

## Longline DDR4 4GB 2400MHz PC4-19200 LNGDDR424004GB

4GB 1Rx16 512M x 64-Bit PC4-2400 CL17 288-Pin DIMM

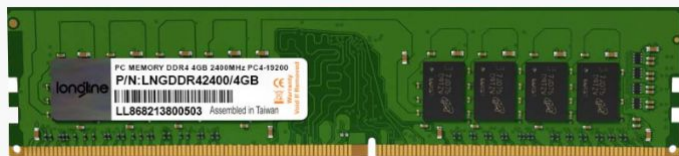
### DESCRIPTION

This document describes LonglineRAM's 512M x 64-bit (4GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM), 1Rx16, memory module, based on four 512M x 16-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2400 timing of 17-17-17 at 1.2V.

Each 288-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

### FEATURES

- Power Supply: VDD=1.2V 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
- 8 internal banks; 2 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(1DD)	17 cycles
Row Cycle Time (tRCmin)	45.75ns (min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns (min.)
Row Active Time (tRASmin)	32ns (min.)
Maximum Operating Power	TBD W*
UL Rating	94 V - 0
Operating Temperature	0° C to 85° C
Storage Temperature	-55° C to +100° C

\*Power will vary depending on the SDRAM used.