

# Memory Module Specifications

## KSM26RD8/16HDI

16GB 2Rx8 2G x 72-Bit PC4-2666

CL19 Registered w/Parity 288-Pin DIMM

### DESCRIPTION

Kingston's KSM26RD8/16HDI is a 2G x 72-bit (16GB) DDR4-2666 CL19 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 DDR4-2666 timing of 19-19-19 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: PC4-2666, 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)  | 19 cycles         |
| Row Cycle Time (tRCmin)                          | 46.25ns(min.)     |
| Refresh to Active/Refresh Command Time (tRFCmin) | 350ns(min.)       |
| Row Active Time (tRASmin)                        | 32ns(min.)        |
| Maximum Operating Power                          | *                 |
| UL Rating  | 94 V - 0          |
| Operating Temperature                            | 0° C to +85° C    |
| Storage Temperature                              | -55° C to +100° C |

\* See IDD Table (page 2)

### Module Assembly

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

**RCD:** IDT

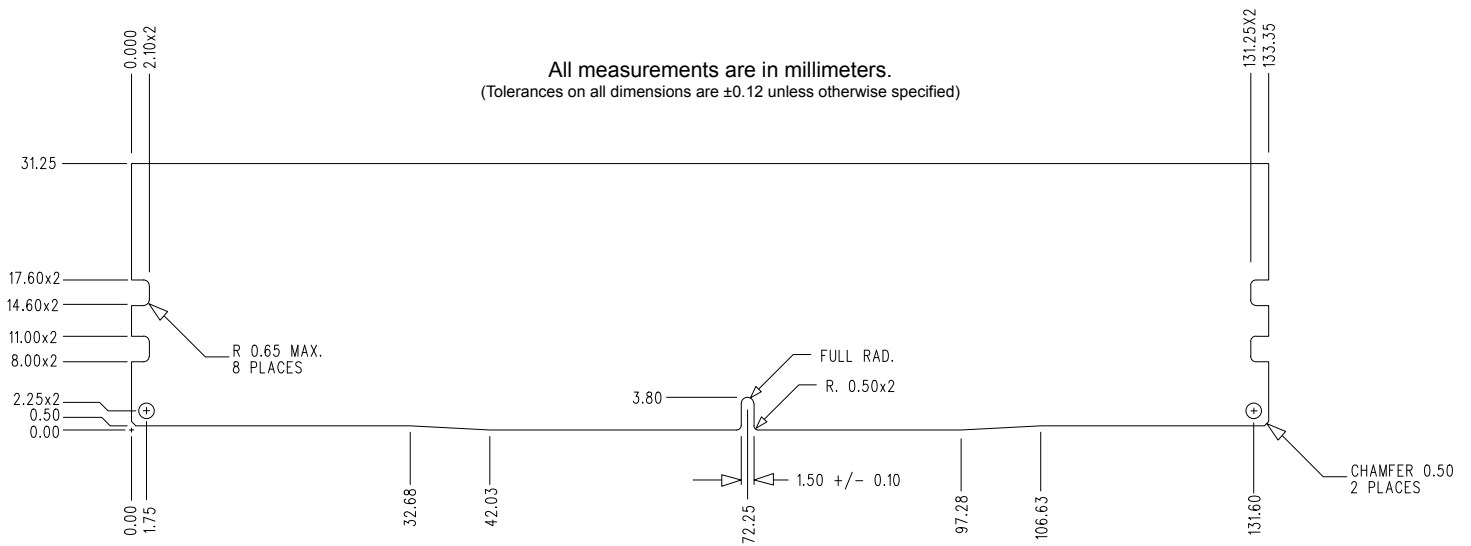
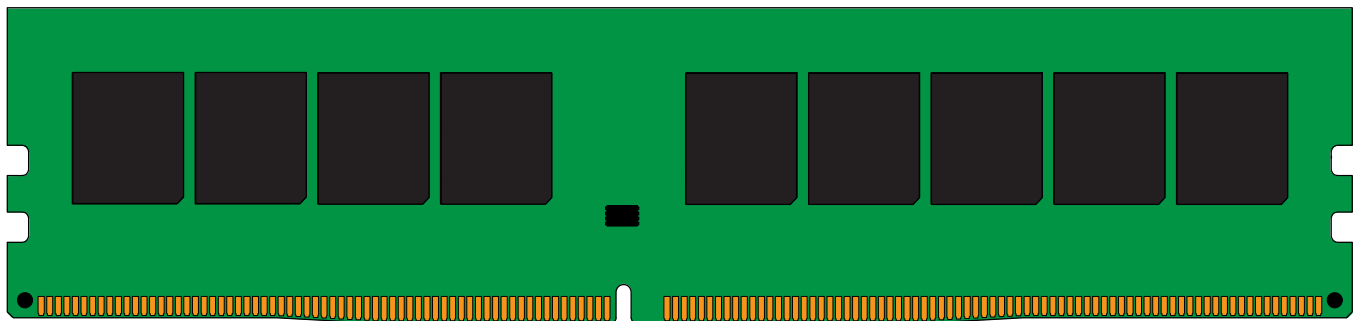
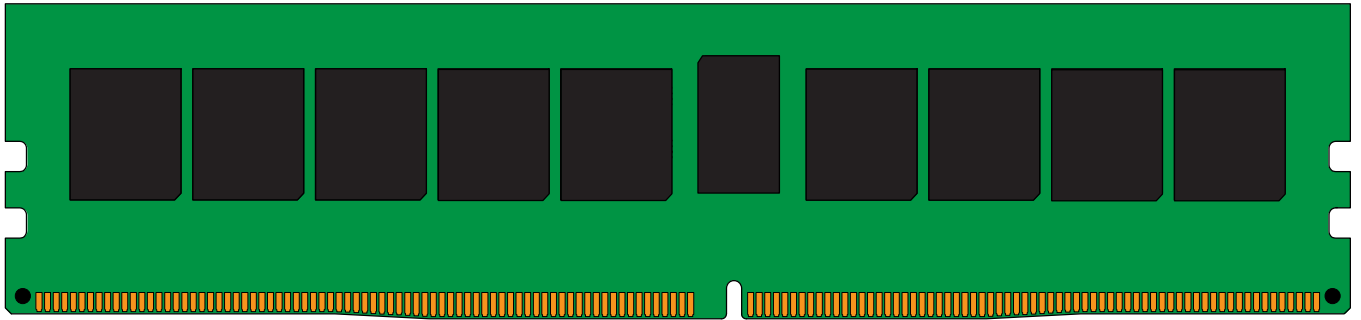
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## IDD Specifications

