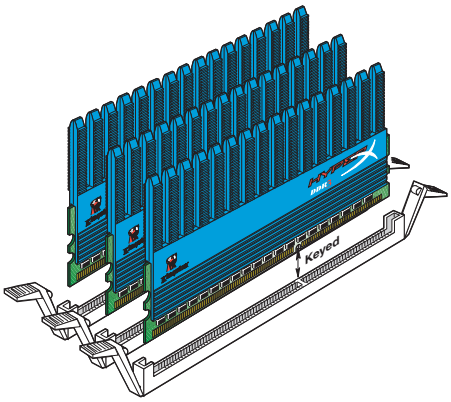
KHX16000D3ULT1K3/3GX

3GB (1GB 128M x 64-Bit x 3 pcs.) PC3-16000
Triple-Channel CL9 240-Pin DIMM Kit

DESCRIPTION:

Kingston's KHX16000D3ULT1K3/3GX is a triple-channel kit of three 128M x 64-bit 1GB (1024MB) DDR3-2000MHz CL9 SDRAM (Synchronous DRAM) memory modules, based on eight 128M x 8-bit DDR3 FBGA components per module. Total kit capacity is 3GB. Each module kit supports **Intel® XMP** (Extreme Memory Profiles). Each module kit has been tested to run at DDR3-2000MHz at an ultra-low latency timing of 8-8-8-24 at 1.65V. The SPDs are programmed to JEDEC standard latency DDR3-1333MHz timing of 9-9-9 at 1.5V. Each 240-pin DIMM uses gold contact fingers and requires +1.5V. The JEDEC standard electrical and mechanical specifications are as follows:

FEATURES:

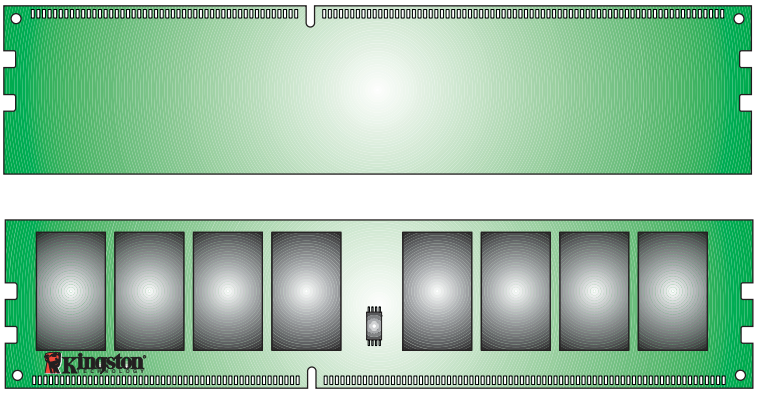


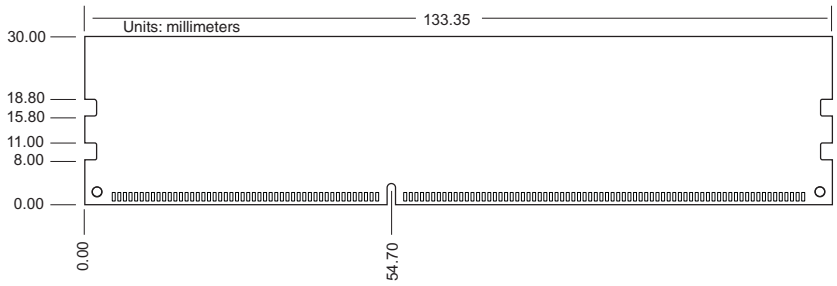
- ☑ JEDEC standard 1.5V ± 0.075V Power Supply
- ☑ VDDQ = 1.5V ± 0.075V
- ☑ 667MHz fCK for 1333Mb/sec/pin
- ☑ 8 independent internal bank
- ☑ Programmable CAS Latency: 6,7,8,9
- ☑ Posted CAS
- ☑ Programmable Additive Latency: 0, CL - 2, or CL - 1 clock
- ☑ Programmable CAS Write Latency(CWL) = 7(DDR3-1333)
- ☑ 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 then TCASE 85°C, 3.9us at 85°C < TCASE . 95°C
- ☑ Asynchronous Reset
- ☑ PCB : Height 2.401” (61.00mm) w/ heatsink, single sided component

PERFORMANCE:

☑ CL(IDD)	9 cycles
☑ Row Cycle Time (tRCmin)	49.5ns (min.)
☑ Refresh to Active/Refresh Command Time (tRFCmin)	110ns
☑ Row Active Time (tRASmin)	36ns (min.)
☑ Power	1.296 W (operating per module)
☑ UL Rating	94 V - 0
☑ Operating Temperature	0° C to 85° C
☑ Storage Temperature	-55° C to +100° C

MODULE DIMENSIONS:





w/ heatsink assembly

