

# Memory Module Specifications

## KSM56R46BS8PMI-16MDI

16GB 1Rx8 2G x 80-Bit

PC5-5600 CL46 Registered EC8 288-Pin DIMM

### DESCRIPTION

Kingston's KSM56R46BS8PMI-16MDI is a 2G x 80-bit (16GB) DDR5-5600 CL46 SDRAM (Synchronous DRAM), 1Rx8, ECC, memory module, based on ten 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)
<b>RCD:</b> IDT/Renesas
<b>PMIC:</b> MPS
<b>SPD Hub:</b> Montage
<b>TS:</b> IDT/Renesas

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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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