# Memory Module Specifications



## HX432C16FB3/32

32GB 4G x 64-Bit DDR4-3200 CL16 288-Pin DIMM



## **SPECIFICATIONS**

CL(IDD)	17 cycles
Row Cycle Time (tRCmin)	45.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
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Row Active Time (tRASmin)	32ns(min.)
	32ns(min.) 94 V - 0
Row Active Time (tRASmin)	,

#### **DESCRIPTION**

HyperX HX432C16FB3/32 is a 4G x 64-bit (32GB) DDR4-3200 CL16 SDRAM (Synchronous DRAM) 2Rx8, memory module, based on sixteen 2G x 8-bit FBGA components per module. Each module kit supports Intel® Extreme Memory Profiles (Intel® XMP) 2.0. Each module has been tested to run at DDR4-3200 at a low latency timing of 16-20-20 at 1.35V. The SPDs are programmed to JEDEC standard latency DDR4-2400 timing of 17-17-17 at 1.2V. Each 288-pin DIMM uses gold contact fingers. The JEDEC standard electrical and mechanical specifications are as follows:

#### **FACTORY TIMING PARAMETERS**

Default (JEDEC): DDR4-2400 CL17-17-17 @1.2V
 XMP Profile #1: DDR4-3200 CL16-20-20 @1.35V
 XMP Profile #2: DDR4-3000 CL16-19-19 @1.35V

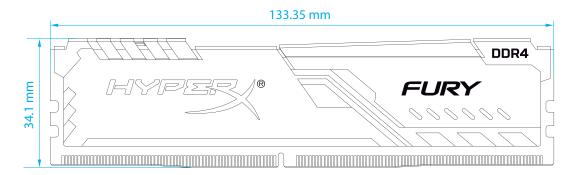
#### **FEATURES**

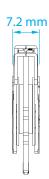
- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP = 2.5V Typical
- VDDSPD = 2.2V to 3.6V
- On-Die termination (ODT)
- 16 internal banks; 4 groups of 4 banks each
- Bi-Directional Differential Data Strobe
- 8 bit pre-fetch
- Burst Length (BL) switch on-the-fly BL8 or BC4(Burst Chop)
- Height 1.3425" (34.1mm), w/heatsink

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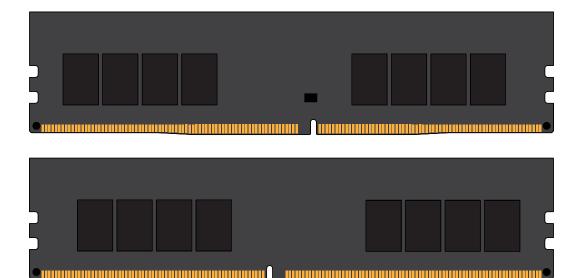


#### **MODULE WITH HEAT SPREADER**

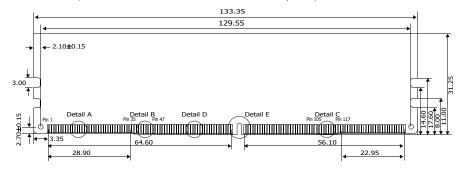




## **MODULE DIMENSIONS**



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



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## 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**



## HX432C16FB3/16

16GB 2G x 64-Bit DDR4-3200 CL16 288-Pin DIMM



## **SPECIFICATIONS**

CL(IDD)	17 cycles
Row Cycle Time (tRCmin)	45.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Row Active Time (tRASmin)  UL Rating	32ns(min.) 94 V - 0
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## **DESCRIPTION**

HyperX HX432C16FB3/16 is a 2G x 64-bit (16GB) DDR4-3200 CL16 SDRAM (Synchronous DRAM) 1Rx8, memory module, based on sixteen 1G x 8-bit FBGA components per module. Each module kit supports Intel® Extreme Memory Profiles (Intel® XMP) 2.0. Each module has been tested to run at DDR4-3200 at a low latency timing of 16-18-18 at 1.35V. The SPDs are programmed to JEDEC standard latency DDR4-2400 timing of 17-17-17 at 1.2V. Each 288-pin DIMM uses gold contact fingers. The JEDEC standard electrical and mechanical specifications are as follows:

#### **FACTORY TIMING PARAMETERS**

Default (JEDEC): DDR4-2400 CL17-17-17 @1.2V
 XMP Profile #1: DDR4-3200 CL16-18-18 @1.35V
 XMP Profile #2: DDR4-3000 CL15-17-17 @1.35V