| IDD    |      | unit |
|--------|------|------|
| Symbol | 2666 |      |
| IDD0   | 957  | mA   |
| IDD0A  | 961  | mA   |
| IDD1   | 1056 | mA   |
| IDD1A  | 1081 | mA   |
| IDD2N  | 895  | mA   |
| IDD2NA | 903  | mA   |
| IDD2NT | 987  | mA   |
| IDD2NL | 771  | mA   |
| IDD2NG | 900  | mA   |
| IDD2ND | 882  | mA   |
| IDD2NP | 911  | mA   |
| IDD2P  | 576  | mA   |
| IDD2Q  | 857  | mA   |
| IDD3N  | 924  | mA   |
| IDD3NA | 924  | mA   |
| IDD3P  | 644  | mA   |
| IDD4R  | 1587 | mA   |
| IDD4RA | 1620 | mA   |
| IDD4RB | 1603 | mA   |
| IDD4W  | 1589 | mA   |
| IDD4WA | 1623 | mA   |
| IDD4WB | 1530 | mA   |
| IDD4WC | 1577 | mA   |
| IDD4WP | 1740 | mA   |
| IDD5B  | 2428 | mA   |
| IDD5F2 | 1923 | mA   |
| IDD5F4 | 1760 | mA   |
| IDD6N  | 322  | mA   |
| IDD6E  | 451  | mA   |
| IDD6R  | 203  | mA   |
| IDD6A  | 451  | mA   |
| IDD7   | 1849 | mA   |
| IDD8   | 157  | mA   |

| IPP    |      | unit |
|--------|------|------|
| Symbol | 2666 |      |
| IPP0   | 56   | mA   |
| IPP1   | 60   | mA   |
| IPP2N  | 41   | mA   |
| IPP2P  | 33   | mA   |
| IPP3N  | 197  | mA   |
| IPP3P  | 193  | mA   |
| IPP4R  | 147  | mA   |
| IPP4W  | 145  | mA   |
| IPP5B  | 509  | mA   |
| IPP5F2 | 342  | mA   |
| IPP5F4 | 280  | mA   |
| IPP6N  | 73   | mA   |
| IPP6E  | 104  | mA   |
| IPP6R  | 50   | mA   |
| IPP6A  | 102  | mA   |
| IPP7   | 161  | mA   |
| IPP8   | 35   | mA   |

## MODULE DIMENSIONS



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