

# Memory Module Specifications

## KF316C10BB/4

4GB 512M x 64-Bit

DDR3-1600 CL10 240-Pin DIMM



## SPECIFICATIONS

CL(IDD)	10 cycles
Row Cycle Time (tRCmin)	48.125ns(min.)
Refresh to Active/Refresh Command Time (tRFCmin)	260ns(min.)
Row Active Time (tRASmin)	37.5ns(min.)
UL Rating	94 V - 0
Operating Temperature	0° C to +85° C
Storage Temperature	-55° C to +100° C

## DESCRIPTION

Kingston FURY KF316C10BB/4 is a 512M x 64-bit (4GB) DDR3-1600 CL10 SDRAM (Synchronous DRAM) 1Rx8, memory module, based on eight 512M x 8-bit FBGA components per module. Each module has been tested to run at DDR3-1600 at a low latency timing of 10-10-10 at 1.5V. Additional timing parameters are shown in the Plug-N-Play (PnP) Timing Parameters section below. Each 240-pin DIMM uses gold contact fingers. 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.

## FACTORY TIMING PARAMETERS

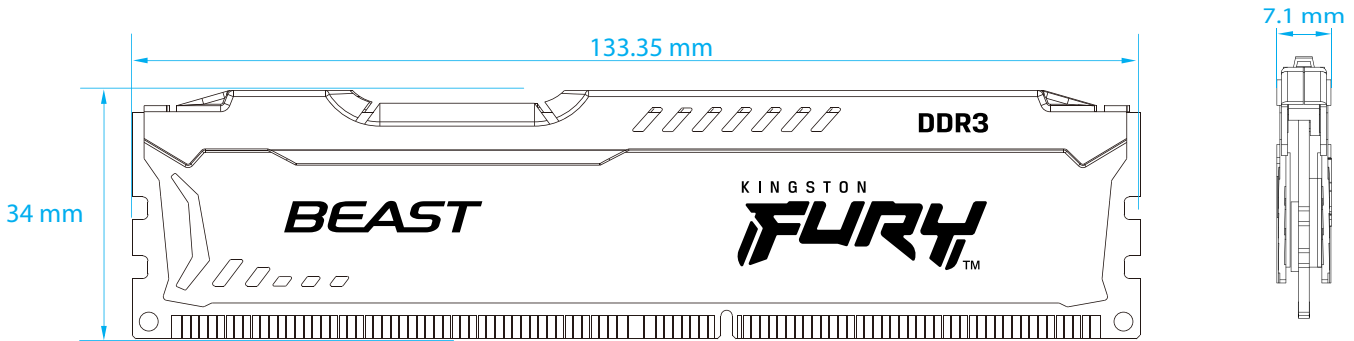
- Default (Plug N Play): DDR3-1600 CL10-10-10 @ 1.5V  
DDR3-1333 CL9-9-9 @ 1.5V  
DDR3-1066 CL7-7-7 @ 1.5V

## FEATURES

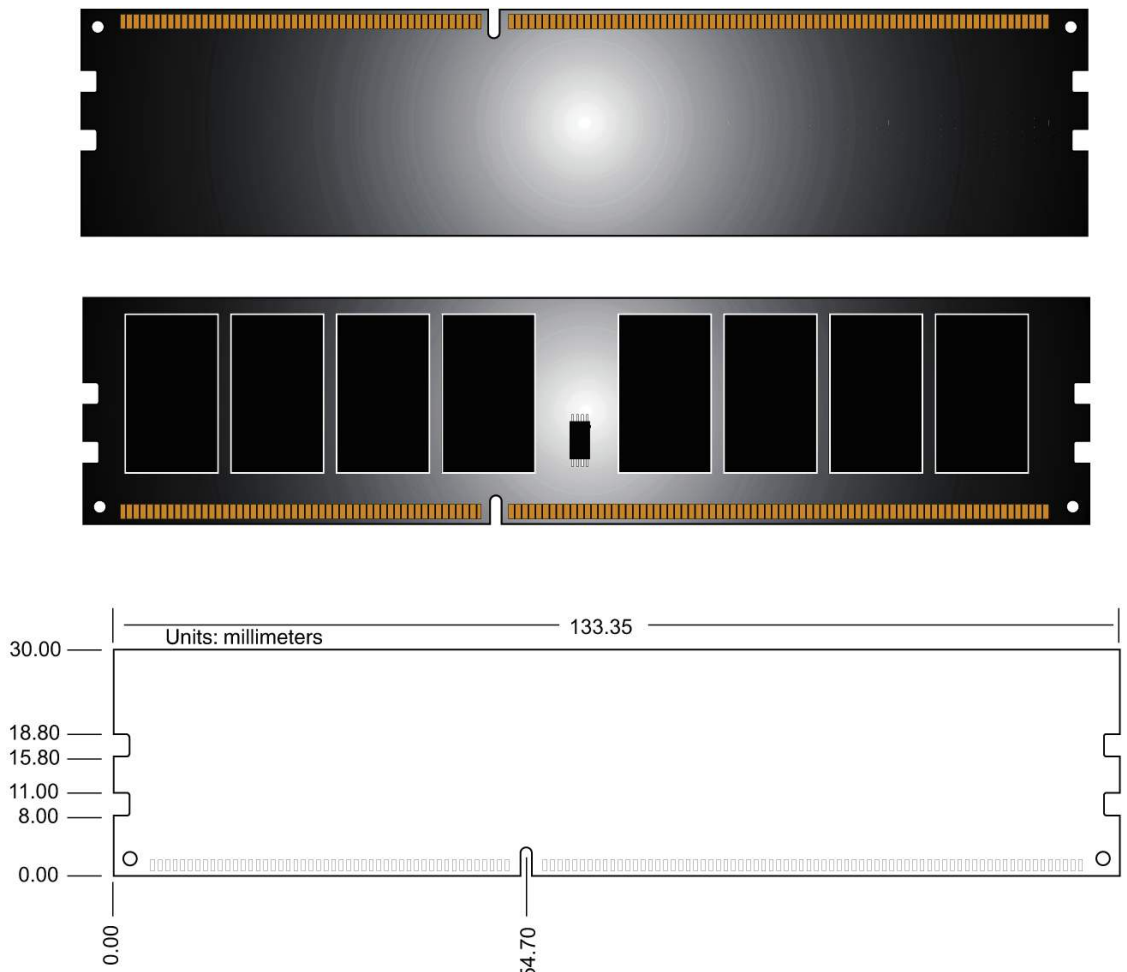
- JEDEC standard 1.5V Power Supply
- VDDQ = 1.5V
- 800MHz fCK for 1600Mb/sec/pin
- 8 independent internal bank
- Programmable CAS Latency: 11, 10, 9, 8, 7, 6
- Programmable Additive Latency: 0, CL - 2, or CL - 1 clock
- 8-bit pre-fetch
- Burst Length: 8 (Interleave without any limit, sequential with starting address "000" only), 4 with tCCD = 4 which does not allow seamless read or write [either on the fly using A12 or MRS]
- Bi-directional Differential Data Strobe
- Internal(self) calibration : Internal self calibration through ZQ pin (RZQ : 240 ohm ± 1%)
- On Die Termination using ODT pin
- Average Refresh Period 7.8us at lower than TCASE 85°C, 3.9us at 85°C < TCASE < 95°C
- Asynchronous Reset
- Height 1.338" (34mm) w/heatsink

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### MODULE WITH HEAT SPREADER



### MODULE DIMENSIONS



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