

Memory Module Specifications

KSM24RS4/16HDI

16GB 1Rx4 2G x 72-Bit PC4-2400

CL17 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM24RS4/16HDI is a 2G x 72-bit (16GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM) registered w/ parity, 1Rx4, ECC, memory module, based on eighteen 2G x 4-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

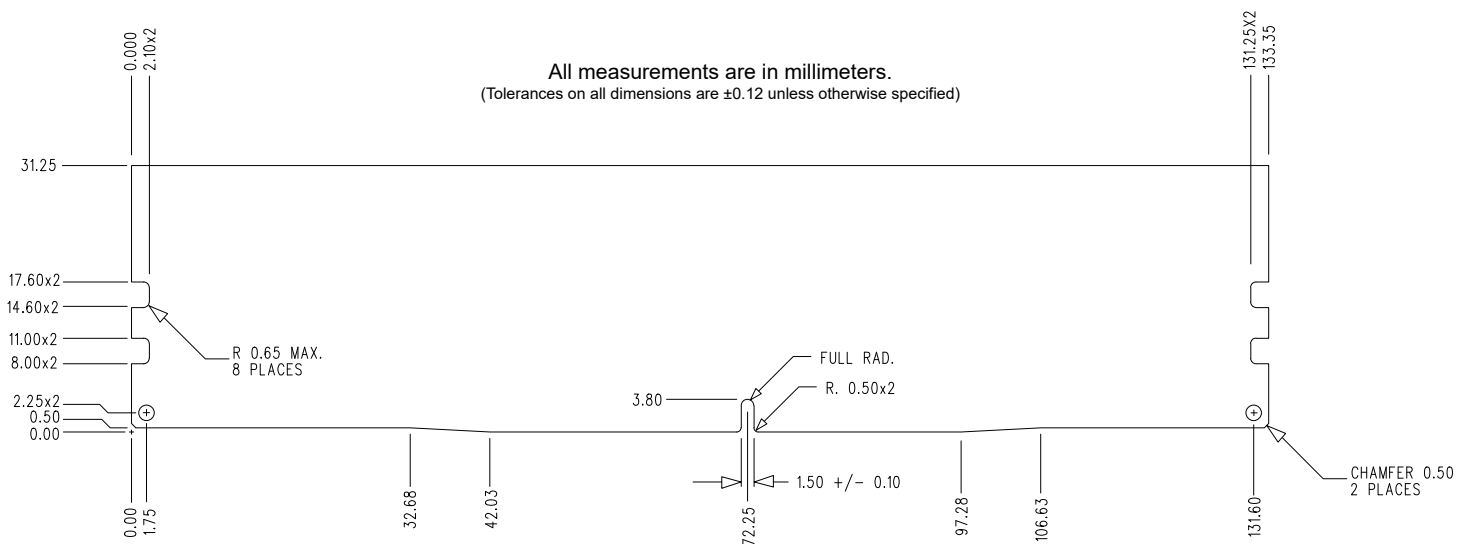
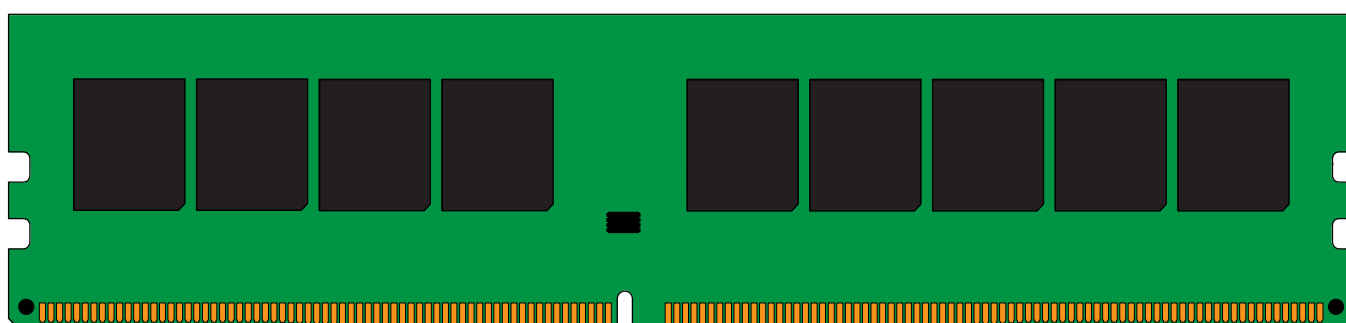
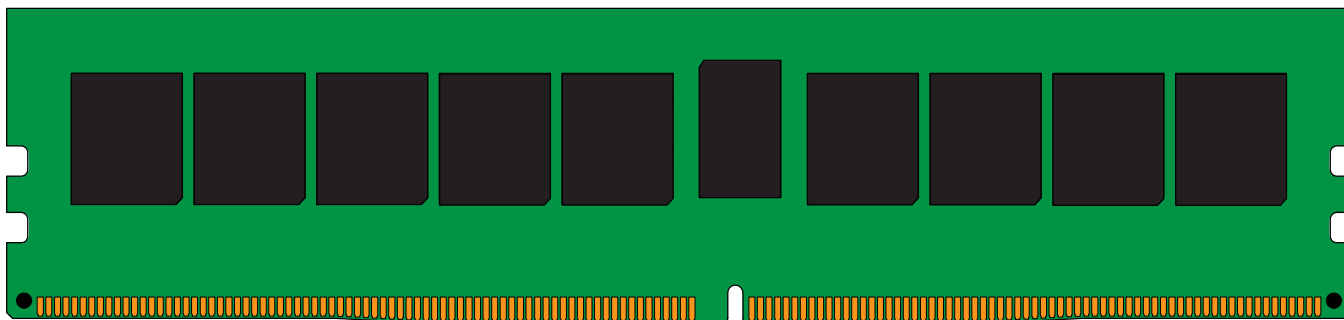
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IDD Specifications

IDD		unit
Symbol	2400	
IDD0	1023	mA
IDD0A	1023	mA
IDD1	1168	mA
IDD1A	1222	mA
IDD2N	898	mA
IDD2NA	906	mA
IDD2NT	988	mA
IDD2NL	774	mA
IDD2NG	903	mA
IDD2ND	885	mA
IDD2NP	914	mA
IDD2P	578	mA
IDD2Q	860	mA
IDD3N	928	mA
IDD3NA	928	mA
IDD3P	646	mA
IDD4R	1926	mA
IDD4RA	1990	mA
IDD4RB	1954	mA
IDD4W	1981	mA
IDD4WA	2048	mA
IDD4WB	1813	mA
IDD4WC	1973	mA
IDD4WP	2273	mA
IDD5B	3970	mA
IDD5F2	2958	mA
IDD5F4	2630	mA
IDD6N	325	mA
IDD6E	454	mA
IDD6R	205	mA
IDD6A	455	mA
IDD7	3514	mA
IDD8	158	mA

IPP		unit
Symbol	2400	
IPP0	71	mA
IPP1	80	mA
IPP2N	42	mA
IPP2P	34	mA
IPP3N	200	mA
IPP3P	193	mA
IPP4R	256	mA
IPP4W	253	mA
IPP5B	977	mA
IPP5F2	643	mA
IPP5F4	522	mA
IPP6N	73	mA
IPP6E	104	mA
IPP6R	50	mA
IPP6A	103	mA
IPP7	440	mA
IPP8	36	mA

MODULE DIMENSIONS



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