

Memory Module Specifications

KSM24RS4/16HCI

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

CL17 Registered w/Parity 288-Pin DIMM

DESCRIPTION

Kingston's KSM24RS4/16HCI 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 (C-DIE)

RCD: IDT

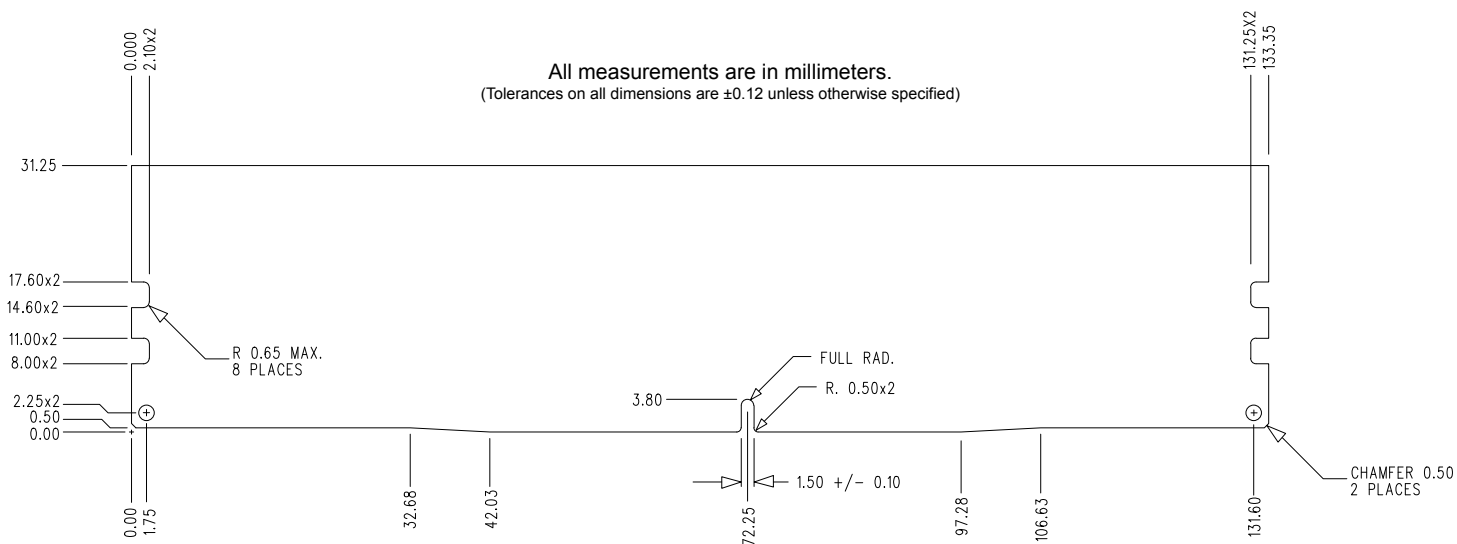
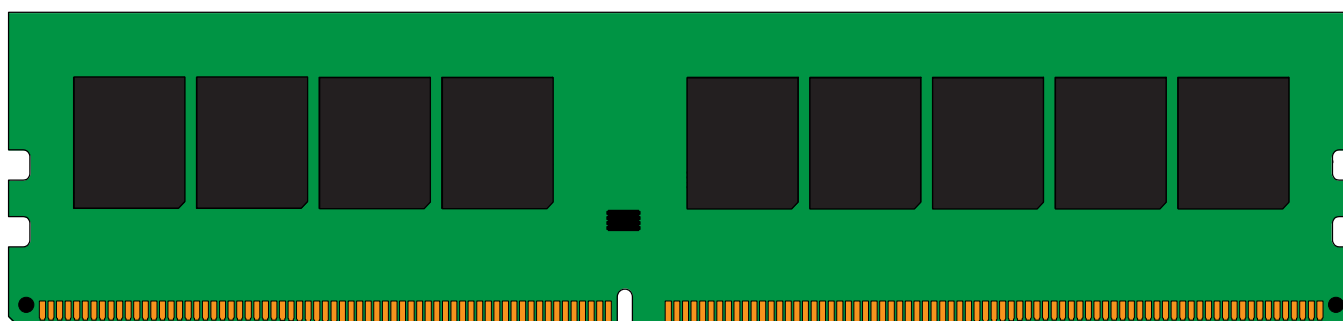
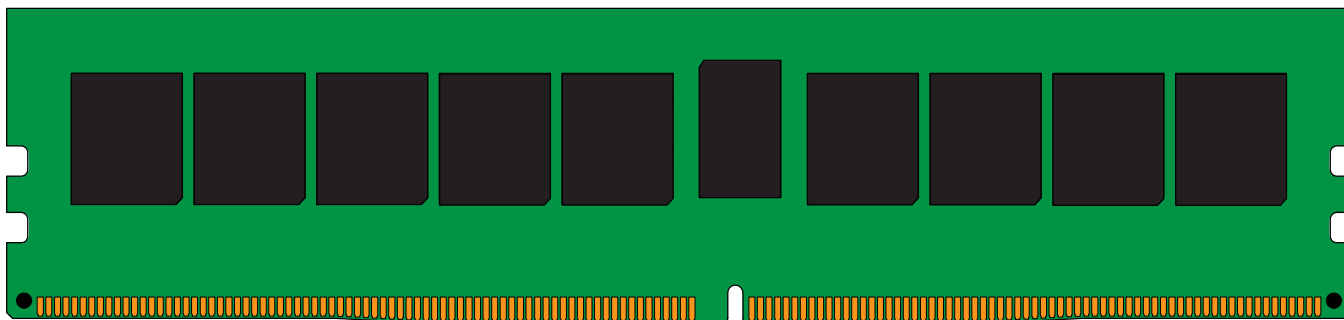
Continued >>

IDD Specifications

IDD		unit
Symbol	2400	
IDD0	1141	mA
IDD0A	1141	mA
IDD1	1308	mA
IDD1A	1362	mA
IDD2N	979	mA
IDD2NA	979	mA
IDD2NT	1069	mA
IDD2NL	853	mA
IDD2NG	979	mA
IDD2ND	961	mA
IDD2NP	979	mA
IDD2P	648	mA
IDD2Q	943	mA
IDD3N	1159	mA
IDD3NA	1159	mA
IDD3P	846	mA
IDD4R	2154	mA
IDD4RA	2208	mA
IDD4RB	534	mA
IDD4W	2082	mA
IDD4WA	2136	mA
IDD4WB	543	mA
IDD4WC	2064	mA
IDD4WP	2352	mA
IDD5B	4021	mA
IDD5F2	3049	mA
IDD5F4	2779	mA
IDD6N	400	mA
IDD6E	526	mA
IDD6R	274	mA
IDD6A	526	mA
IDD7	3684	mA
IDD8	238	mA

IPP		unit
Symbol	2400	
IPP0	99	mA
IPP1	117	mA
IPP2N	58	mA
IPP2P	58	mA
IPP3N	288	mA
IPP3P	288	mA
IPP4R	342	mA
IPP4W	342	mA
IPP5B	1134	mA
IPP5F2	720	mA
IPP5F4	630	mA
IPP6N	90	mA
IPP6E	126	mA
IPP6R	74	mA
IPP6A	126	mA
IPP7	432	mA
IPP8	58	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.