

Memory Module Specifications

KSM56R46BD8PMI-32MDI

32GB 2Rx8 4G x 80-Bit

PC5-5600 CL46 Registered EC8 288-Pin DIMM

DESCRIPTION

Kingston's KSM56R46BD8PMI-32MDI 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

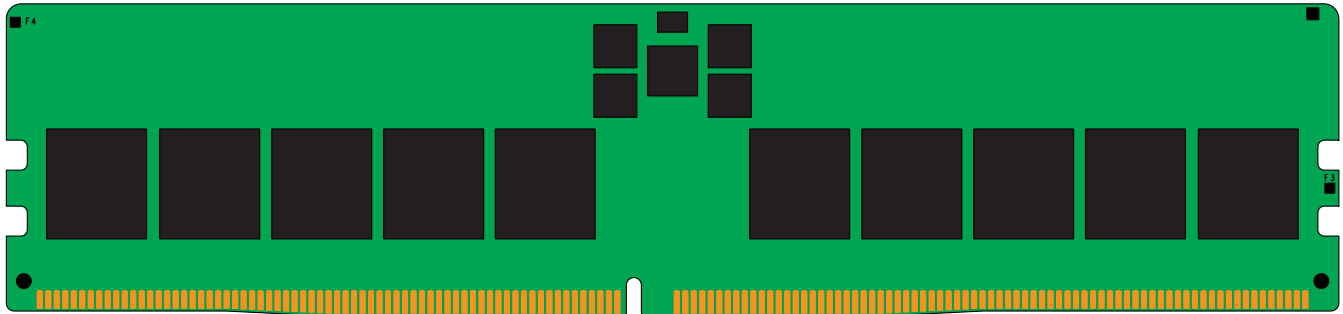
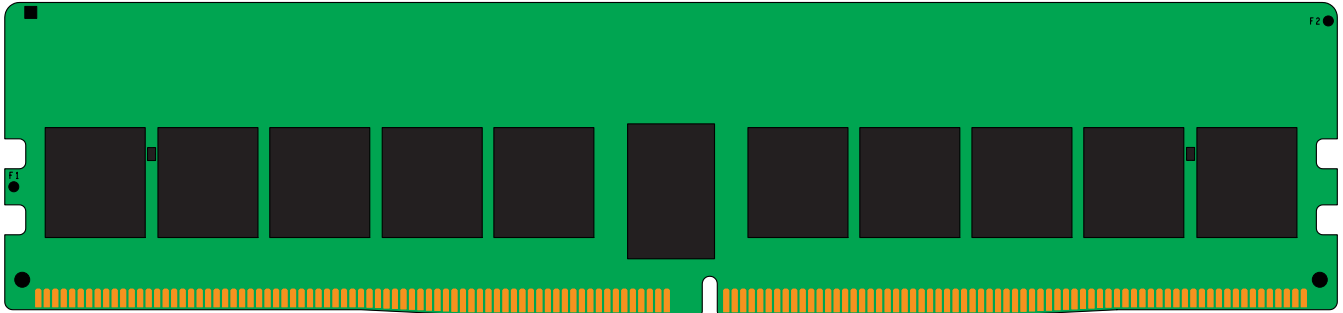
CL(IDD)	46 cycles
Row Cycle Time (tRCmin)	48ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	295ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Row Precharge Time (tRPmin)	16ns(min.)
UL Rating	94 V - 0
Operating Temperature	0° C to +95° C
Storage Temperature	-55° C to +100° C

Module Assembly

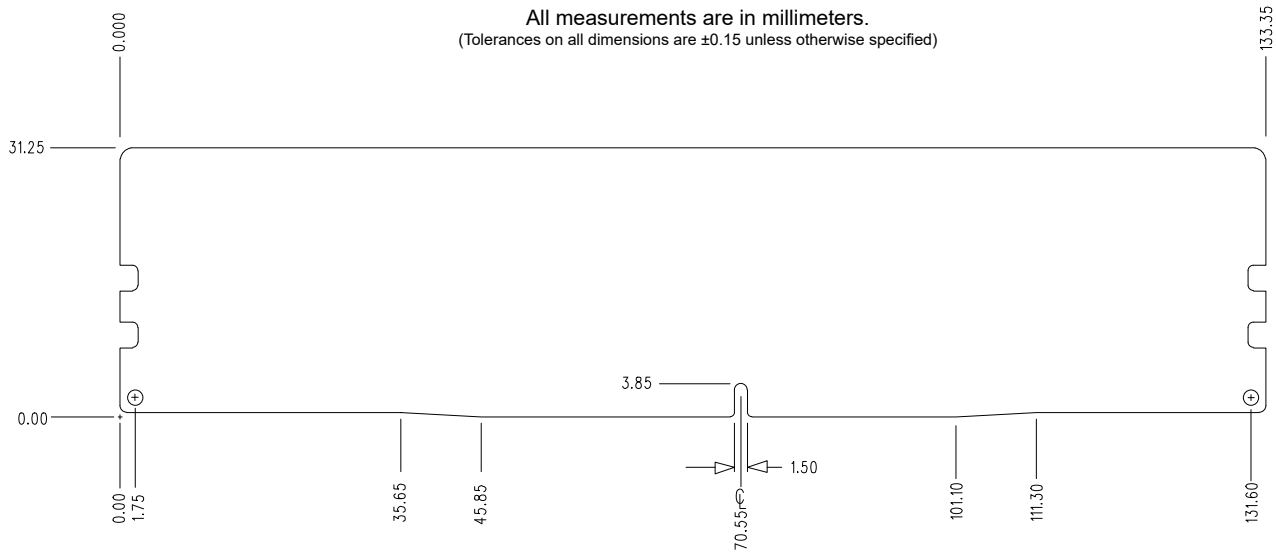
DRAM: Micron (D-Die)
RCD: IDT/Renesas
PMIC: MPS
SPD Hub: Montage
TS: IDT/Renesas

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MODULE DIMENSIONS



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



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Revision No.	History	Release Date	Remark	Editor	Approved
A	Initial Release	03/07/24		David Y.	Henry N.

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