#### **FEATURES**

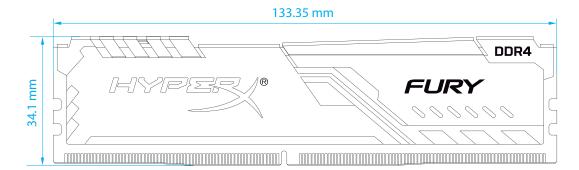
- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP = 2.5V Typical
- VDDSPD = 2.2V to 3.6V
- On-Die termination (ODT)
- 16 internal banks; 4 groups of 4 banks each
- Bi-Directional Differential Data Strobe
- 8 bit pre-fetch
- Burst Length (BL) switch on-the-fly BL8 or BC4(Burst Chop)
- Height 1.3425" (34.1mm), w/heatsink

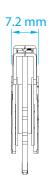
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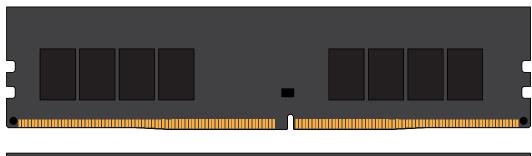


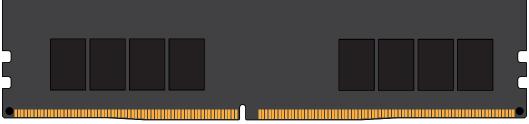
## **MODULE WITH HEAT SPREADER**



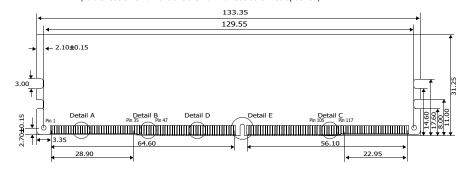


## **MODULE DIMENSIONS**





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# **Memory Module Specifications**



## HX432C16FB3/8

8GB 1G x 64-Bit DDR4-3200 CL16 288-Pin DIMM



## **SPECIFICATIONS**

CL(IDD)	17 cycles
Row Cycle Time (tRCmin)	45.75ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	350ns(min.)
Row Active Time (tRASmin)	32ns(min.)
Row Active Time (tRASmin)  UL Rating	32ns(min.) 94 V - 0
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## **DESCRIPTION**

HyperX HX432C16FB3/8 is a 1G x 64-bit (8GB) DDR4-3200 CL16 SDRAM (Synchronous DRAM) 1Rx8, memory module, based on eight 1G x 8-bit FBGA components per module. Each module kit supports Intel® Extreme Memory Profiles (Intel® XMP) 2.0. Each module has been tested to run at DDR4-3200 at a low latency timing of 16-18-18 at 1.35V. The SPDs are programmed to JEDEC standard latency DDR4-2400 timing of 17-17-17 at 1.2V. Each 288-pin DIMM uses gold contact fingers. The JEDEC standard electrical and mechanical specifications are as follows:

#### **FACTORY TIMING PARAMETERS**

Default (JEDEC): DDR4-2400 CL17-17-17 @1.2V
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 XMP Profile #2: DDR4-3000 CL15-17-17 @1.35V

#### **FEATURES**

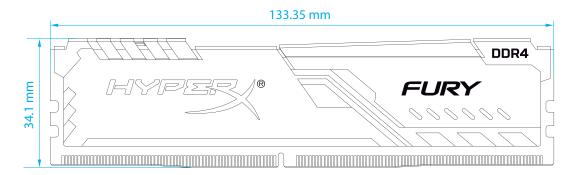
- Power Supply: VDD = 1.2V Typical
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- VPP = 2.5V Typical
- VDDSPD = 2.2V to 3.6V
- On-Die termination (ODT)
- 16 internal banks; 4 groups of 4 banks each
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- 8 bit pre-fetch
- Burst Length (BL) switch on-the-fly BL8 or BC4(Burst Chop)
- Height 1.3425" (34.1mm), w/heatsink

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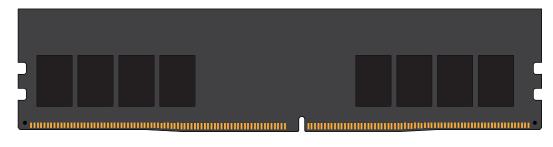


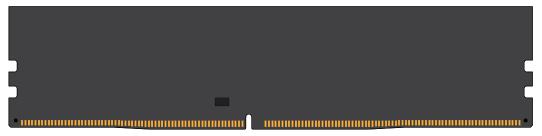
## **MODULE WITH HEAT SPREADER**



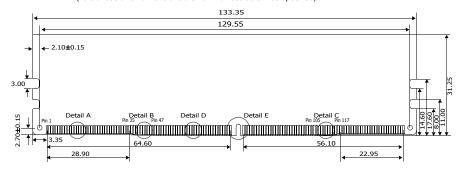


## **MODULE DIMENSIONS**





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