

Memory Module Specifications

KSM32RD4/64MFR

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

CL22 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM32RD4/64MFR 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)	22cycles
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)

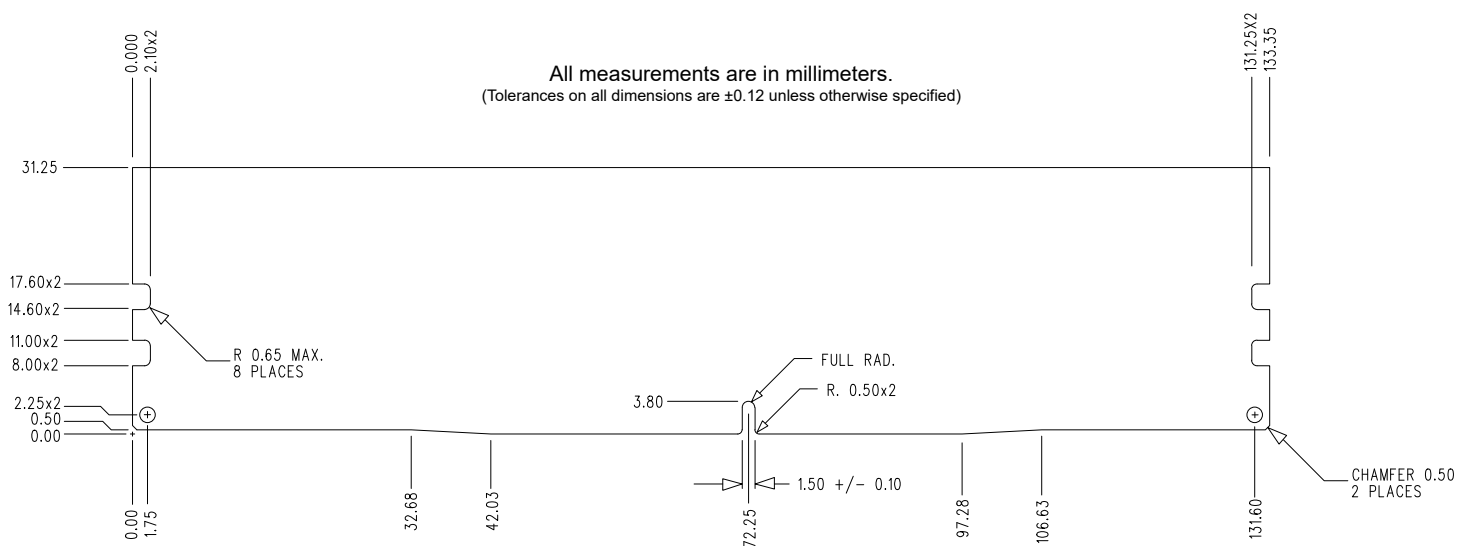
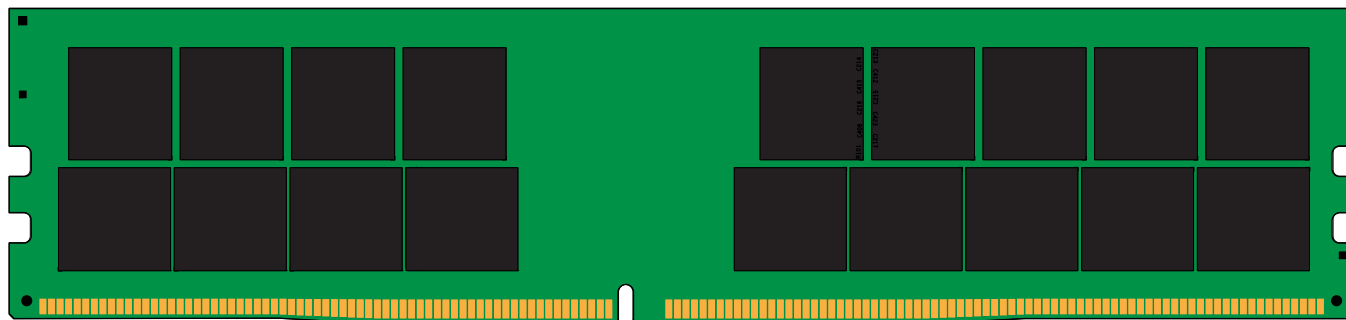
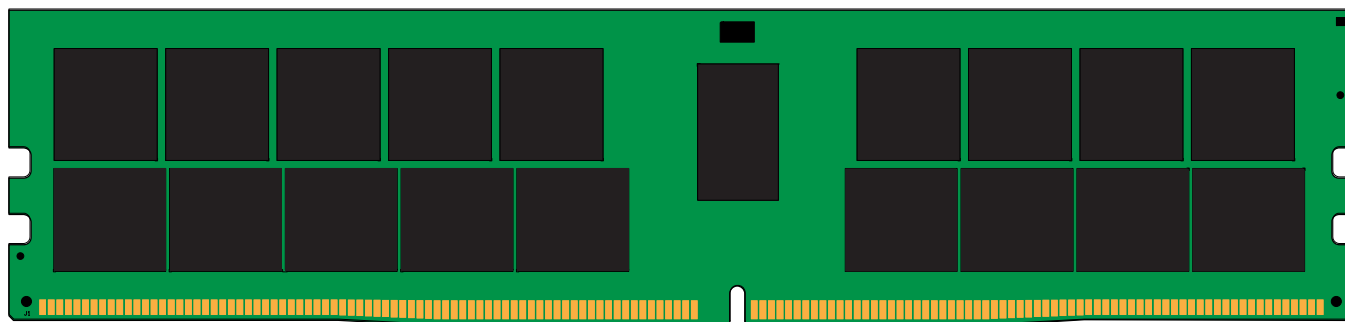
RCD: Rambus

Continued >>

IDD Specifications

Symbol	3200	Units
I _{DD0}	1674	mA
I _{PP0}	90	mA
I _{DD1}	1872	mA
I _{DD2N}	1620	mA
I _{DD2NT}	1602	mA
I _{DD2P}	1368	mA
I _{DD2Q}	1512	mA
I _{DD3N}	2160	mA
I _{PP3N}	72	mA
I _{DD3P}	1728	mA
I _{DD4R}	2970	mA
I _{DD4W}	2412	mA
I _{DD5R}	1908	mA
I _{PP5R}	108	mA
I _{DD6N}	1908	mA
I _{DD6E}	3240	mA
I _{DD6R}	720	mA
I _{DD6A}	396	mA
I _{DD6A}	720	mA
I _{DD6A}	1836	mA
I _{DD6A}	3240	mA
I _{PP6X}	216	mA
I _{DD7}	5544	mA
I _{PP7}	234	mA
I _{DD8}	1296	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.