

KSM24RD8/16MEI

16GB 2Rx8 2G x 72-Bit PC4-2400 CL17 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM24RD8/16MEI is a 2G x 72-bit (16GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM) registered w/parity, 2Rx8, ECC, memory module, based on eighteen 1G x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2400 timing of 17-17-17 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 = 2.25V 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: PC4-2400, 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)	17 cycles	
Row Cycle Time (tRCmin)	46.16ns(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 (E-DIE)
RCD: IDT

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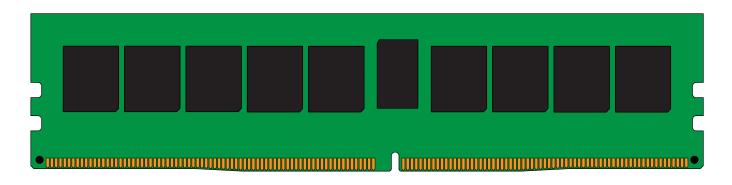
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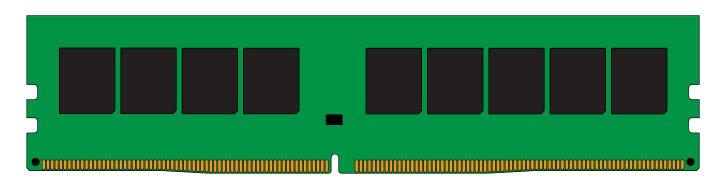
IDD Specifications

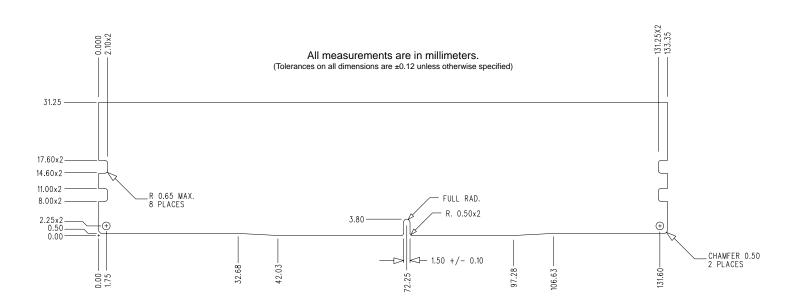
Symbol	2400	Units
I _{DD0}	657	mA
I _{PP0}	54	mA
I _{DD1}	765	mA
I _{DD2N}	612	mA
I _{DD2NT}	675	mA
I _{DD2P}	450	mA
I _{DD2Q}	540	mA
I _{DD3N}	864	mA
I _{PP3N}	54	mA
I _{DD3P}	666	mA
I _{DD4R}	1530	mA
I _{DD4W}	1377	mA
I _{DD5R}	747	mA
I _{PP5R}	72	mA
I _{DD6N}	612	mA
I _{DD6E}	828	mA
I _{DD6R}	378	mA
I _{DD6A}	154.8	mA
I _{DD6A}	378	mA
I _{DD6A}	558	mA
I _{PP6X}	90	mA
I _{DD7}	1836	mA
I _{PP7}	162	mA
I _{DD8}	450	mA

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MODULE DIMENSIONS







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