

Memory Module Specifications

KSM24ES8/8ME

8GB 1Rx8 1G x 72-Bit PC4-2400
CL17 288-Pin DIMM

DESCRIPTION

Kingston's KSM24ES8/8ME is a 1G x 72-bit (8GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM), 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 Typical
- VDDQ = 1.2V Typical
- VPP = 2.5V Typical
- VDDSPD = 2.2V to 3.6V
- Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals
- Low-power auto self refresh (LPASR)
- Data bus inversion (DBI) for data bus
- On-die VREFDQ generation and calibration
- Single-rank
- On-board I2 serial presence-detect (SPD) EEPROM
- Temperature sensor with integrated SPD
- 16 internal banks; 4 groups of 4 banks each
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)
- Selectable BC4 or BL8 on-the-fly (OTF)
- Fly-by topology
- Terminated control command and address bus
- PCB: Height 1.23" (31.25mm)
- RoHS Compliant and Halogen-Free

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 Specifications (page 2)

Module Assembly

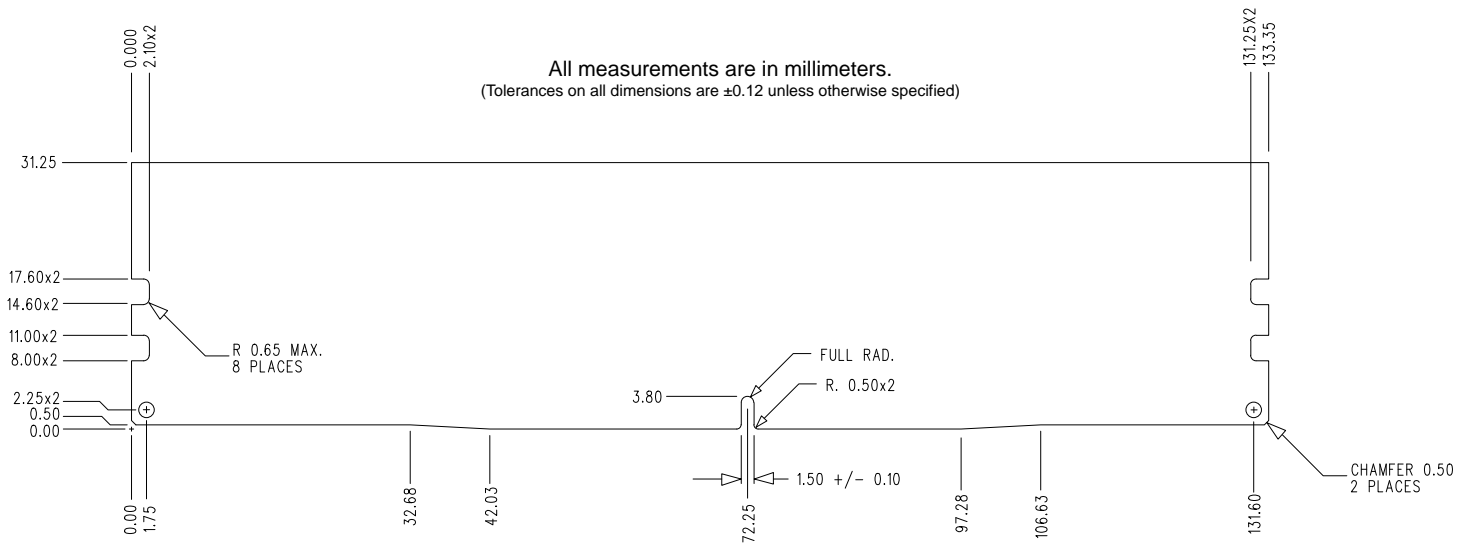
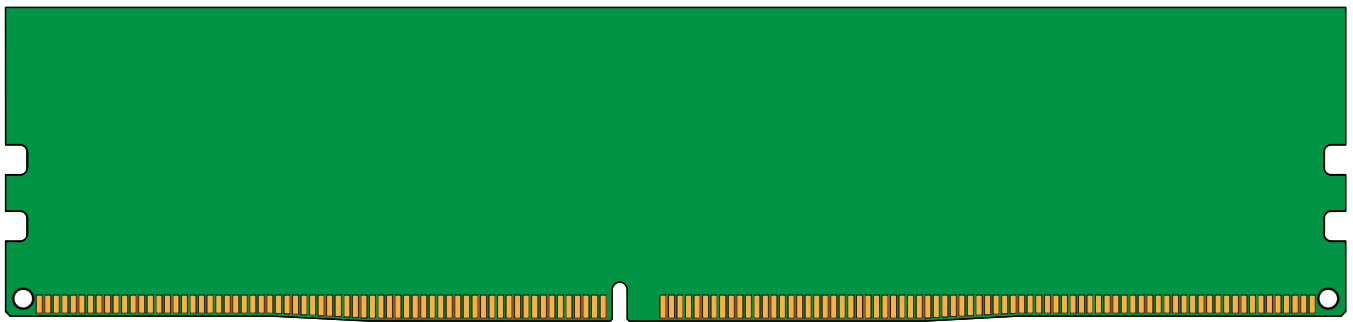
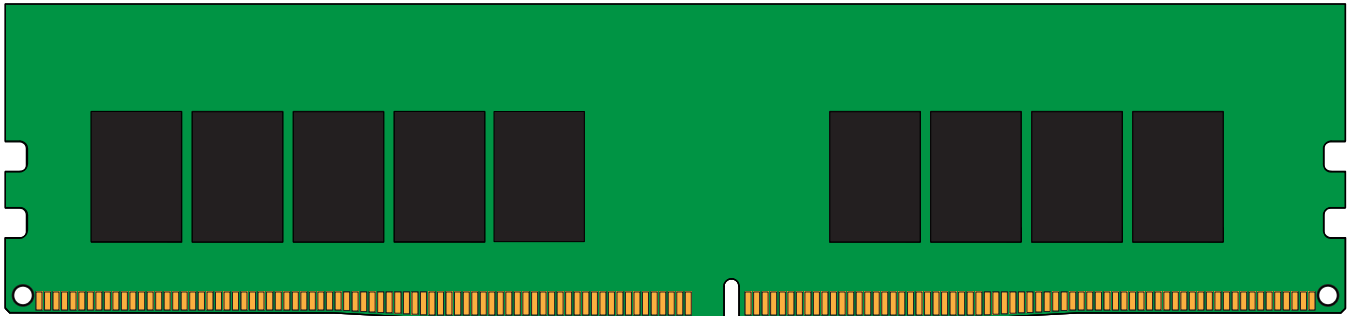
DRAM: MICRON (E-DIE)

Continued >>

IDD Specifications

Symbol	2400	Units
I _{DD0}	432	mA
I _{PP0}	27	mA
I _{DD1}	540	mA
I _{DD2N}	306	mA
I _{DD2NT}	450	mA
I _{DD2P}	225	mA
I _{DD2Q}	270	mA
I _{DD3N}	432	mA
I _{PP3N}	27	mA
I _{DD3P}	333	mA
I _{DD4R}	1305	mA
I _{DD4W}	1152	mA
I _{DD5R}	522	mA
I _{PP5R}	45	mA
I _{DD6N}	306	mA
I _{DD6E}	414	mA
I _{DD6R}	189	mA
I _{DD6A}	77.4	mA
I _{DD6A}	189	mA
I _{DD6A}	279	mA
I _{PP6X}	45	mA
I _{DD7}	1611	mA
I _{PP7}	135	mA
I _{DD8}	225	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.