

Memory Module Specifications

KSM24RS8/8HAI

8GB 1Rx8 1G x 72-Bit PC4-2400

CL17 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM24RS8/8HAI is a 1G x 72-bit (8GB) DDR4-2400 CL17 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 DDR4-2400 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 Table (page 2)

Module Assembly

DRAM: HYNIX (A-DIE)

RCD: IDT

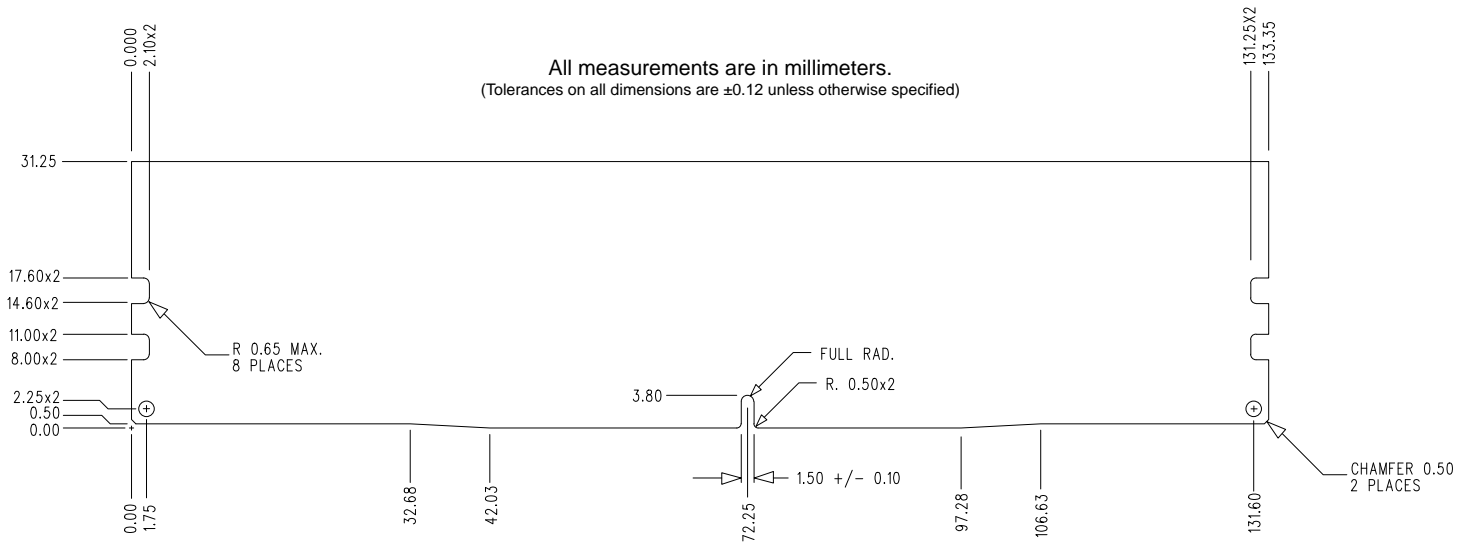
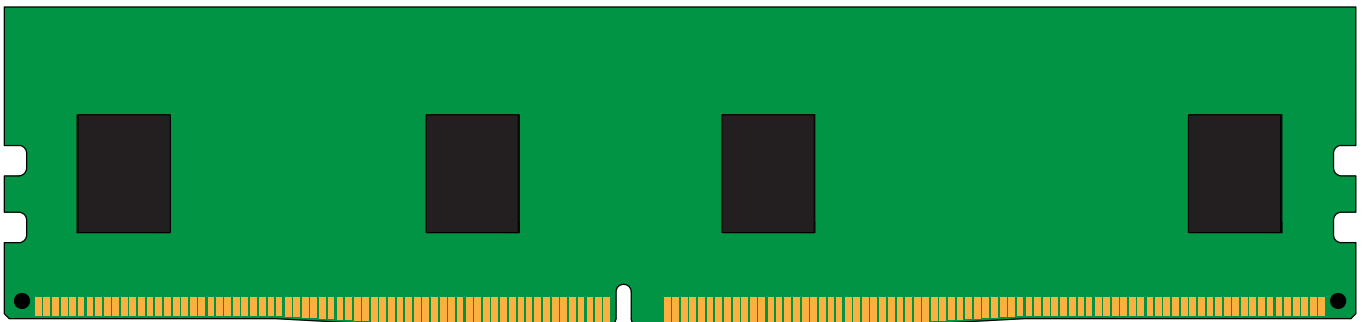
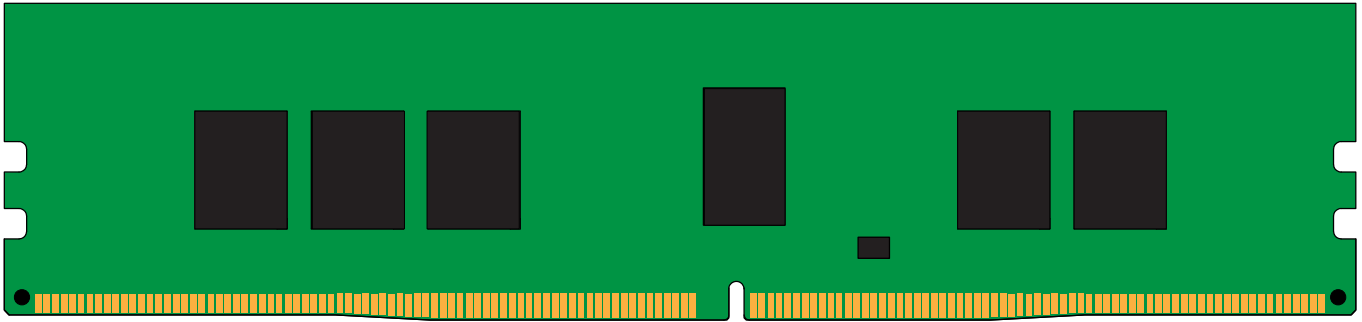
Continued >>

IDD Specifications

IDD		unit
Symbol	2400	
IDD0	835	mA
IDD0A	835	mA
IDD1	966	mA
IDD1A	993	mA
IDD2N	736	mA
IDD2NA	736	mA
IDD2NT	781	mA
IDD2NL	655	mA
IDD2NG	727	mA
IDD2ND	727	mA
IDD2NP	727	mA
IDD2P	468	mA
IDD2Q	691	mA
IDD3N	898	mA
IDD3NA	898	mA
IDD3P	639	mA
IDD4R	1650	mA
IDD4RA	1740	mA
IDD4RB	1740	mA
IDD4W	1614	mA
IDD4WA	1641	mA
IDD4WB	1614	mA
IDD4WC	1560	mA
IDD4WP	1758	mA
IDD5B	2257	mA
IDD5F2	1771	mA
IDD5F4	1636	mA
IDD6N	220	mA
IDD6E	274	mA
IDD6R	148	mA
IDD6A	274	mA
IDD7	1902	mA
IDD8	130	mA

IPP		unit
Symbol	2400	
IPP0	54	mA
IPP1	63	mA
IPP2N	29	mA
IPP2P	29	mA
IPP3N	135	mA
IPP3P	135	mA
IPP4R	135	mA
IPP4W	135	mA
IPP5B	585	mA
IPP5F2	414	mA
IPP5F4	360	mA
IPP6N	36	mA
IPP6E	63	mA
IPP6R	37	mA
IPP6A	63	mA
IPP7	171	mA
IPP8	29	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.