KSM29RS8/16MER

16GB 1Rx8 2G x 72-Bit PC4-2933 CL21 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM29RS8/16MER is a 2G x 72-bit (16GB) DDR4-2933 CL21 SDRAM (Synchronous DRAM) registered w/ parity, 1Rx8, ECC, memory module, based on nine 2G x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4-2933 timing of 21-21-21 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: PC4-2933, 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)	21 cycles	
Row Cycle Time (tRCmin)	46.32ns(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: Rambus

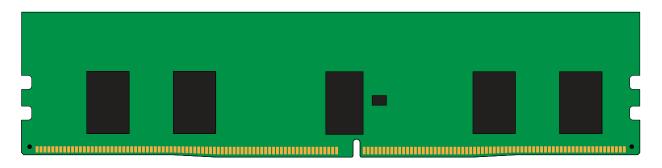
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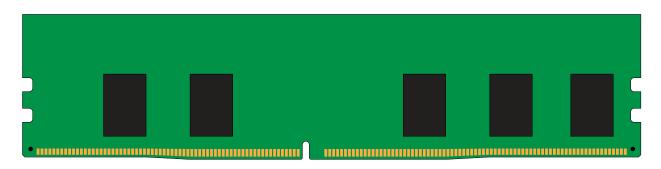
IDD Specifications

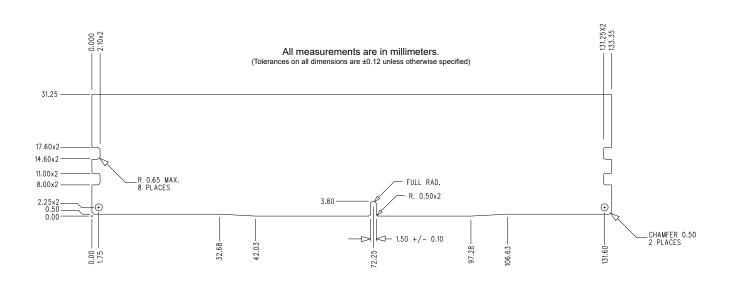
Symbol	2933	Units
I _{DD0} ¹	531	mA
I _{PP0} 1	27	mA
I _{DD1} ¹	630	mA
I _{DD2N} ²	396	mA
I _{DD2NT} ¹	450	mA
I _{DD2P} ²	342	mA
I_{DD2Q}^2	378	mA
I _{DD3N} ²	540	mA
I _{PP3N} ²	18	mA
I _{DD3P} ²	441	mA
I _{DD4R} 1	1386	mA
I _{DD4W} 1	1107	mA
I _{DD5R} 1	612	mA
I _{PP5R} ¹	36	mA
I _{DD6N} ²	477	mA
I _{DD6E} ²	1017	mA
I _{DD6R} ²	180	mA
I _{DD6A} ²	99	mA
I _{DD6A} ²	180	mA
I _{DD6A} ²	459	mA
I _{DD6A} ²	1017	mA
I _{PP6} x ²	54	mA
I _{DD7} ¹	1647	mA
I _{PP7} 1	72	mA
I _{DD8} ²	324	mA

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MODULE DIMENSIONS







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