

Memory Module Specifications

KSM29RS8/8HCI

8GB 1Rx8 1G x 72-Bit PC4-2933

CL21 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM29RS8/8HCI is a 1G x 72-bit (8GB) DDR4-2933 CL21 SDRAM (Synchronous DRAM) registered w/ parity, 1Rx8, ECC, memory module, based on nine 1G 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: HYNIX (C-DIE)
RCD: IDT

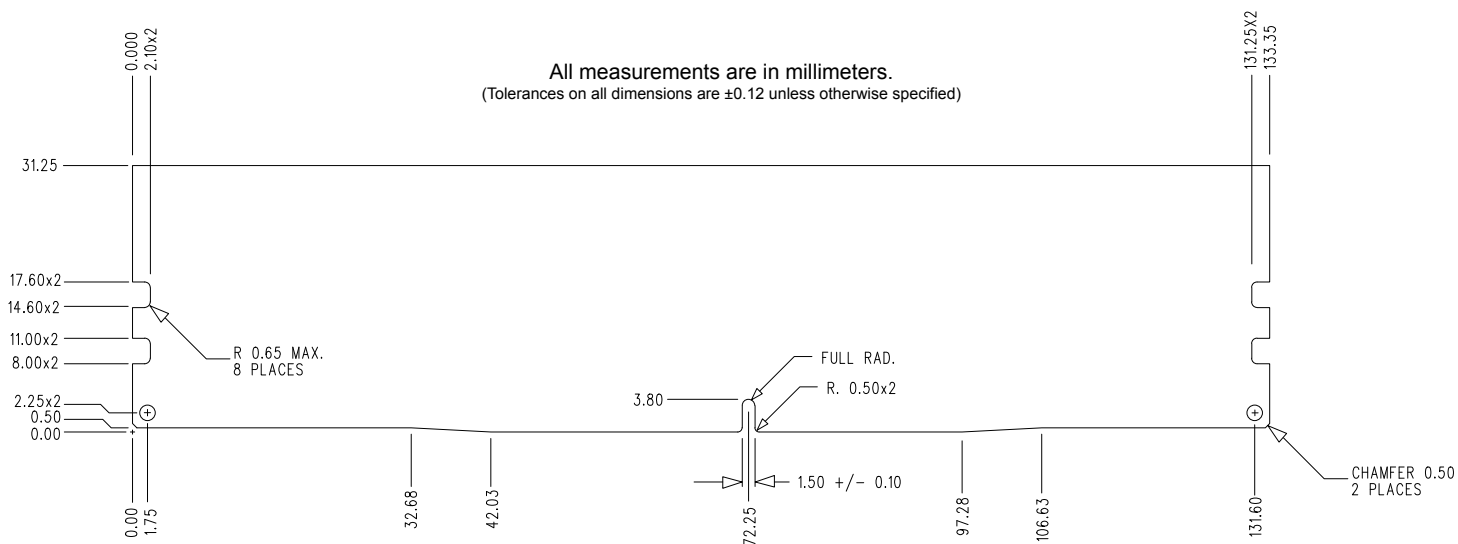
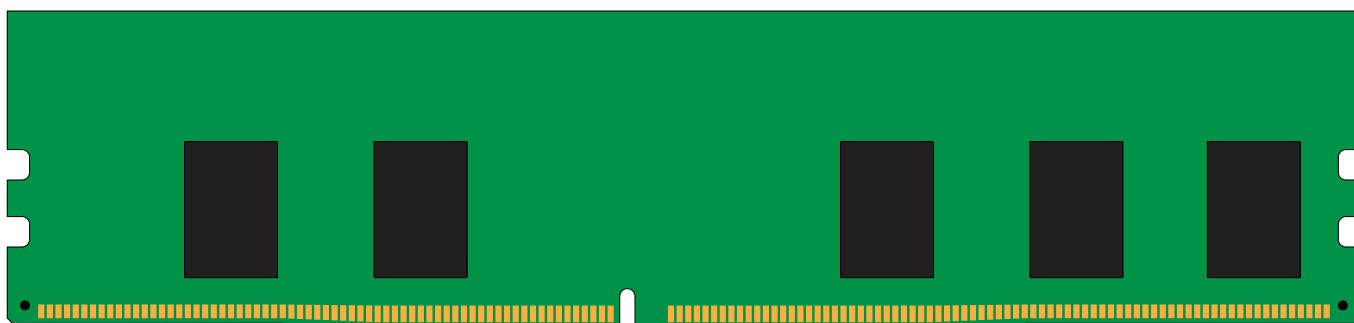
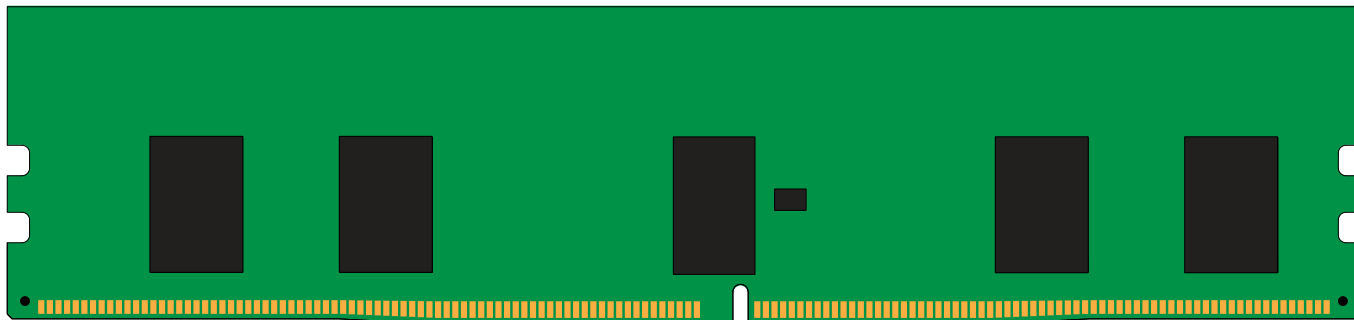
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IDD Specifications

IDD		unit
Symbol	2933	
IDD0	769	mA
IDD0A	778	mA
IDD1	923	mA
IDD1A	950	mA
IDD2N	679	mA
IDD2NA	679	mA
IDD2NT	724	mA
IDD2NL	616	mA
IDD2NG	679	mA
IDD2ND	670	mA
IDD2NP	679	mA
IDD2P	463	mA
IDD2Q	643	mA
IDD3N	778	mA
IDD3NA	778	mA
IDD3P	562	mA
IDD4R	1715	mA
IDD4RA	1751	mA
IDD4RB	1733	mA
IDD4W	1544	mA
IDD4WA	1580	mA
IDD4WB	1490	mA
IDD4WC	1526	mA
IDD4WP	1706	mA
IDD5B	2200	mA
IDD5F2	1732	mA
IDD5F4	1597	mA
IDD6N	204	mA
IDD6E	267	mA
IDD6R	141	mA
IDD6A	267	mA
IDD7	1805	mA
IDD8	123	mA

IPP		unit
Symbol	2933	
IPP0	50	mA
IPP1	59	mA
IPP2N	29	mA
IPP2P	29	mA
IPP3N	144	mA
IPP3P	144	mA
IPP4R	171	mA
IPP4W	171	mA
IPP5B	567	mA
IPP5F2	378	mA
IPP5F4	315	mA
IPP6N	45	mA
IPP6E	63	mA
IPP6R	37	mA
IPP6A	63	mA
IPP7	162	mA
IPP8	29	mA

MODULE DIMENSIONS



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