Memory Module Specifications

KSM32RD4/64MER

64GB 2Rx4 8G x 72-Bit PC4-3200 CL22 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM32RD4/64MER is a 8G x 72-bit (64GB) DDR4-3200 CL22 SDRAM (Synchronous DRAM) registered w/ parity, 2Rx4, ECC, memory module, based on thiry-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

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- 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	ature -55° C to +100° C	

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*See IDD Specifications (page 2)

Module Assembly

DRAM: MICRON (E-DIE)	
RCD: Rambus	

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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}	2574	mA
I _{DD5R}	1908	mA
I _{PP5R}	108	mA
I _{DD6N}	1908	mA
I _{DD6E}	4068	mA
I _{DD6R}	720	mA
I _{DD6A}	396	mA
I _{DD6A}	720	mA
I _{DD6A}	1836	mA
I _{DD6A}	4068	mA
I _{PP6X}	216	mA
I _{DD7}	4230	mA
I _{PP7}	198	mA
I _{DD8}	1296	mA

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MODULE DIMENSIONS







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