Memory Module Specifications



HX424S14IB2/8

8GB 1G x 64-Bit DDR4-2400 CL14 260-Pin SODIMM



DESCRIPTION

HyperX HX424S14IB2/8 is a 1G x 64-bit (8GB) DDR4-2400 CL14 SDRAM (Synchronous DRAM) 1Rx8, memory module, based on eight 1G x 8-bit DDR4 FBGA components. Each module supports Intel® Extreme Memory Profiles (Intel® XMP) 2.0. This module has been tested to run at DDR4-2400 at a low latency timing of 14-14-14 at 1.2V. Additional timing parameters are shown in the PnP Timing Parameters section below. The JEDEC standard electrical and mechanical specifications are as follows:

Note: The PnP feature offers a range of speed and timing options to support the widest variety of processors and chipsets. Your maximum speed will be determined by your BIOS.

PnP JEDEC TIMING PARAMETERS:

• JEDEC/PnP: DDR4-2400 CL14-14-14 @1.2V

DDR4-2133 CL13-13-13 @1.2V

• XMP Profile #1: DDR4-2400 CL14-14-14 @1.2V

SPECIFICATIONS

CL(IDD)	14 cycles
Row Cycle Time (tRCmin)	45.75ns (min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns (min.)
Row Active Time (tRASmin)	29.125ns (min.)
Maximum Operating Power	TBD W*
UL Rating	94 V - 0
Operating Temperature	0°C to 85°C
Storage Temperature	-55°C to +100°C

^{*}Power will vary depending on the SDRAM used.

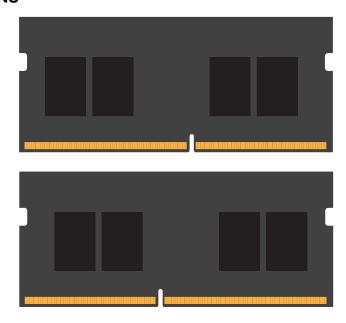
FEATURES

- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP 2.5V Typical
- VDDSPD = 2.25V to 3.6V
- On-Die termination (ODT)
- 16 internal banks; 4 groups of 4 banks each
- Bi-Directional Differential Data Strobe
- 8 bit pre-fetch
- Burst Length (BL) switch on-the-fly BL8 or BC4(Burst Chop)
- Height 1.18" (30.00mm)

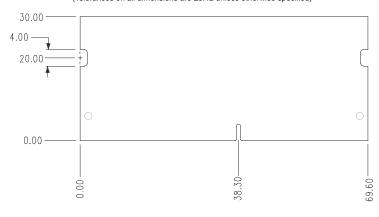
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MODULE DIMENSIONS



All measurements are in millimeters. (Tolerances on all dimensions are ± 0.12 unless otherwise specified)





FOR MORE INFORMATION, GO TO HYPERXGAMING.COM

All Kingston products are tested to meet our published specifications. Some motherboards or system configurations may not operate at the published HyperX memory speeds and timing settings. Kingston does not recommend that any user attempt to run their computers faster than the published speed. Overclocking or modifying your system timing may result in damage to computer components.

Memory Module Specifications



HX424S14IB/16

16GB 2G x 64-Bit DDR4-2400 CL14 260-Pin SODIMM



DESCRIPTION

HyperX HX424S14IB/16 is a 2G x 64-bit (16GB) DDR4-2400 CL14 SDRAM (Synchronous DRAM) 2Rx8, memory module, based on sixteen 1G x 8-bit DDR4 FBGA components. Each module supports Intel® Extreme Memory Profiles (Intel® XMP) 2.0. This module has been tested to run at DDR4-2400 at a low latency timing of 14-14-14 at 1.2V. Additional timing parameters are shown in the PnP Timing Parameters section below. The JEDEC standard electrical and mechanical specifications are as follows:

Note: HyperX DDR4 PnP memory will run in most DDR4 systems up to the speed allowed by the manufacturer's system BIOS. PnP cannot increase the system memory speed faster than is allowed by the manufacturer's BIOS. Memory overclocking is locked at 2133MHz on all mobile processors except Core i5 and i7 quad core processors with a TDP of 45W or greater.

