

Memory Module Specifications

KSM24RS8/8HDI

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

CL17 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM24RS8/8HDI 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 = 2.41V 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: PC4-2400, 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 (D-DIE)

RCD: IDT

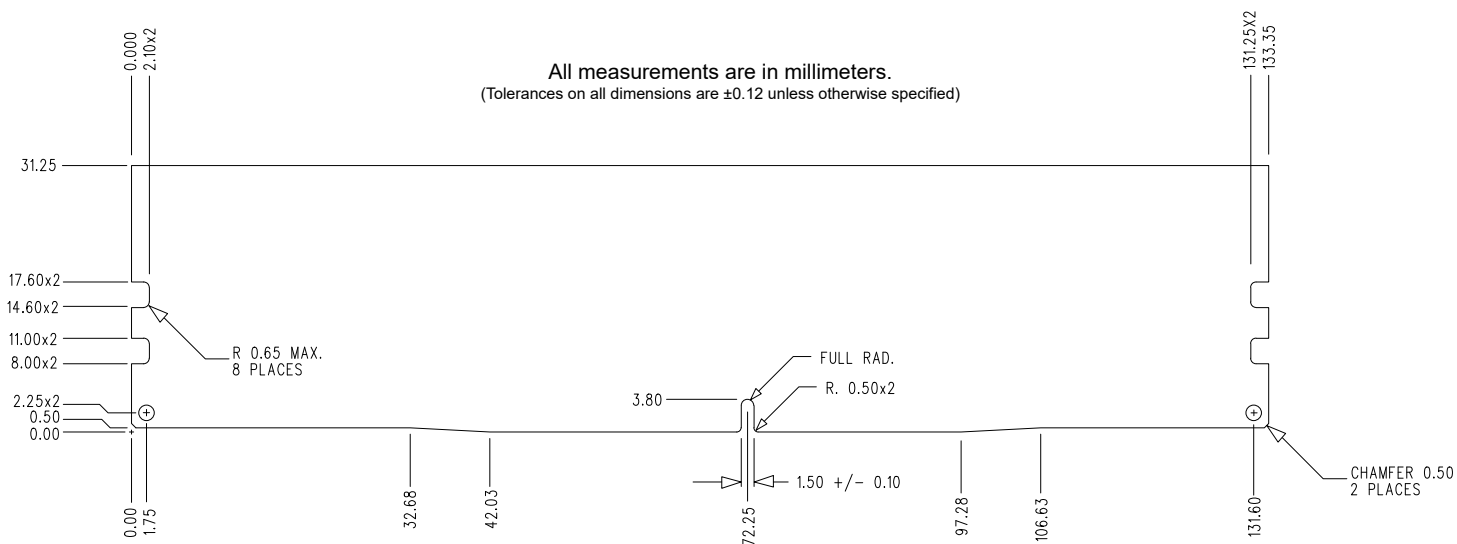
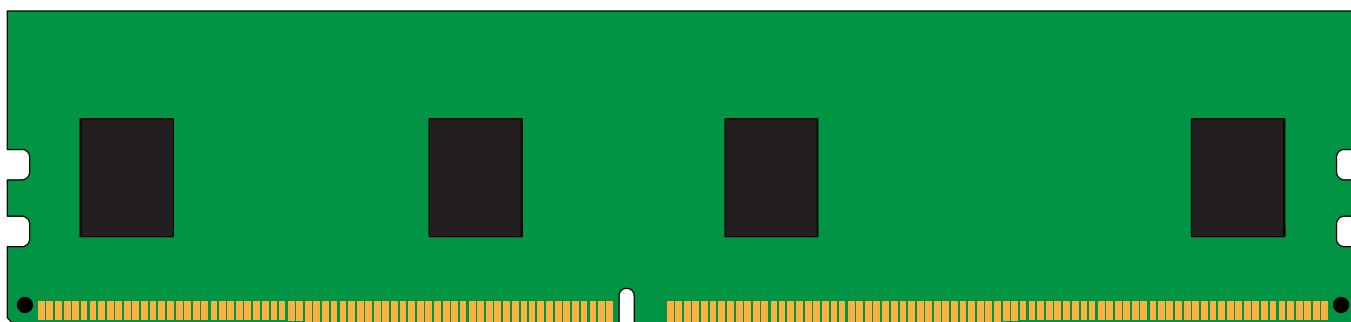
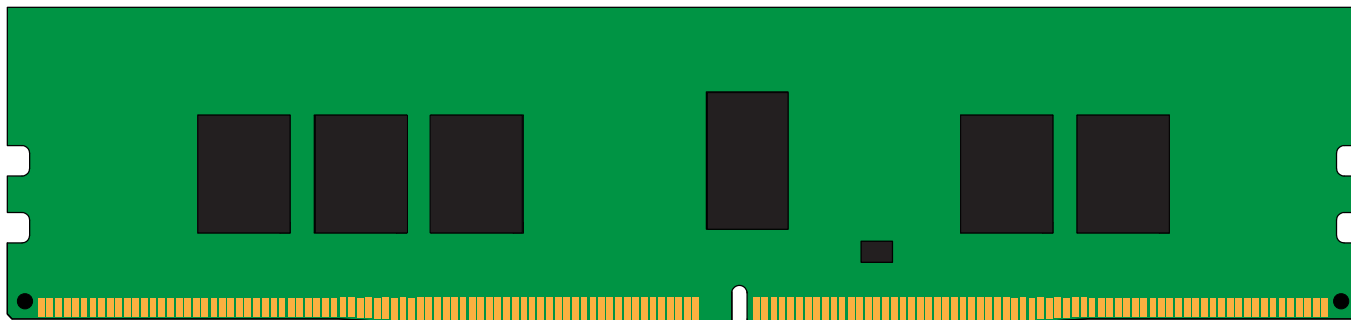
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IDD Specifications

IDD		unit
Symbol	2400	
IDD0	746	mA
IDD0A	746	mA
IDD1	845	mA
IDD1A	866	mA
IDD2N	684	mA
IDD2NA	688	mA
IDD2NT	729	mA
IDD2NL	622	mA
IDD2NG	686	mA
IDD2ND	677	mA
IDD2NP	691	mA
IDD2P	443	mA
IDD2Q	665	mA
IDD3N	698	mA
IDD3NA	698	mA
IDD3P	477	mA
IDD4R	1378	mA
IDD4RA	1408	mA
IDD4RB	1394	mA
IDD4W	1379	mA
IDD4WA	1409	mA
IDD4WB	1319	mA
IDD4WC	1367	mA
IDD4WP	1530	mA
IDD5B	2218	mA
IDD5F2	1713	mA
IDD5F4	1551	mA
IDD6N	174	mA
IDD6E	239	mA
IDD6R	115	mA
IDD6A	239	mA
IDD7	1641	mA
IDD8	92	mA

IPP		unit
Symbol	2400	
IPP0	36	mA
IPP1	40	mA
IPP2N	21	mA
IPP2P	17	mA
IPP3N	100	mA
IPP3P	98	mA
IPP4R	128	mA
IPP4W	126	mA
IPP5B	490	mA
IPP5F2	323	mA
IPP5F4	260	mA
IPP6N	37	mA
IPP6E	52	mA
IPP6R	25	mA
IPP6A	52	mA
IPP7	142	mA
IPP8	18	mA

MODULE DIMENSIONS



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