

Memory Module Specifications

KSM26SES8/16MF

16GB 1Rx8 2G x 72-Bit PC4-2666

CL19 260-Pin ECC SODIMM

DESCRIPTION

Kingston's KSM26SES8/16MF is a 2G x 72-bit (16GB) DDR4-2666 CL19 SDRAM (Synchronous DRAM) w/ parity, 1Rx8, ECC, memory module, based on nine 2G 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

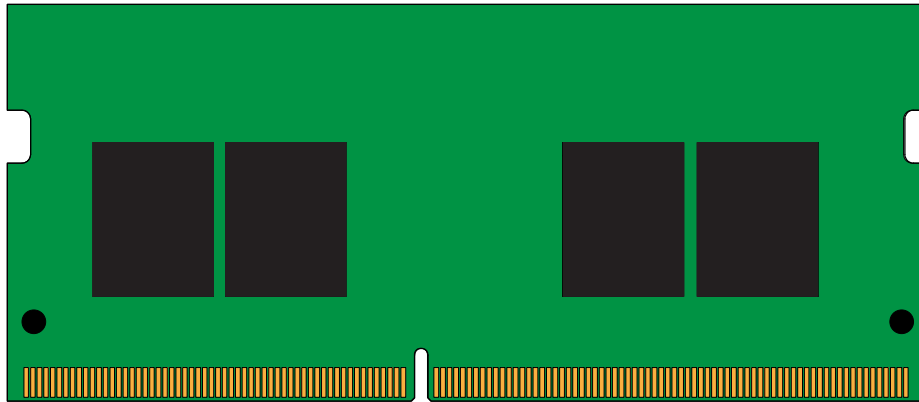
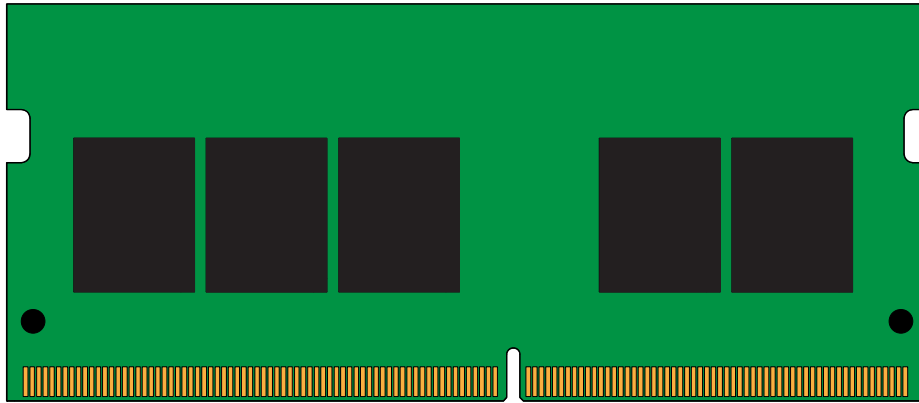
| |
|----------------------|
| DRAM: MICRON (F-DIE) |
|----------------------|

Continued >>

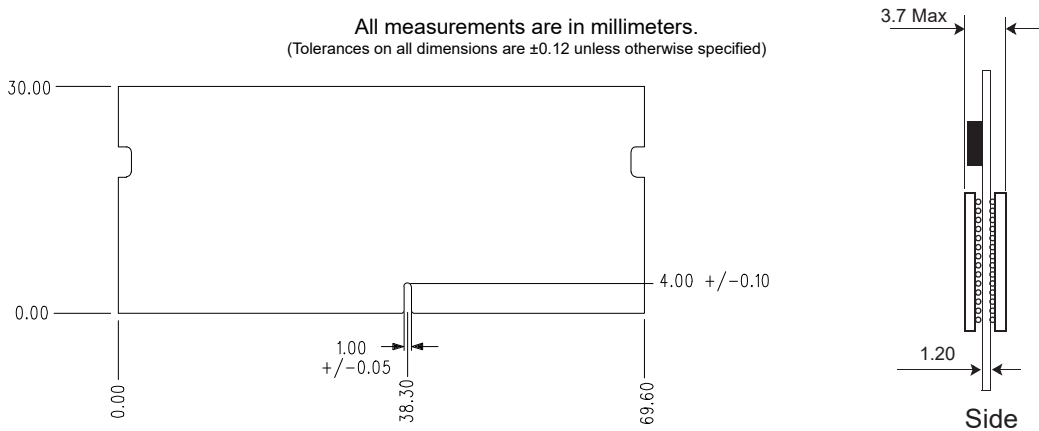
IDD Specifications

| Symbol | 2666 | Units |
|--------------------------|------|-------|
| I _{DD0} | 522 | mA |
| I _{PP0} | 27 | mA |
| I _{DD1} | 621 | mA |
| I _{DD2N} | 387 | mA |
| I _{DD2NT} | 441 | mA |
| I _{DD2P} | 342 | mA |
| I _{DD2Q} | 378 | mA |
| I _{DD3N} | 531 | mA |
| I _{PP3N} | 18 | mA |
| I _{DD3P} | 432 | mA |
| I _{DD4R} | 1125 | mA |
| I _{DD4W} | 918 | mA |
| I _{DD5R} | 612 | mA |
| I _{PP5R} | 36 | mA |
| I _{DD6N} | 477 | mA |
| I _{DD6E} | 810 | mA |
| I _{DD6R} | 180 | mA |
| I _{DD6A (25°C)} | 99 | mA |
| I _{DD6A (45°C)} | 180 | mA |
| I _{DD6A (75°C)} | 459 | mA |
| I _{DD6A (95°C)} | 810 | mA |
| I _{PP6X} | 54 | mA |
| I _{DD7} | 1467 | mA |
| I _{PP7} | 72 | mA |
| I _{DD8} | 324 | mA |

MODULE DIMENSIONS



All measurements are in millimeters.
(Tolerances on all dimensions are ± 0.12 unless otherwise specified)



The product images shown are for illustration purposes only and may not be an exact representation of the product.
Kingston reserves the right to change any information at anytime without notice.