PnP JEDEC TIMING PARAMETERS:

• JEDEC/PnP: DDR4-2400 CL14-14-14 @1.2V

DDR4-2133 CL13-13-13 @1.2V

• XMP Profile #1: DDR4-2400 CL14-14-14 @1.2V

SPECIFICATIONS

CL(IDD)	14 cycles
Row Cycle Time (tRCmin)	46.75ns (min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns (min.)
Row Active Time (tRASmin)	29.125ns (min.)
Maximum Operating Power	TBD W*
UL Rating	94 V - 0
Operating Temperature	0°C to 85°C
Storage Temperature	-55°C to +100°C

^{*}Power will vary depending on the SDRAM used.

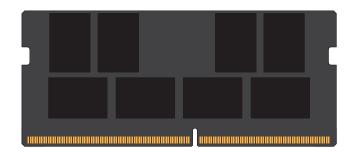
FEATURES

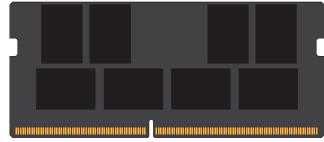
- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP 2.5V Typical
- VDDSPD = 2.25V to 3.6V
- On-Die termination (ODT)
- 16 internal banks; 4 groups of 4 banks each
- Bi-Directional Differential Data Strobe
- 8 bit pre-fetch
- Burst Length (BL) switch on-the-fly BL8 or BC4(Burst Chop)
- Height 1.18" (30.00mm)

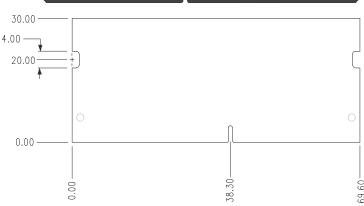
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MODULE DIMENSIONS









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Memory Module Specifications



HX424S15IB/32

32GB 4G x 64-Bit DDR4-2400 CL15 260-Pin SODIMM



SPECIFICATIONS

CL(IDD)	15 cycles
Row Cycle Time (tRCmin)	46.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	29.125ns(min.)
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
- porating romporation	0 0 10 100 0

DESCRIPTION

HyperX HX424S15IB/32 is a 4G x 64-bit (32GB) DDR4-2400 CL15 SDRAM (Synchronous DRAM) 2Rx8, memory module, based on sixteen 2G x 8-bit DDR4 FBGA components. Each module supports Intel® Extreme Memory Profiles (Intel® XMP) 2.0. This module has been tested to run at DDR4-2400 at a low latency timing of 15-15-15 at 1.2V. Additional timing parameters are shown in the PnP Timing Parameters section below. The JEDEC standard electrical and mechanical specifications are as follows:

Note: HyperX DDR4 PnP memory will run in most DDR4 systems up to the speed allowed by the manufacturer's system BIOS. PnP cannot increase the system memory speed faster than is allowed by the manufacturer's BIOS.

FEATURES

- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP 2.5V Typical
- VDDSPD = 2.25V to 3.6V
- On-Die termination (ODT)
- 16 internal banks; 4 groups of 4 banks each
- · Bi-Directional Differential Data Strobe
- 8 bit pre-fetch
- Burst Length (BL) switch on-the-fly BL8 or BC4(Burst Chop)
- Height 1.18" (30.00mm)

PnP JEDEC TIMING PARAMETERS:

• JEDEC/PnP: DDR4-2400 CL15-15-15 @1.2V

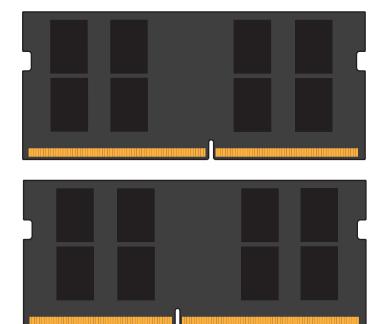
DDR4-2133 CL14-14-14 @1.2V

• XMP Profile #1: DDR4-2400 CL15-15-15 @1.2V

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MODULE DIMENSIONS



All measurements are in millimeters. (Tolerances on all dimensions are ±0.12 unless otherwise specified)





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