

# Memory Module Specifications

## KSM56R46BD8-32MD

32GB 2Rx8 4G x 80-Bit

PC5-5600 CL46 Registered EC8 288-Pin DIMM

### DESCRIPTION

Kingston's KSM56R46BD8-32MD is a 4G x 80-bit (32GB) DDR5-5600 CL46 SDRAM (Synchronous DRAM), 2Rx8, ECC, memory module, based on twenty 2G x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR5-5600 timing of 46-45-45 at 1.1V. Each 288-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

### FEATURES

- Power Supply: VDD = 1.1V Typical
- VDDQ = 1.1V Typical
- VPP = 1.8V Typical
- VDDSPD = 1.8V to 2.0V
- On-Die ECC
- x80 ECC (x40, 2 independent I/O sub channels)
- 32 internal banks
- Hard/Soft Post Package Repair
- Sideband access with I3C/I2C
- PCB: Height 1.23" (31.25mm)
- RoHS Compliant and Halogen-Free

### SPECIFICATIONS

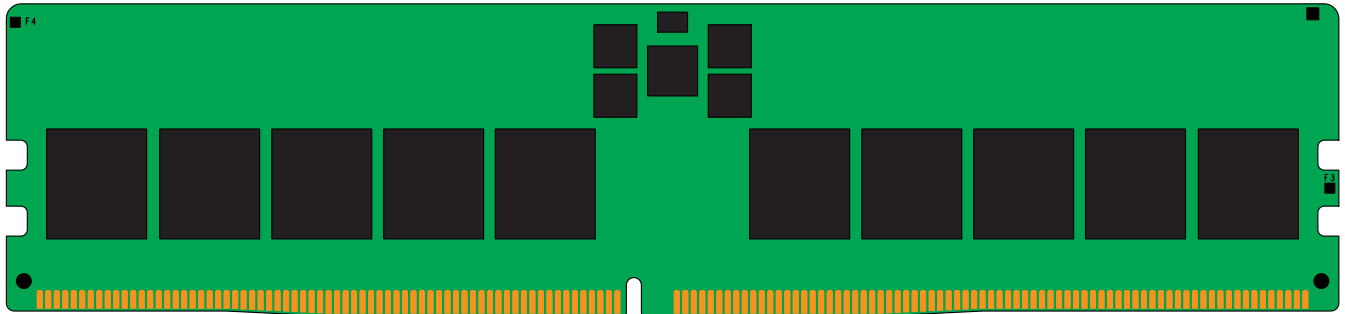
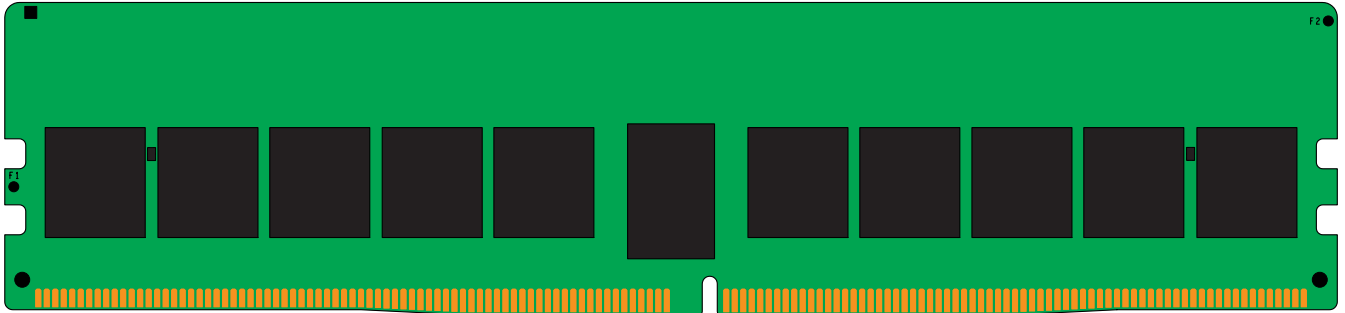
CL(IDD)	46 cycles
Row Cycle Time (tRCmin)	48ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	295ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Row Precharge Time (tRPmin)	16ns(min.)
UL Rating	94 V - 0
Operating Temperature	0° C to +95° C
Storage Temperature	-55° C to +100° C

### Module Assembly

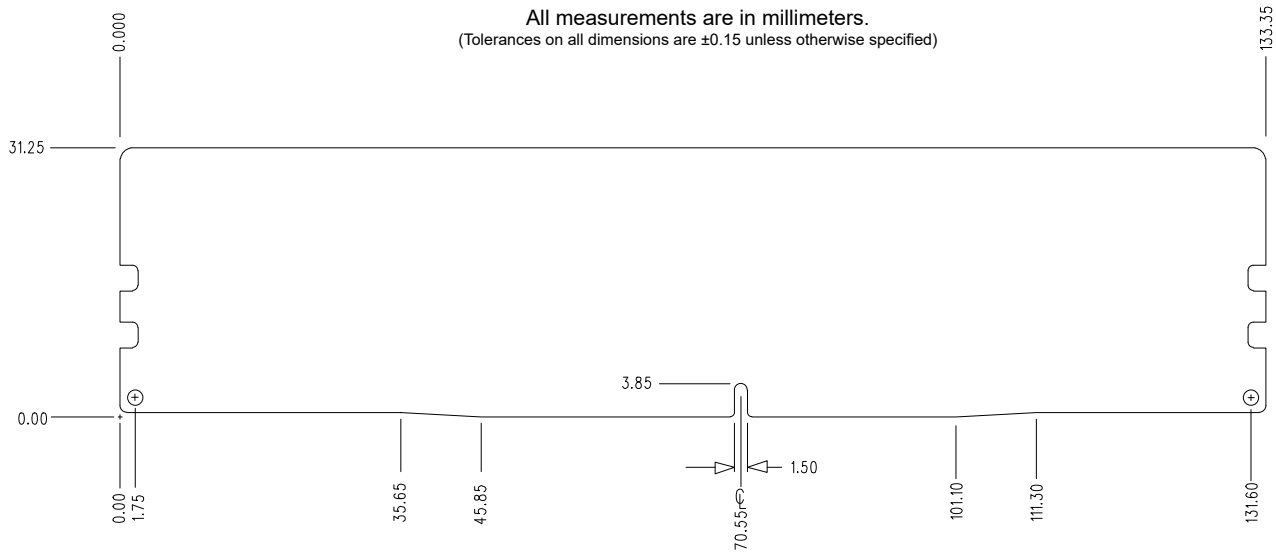
<b>DRAM:</b> Micron (D-DIE)
-----------------------------

Continued >>

## MODULE DIMENSIONS



All measurements are in millimeters.  
(Tolerances on all dimensions are  $\pm 0.15$  unless otherwise specified)



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.

Revision No.	History	Release Date	Remark	Editor	Approved
A	Initial Release	03/21/24		David Y.	Henry N.

\*Products and specifications discussed herein are for evaluation and reference purposes only and are subject to change without notice. All information discussed herein is provided on an “as is” basis, without warranties of any kind.