

# Memory Module Specifications

## KSM32RD4/64SC

64GB 2Rx4 8G x 72-Bit PC4-3200

CL22 Registered w/Parity 288-Pin DIMM

### DESCRIPTION

Kingston's KSM32RD4/64SC is a 8G x 72-bit (64GB) DDR4-3200 CL22 SDRAM (Synchronous DRAM) registered w/ parity, 2Rx4, ECC, memory module, based on thirty-six 4G x 4-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-3200 timing of 22-22-22 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: PC4-3200, PC4-2933, 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)	22 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

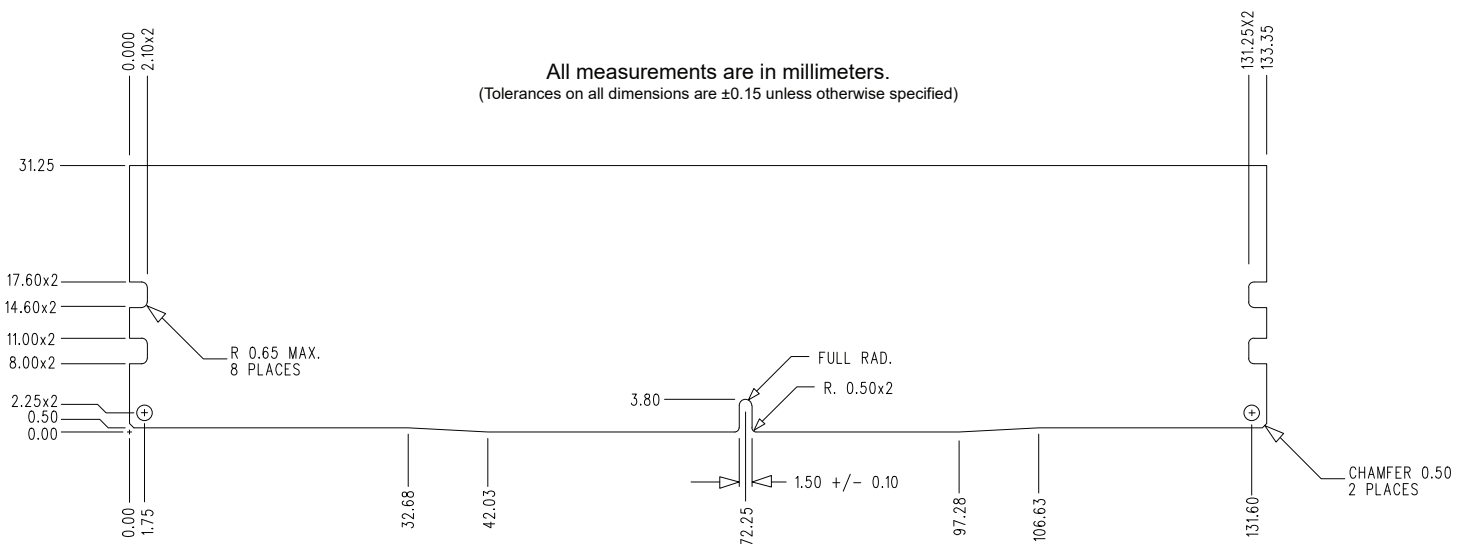
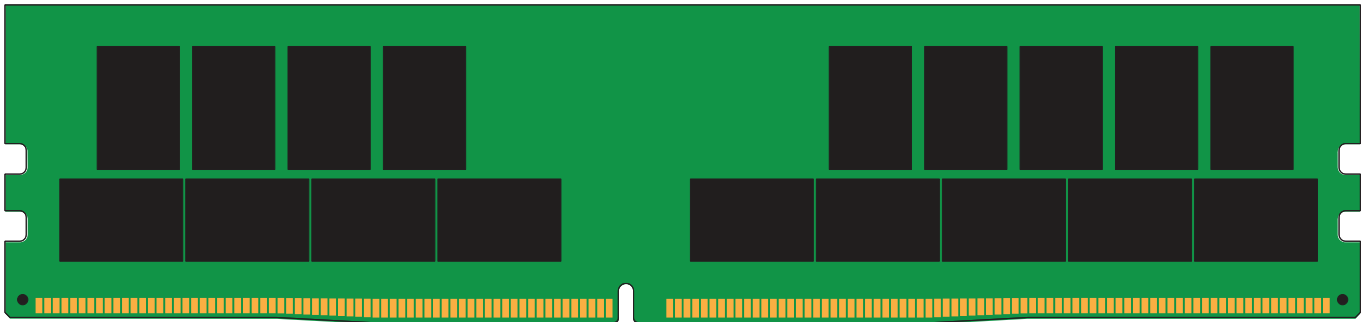
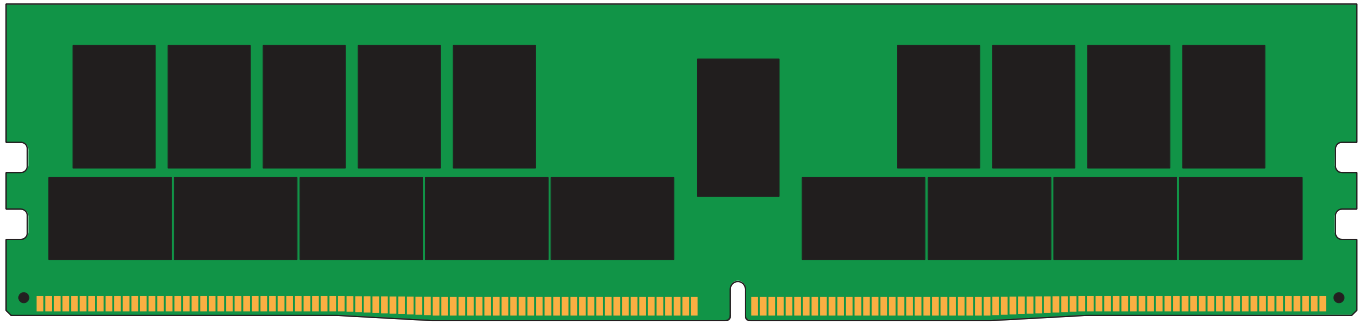
<b>DRAM:</b> Samsung (C-DIE)
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## IDD Specifications

IDD		unit
Symbol	3200	
IDD0	1370	mA
IDD0A	1390	mA
IDD1	1580	mA
IDD1A	1629	mA
IDD2N	1249	mA
IDD2NA	1249	mA
IDD2NT	1269	mA
IDD2NL	1056	mA
IDD2NG	1218	mA
IDD2ND	1166	mA
IDD2NP	1259	mA
IDD2P	672	mA
IDD2Q	1154	mA
IDD3N	1470	mA
IDD3NA	1483	mA
IDD3P	783	mA
IDD4R	2453	mA
IDD4RA	2379	mA
IDD4RB	2486	mA
IDD4W	2305	mA
IDD4WA	2429	mA
IDD4WB	2305	mA
IDD4WC	2212	mA
IDD4WP	2623	mA
IDD5B	7856	mA
IDD5F2	5771	mA
IDD5F4	4946	mA
IDD6N	1042	mA
IDD6E	1869	mA
IDD6R	1038	mA
IDD6A	1039	mA
IDD7	3535	mA
IDD8	330	mA

## MODULE DIMENSIONS



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.

Revision No.	History	Release Date	Remark	Editor	Approved
A	Initial Release	03/19/24		David Y.	Henry N.
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