

## KSM24LD4/32HAI

32GB 2Rx4 8G x 72-Bit PC4-2400 CL17 Load Reduced w/Parity 288-Pin DIMM

#### DESCRIPTION

Kingston's KSM24LD4/32HAI is a 4G x 72-bit (32GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM) load reduced w/ parity, 2Rx4, ECC, memory module, based on thirty-six 2G x 4-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
- VDDQ = 1.2V
- VPP 2.5V
- VDDSPD=2.41V to 2.75V
- Functionality and operations comply with the DDR4 SDRAM datasheet
- 16 internal banks
- Bank Grouping is applied, and CAS to CAS latency (tCCD\_L, tCCD\_S) for the banks in the same or different bank group accesses are available
- Data transfer rates: PC4-2400, PC4-2133, PC4-1866, PC4-1600
- Bi-Directional Differential Data Strobe
- 8 bit pre-fetch
- Burst Length (BL) switch on-the-fly BL8 or BC4(Burst Chop)
- Supports ECC error correction and detection
- On-Die Termination (ODT)
- · Temperature sensor with integrated SPD
- This product is in compliance with the RoHS directive.
- · Per DRAM Addressability is supported
- · Internal Vref DQ level generation is available
- Write CRC is supported at all speed grades
- · CA parity (Command/Address Parity) mode is supported

## **SPECIFICATIONS**

CL(IDD)	17 cycles
Row Cycle Time (tRCmin)	46.16ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Maximum Operating Power	AUR*
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
Storage Temperature	-55° C to +100° C

<sup>\*</sup> Available Upon Request

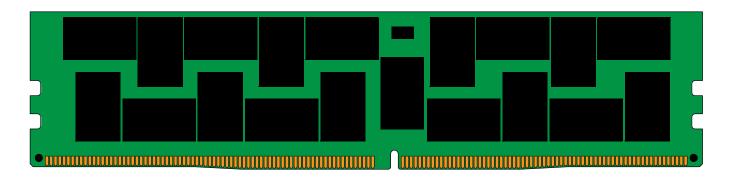
## Module Assembly

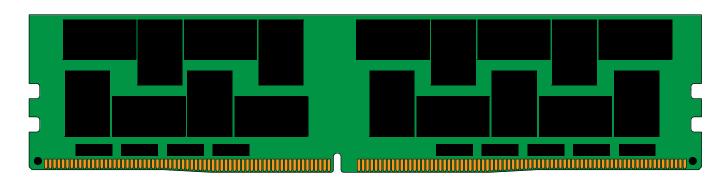
DRAM: HYNIX (A-DIE)
RCD: IDT

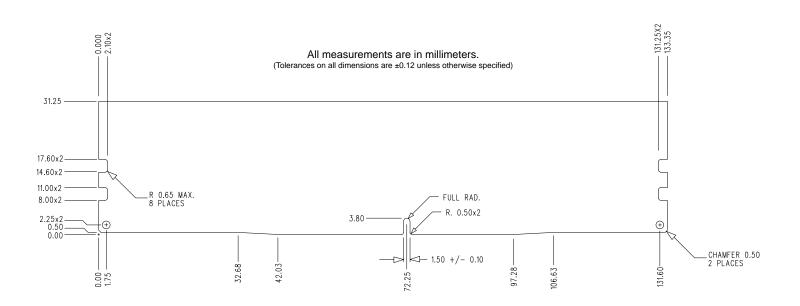
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# **MODULE DIMENSIONS**







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