Memory Module Specifications



KSM48R40BS4TMI-32HAI

32GB 1Rx4 4G x 80-Bit PC5-4800 CL40 Registered EC8 288-Pin DIMM

DESCRIPTION

Kingston's KSM48R40BS4TMI-32HAI is a 4G x 80-bit (32GB) DDR5-4800 CL40 SDRAM (Synchronous DRAM), 1Rx4, ECC, memory module, based on twenty 4G x 4-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR5-4800 timing of 40-39-39 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) | 40 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

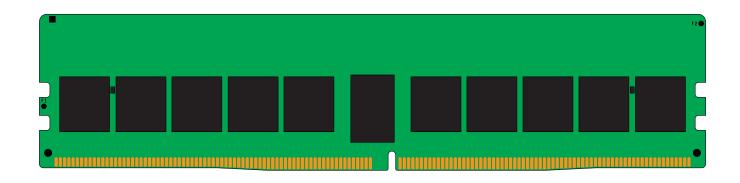
DRAM: HYNIX (A-Die)

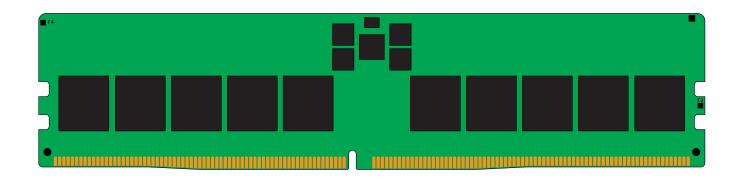
RCD: IDT/Renesas

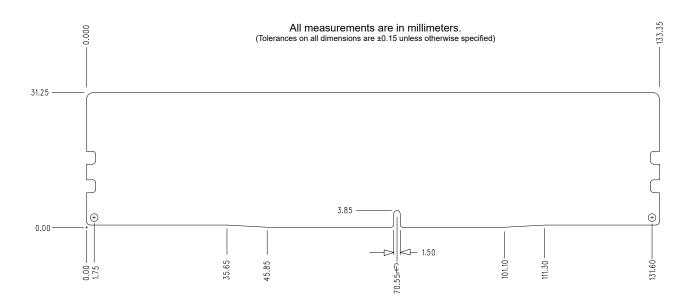
PMIC: TI

SPD Hub: Montage **TS:** IDT/Renesas

MODULE DIMENSIONS







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| Revision No. | History | Release Date | Remark | Editor | Approved |
|--------------|-----------------|--------------|--------|----------|----------|
| Α | Initial Release | 02/08/24 | | David Y. | Henry N. |

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