# Memory Module Specifications



# HX440C19PB4A/8

8GB 1G x 64-Bit DDR4-4000 CL19 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 HX440C19PB4A/8 is a 1G x 64-bit (8GB) DDR4-4000 CL19 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 DDR4-4000 at a low latency timing of 19-23-23 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:

#### XMP TIMING PARAMETERS

•JEDEC: DDR4-2400 CL17-17-17 @1.2V

•XMP Profile #1: DDR4-4000 CL19-23-23 @1.35V •XMP Profile #2: DDR4-3600 CL17-21-21 @1.35V

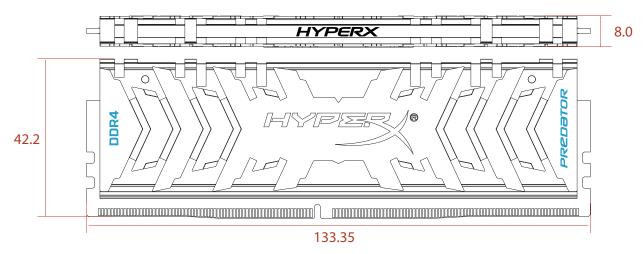
#### **FEATURES**

- Power Supply: VDD = 1.2V Typical
- VDDQ = 1.2V Typical
- VPP = 2.5V Typical
- VDDSPD = 2.4V to 3.3V
- 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)
- HyperX Infrared Sync working distance 18mm
- Factory preset RGB wave lighting effect
- Height 1.661" (42.20mm)

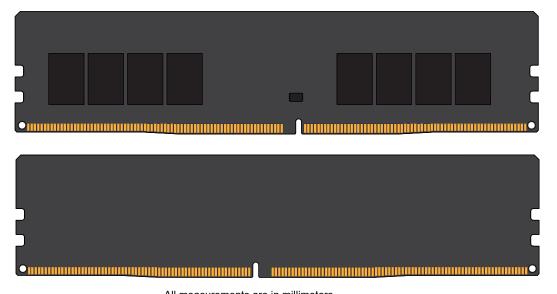
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#### MODULE WITH HEAT SPREADER

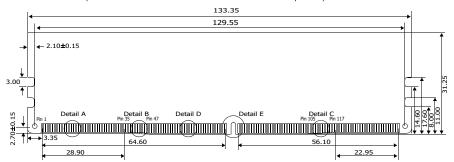


### MODULE DIMENSIONS



# All measurements are in millimeters.

(Tolerances on all dimensions are ±0.12 unless otherwise specified)



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