

Memory Module Specifications

KSM24RD8/16HDI

16GB 2Rx8 2G x 72-Bit PC4-2400

CL17 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM24RD8/16HDI 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 = 2.41V 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

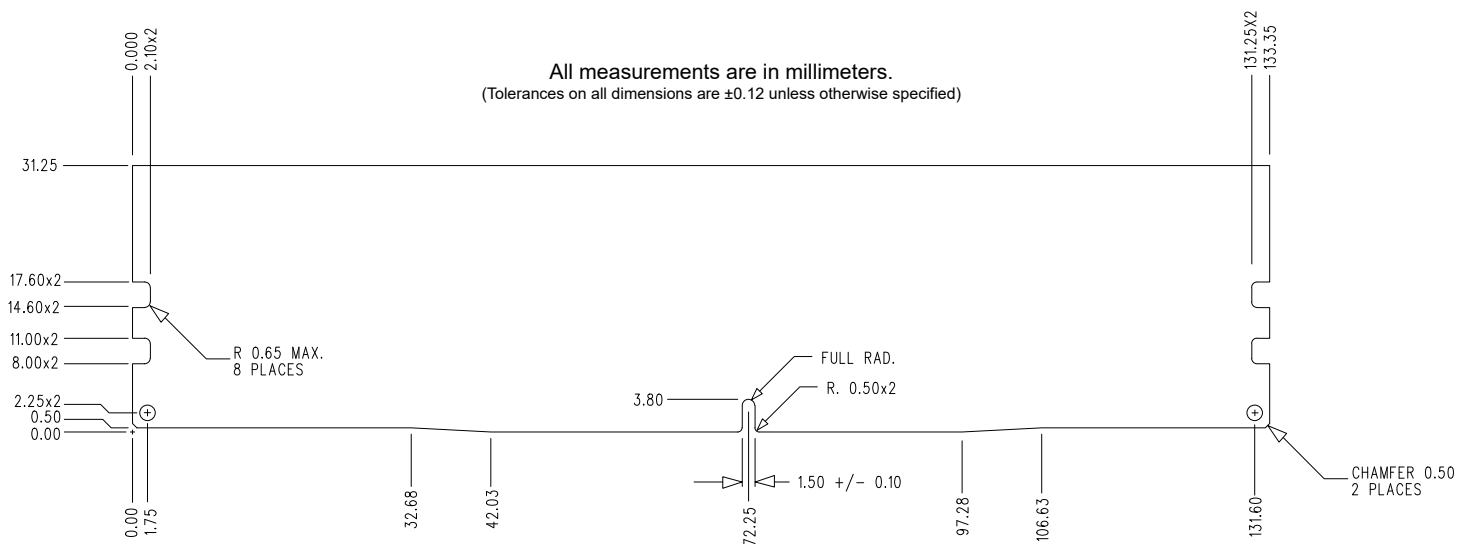
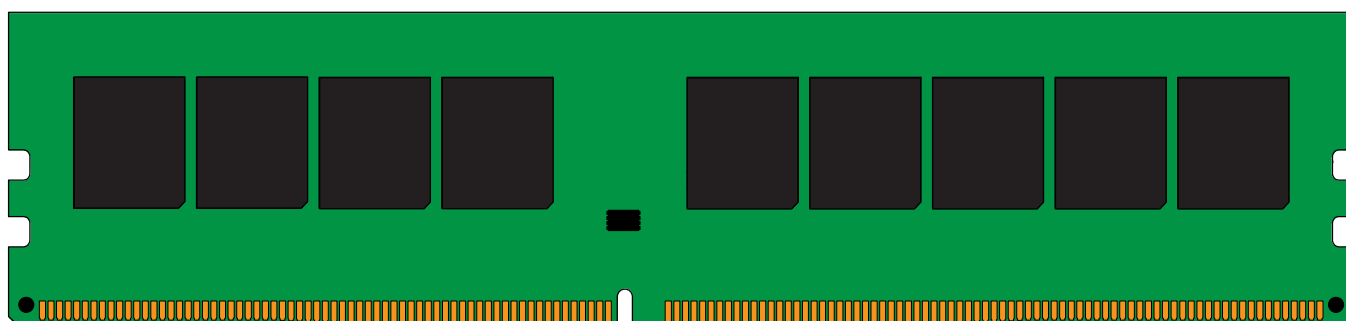
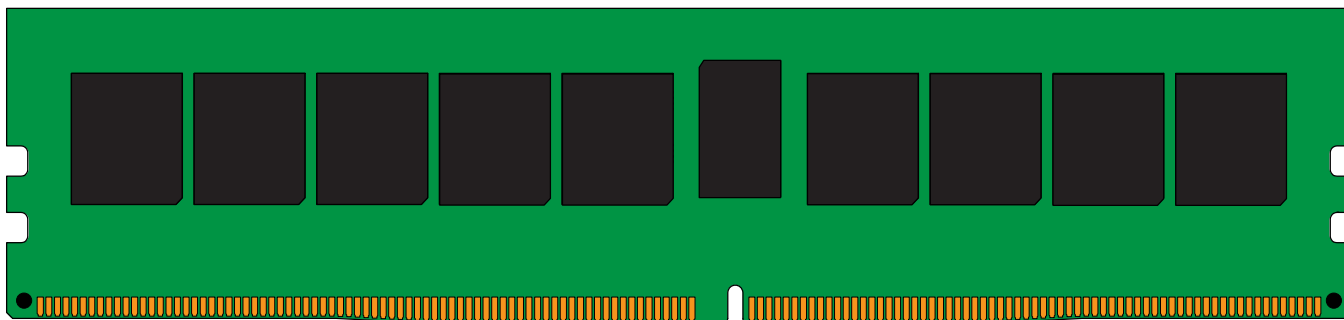
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IDD Specifications

IDD		unit
Symbol	2400	
IDD0	957	mA
IDD0A	961	mA
IDD1	1056	mA
IDD1A	1081	mA
IDD2N	895	mA
IDD2NA	903	mA
IDD2NT	987	mA
IDD2NL	771	mA
IDD2NG	900	mA
IDD2ND	882	mA
IDD2NP	911	mA
IDD2P	576	mA
IDD2Q	857	mA
IDD3N	924	mA
IDD3NA	924	mA
IDD3P	644	mA
IDD4R	1587	mA
IDD4RA	1620	mA
IDD4RB	1603	mA
IDD4W	1589	mA
IDD4WA	1623	mA
IDD4WB	1530	mA
IDD4WC	1577	mA
IDD4WP	1740	mA
IDD5B	2428	mA
IDD5F2	1923	mA
IDD5F4	1760	mA
IDD6N	322	mA
IDD6E	451	mA
IDD6R	203	mA
IDD6A	451	mA
IDD7	1849	mA
IDD8	157	mA

IPP		unit
Symbol	2400	
IPP0	56	mA
IPP1	60	mA
IPP2N	41	mA
IPP2P	33	mA
IPP3N	197	mA
IPP3P	193	mA
IPP4R	147	mA
IPP4W	145	mA
IPP5B	509	mA
IPP5F2	342	mA
IPP5F4	280	mA
IPP6N	73	mA
IPP6E	104	mA
IPP6R	50	mA
IPP6A	102	mA
IPP7	161	mA
IPP8	35	mA

MODULE DIMENSIONS



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