

KSM26SES8/8HD

8GB 1Rx8 1G x 72-Bit PC4-2666 CL19 260-Pin ECC SODIMM

DESCRIPTION

Kingston's KSM26SES8/8HD is a 1G x 72-bit (8GB) DDR4-2666 CL19 SDRAM (Synchronous DRAM) w/ parity, 1Rx8, ECC, memory module, based on nine 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 260-pin SODIMM 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 = 2.20V to 3.60V
- · 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
- · RoHS Compliant and Halogen-Free

SPECIFICATIONS

| CL(IDD) | 19 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 | * |
| UL Rating | 94 V - 0 |
| Operating Temperature | 0° C to +85° C |
| Storage Temperature | -55° C to +100° C |
| | |

^{*}See IDD Specifications (page 2)

Module Assembly

DRAM: HYNIX (D-DIE)

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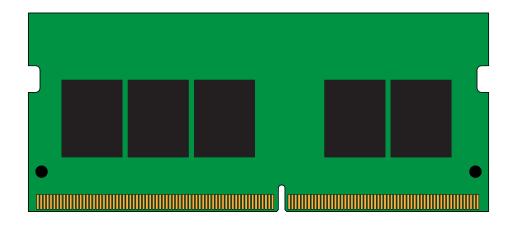
IDD Specifications

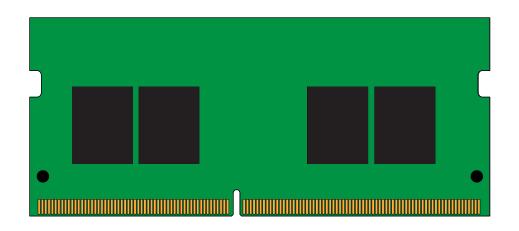
| IDD | | unit |
|--------|------|------|
| Symbol | 2666 | unic |
| IDD0 | 292 | mA |
| IDD0A | 292 | mΑ |
| IDD1 | 355 | mΑ |
| IDD1A | 377 | mΑ |
| IDD2N | 228 | mΑ |
| IDD2NA | 234 | mΑ |
| IDD2NT | 275 | mΑ |
| IDD2NL | 161 | mΑ |
| IDD2NG | 232 | mΑ |
| IDD2ND | 224 | mΑ |
| IDD2NP | 236 | mΑ |
| IDD2P | 153 | mΑ |
| IDD2Q | 210 | mΑ |
| IDD3N | 246 | mΑ |
| IDD3NA | 246 | mΑ |
| IDD3P | 189 | mΑ |
| IDD4R | 894 | mA |
| IDD4RA | 919 | mΑ |
| IDD4RB | 907 | mΑ |
| IDD4W | 889 | mA |
| IDD4WA | 914 | mΑ |
| IDD4WB | 806 | mΑ |
| IDD4WC | 855 | mA |
| IDD4WP | 1022 | mΑ |
| IDD5B | 1748 | mΑ |
| IDD5F2 | 1250 | mΑ |
| IDD5F4 | 1095 | mA |
| IDD6N | 169 | mA |
| IDD6E | 233 | mΑ |
| IDD6R | 109 | mΑ |
| IDD6A | 233 | mA |
| IDD7 | 1152 | mΑ |
| IDD8 | 88 | mA |

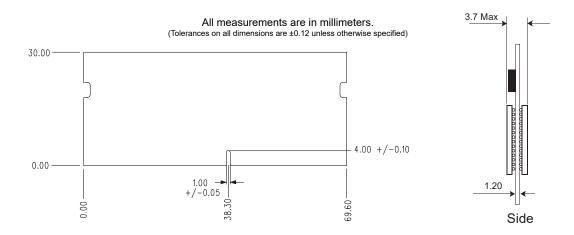
| IPP | | unit |
|--------|------|-------|
| Symbol | 2666 | uiiic |
| IPP0 | 46 | mA |
| IPP1 | 53 | mA |
| IPP2N | 31 | mA |
| IPP2P | 28 | mA |
| IPP3N | 122 | mA |
| IPP3P | 120 | mA |
| IPP4R | 149 | mA |
| IPP4W | 148 | mA |
| IPP5B | 473 | mA |
| IPP5F2 | 307 | mA |
| IPP5F4 | 264 | mA |
| IPP6N | 46 | mA |
| IPP6E | 62 | mA |
| IPP6R | 37 | mA |
| IPP6A | 63 | mA |
| IPP7 | 144 | mA |
| IPP8 | 29 | mA |

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MODULE DIMENSIONS







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