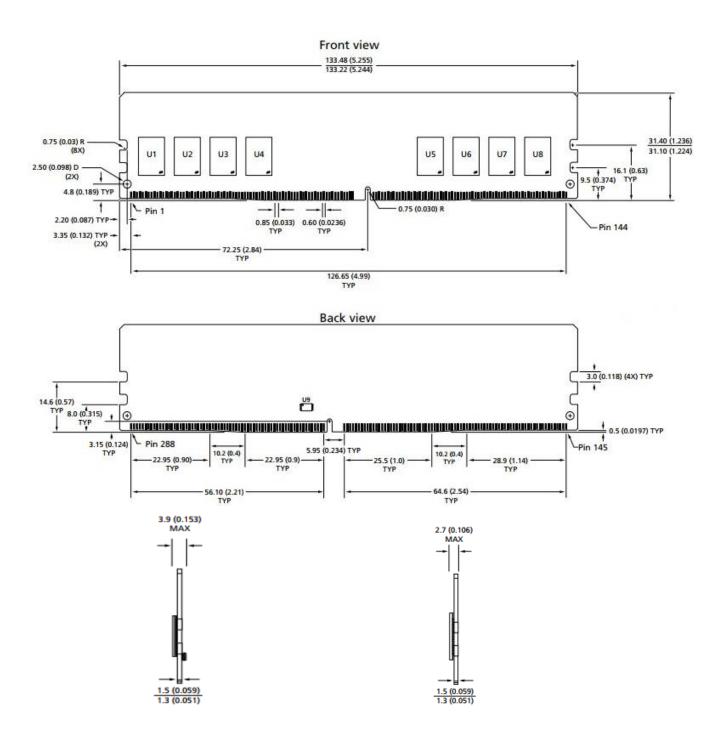
- Power Supply: VDD=1.35V Typical
- VDDQ = 1.2V Typical
- · VPP 2.5V Typical
- VDDSPD=2.2V to 3.6V
- Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals
- Low-power auto self refresh (LPASR)
- · Data bus inversion (DBI) for data bus
- On-die VREFDQ generation and calibration
- Single-rank
- On-board I2 serial presence-detect (SPD) EEPROM
- · 16 internal banks; 4 groups of 4 banks each
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)
- Selectable BC4 or BL8 on-the-fly (OTF)
- Fly-by topology
- · Terminated control command and address bus
- PCB: Height 1.23" (31.25mm)
- · RoHS Compliant and Halogen-Free

SPECIFICATIONS

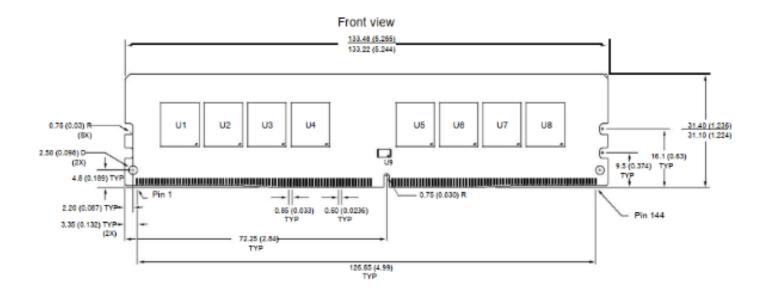
CL(IDD)	16 cycles
Row Cycle Time (tRCmin)	45ns(min.)
Refresh to Active/Refresh	350ns(min.)
Command Time (tRFCmin)	
Row Active Time (tRASmin)	26.25ns(min.)
Maximum Operating Power	TBD W*
UL Rating	94V-0
Operating Temperature	0° C to +70° C
Storage Temperature	-40° C to +85° C

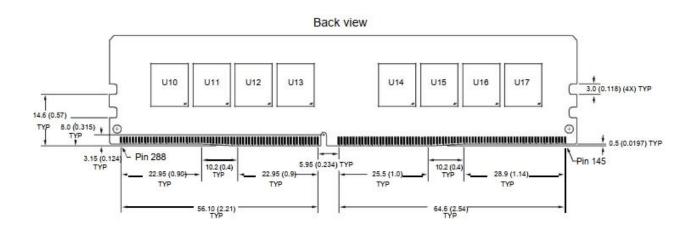
^{*}Power will vary depending on the SDRAM used.

MODULE DIMENSIONS



**The location of U9 may be on the front or on the back, Above Picture is for reference only!







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