

# Memory Module Specifications

## KSM24RD8/16HAI

16GB 2Rx8 2G x 72-Bit PC4-2400

CL17 Registered w/Parity 288-Pin DIMM

### DESCRIPTION

Kingston's KSM24RD8/16HAI is a 2G x 72-bit (16GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM) registered w/ parity, 2Rx8, ECC, memory module, based on eighteen 1G x 8-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=2.25V 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 |

\* Available Upon Request

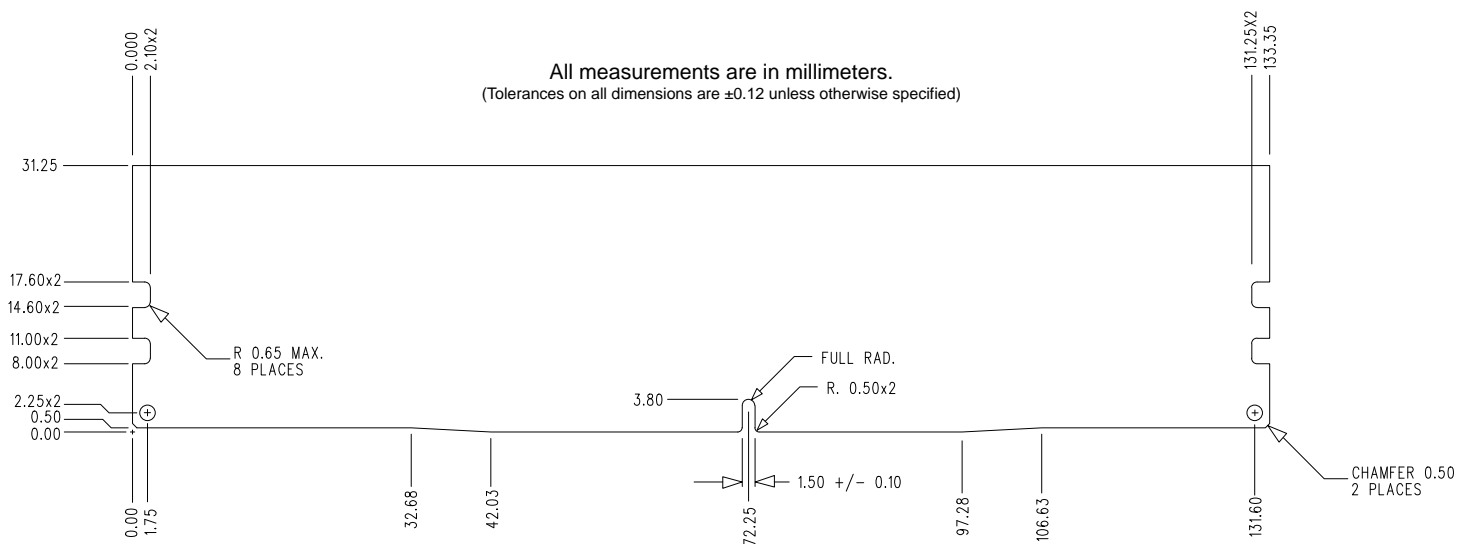
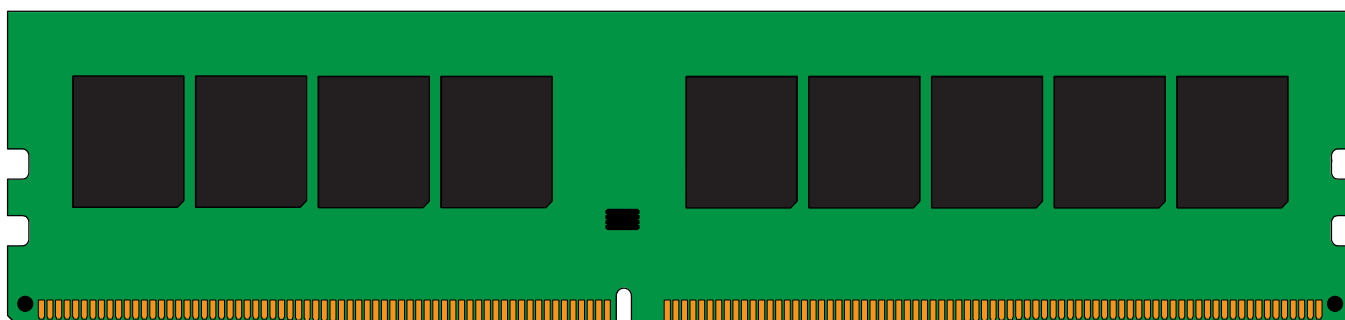
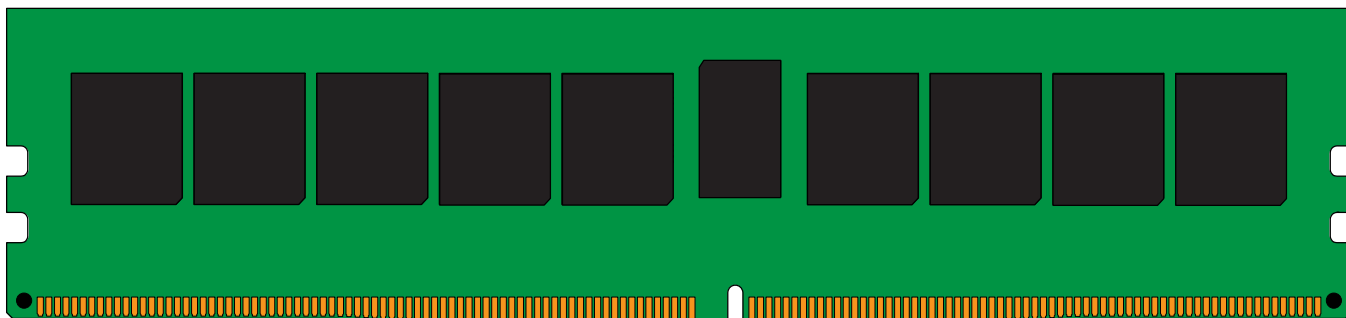
### Module Assembly

**DRAM:** HYNIX (A-DIE)

**RCD:** IDT

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## MODULE DIMENSIONS



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