

# GRAPE6-BLX64

*NEW!! 64bit Linux*

*Easy to Clustering*



## SPECIFICATION

The most suitable for clustering

- Speed: 131.3G flops (4×Grape6 VLSI Chips 6Pipeline per chip).
- Memory size: 262,144 particle. (18Mbit Burst-SRAM×8)
- OS( prepared by users) : 64 bit Calculation!
  1. Linux 2.6.9 (RedHat ELV4)
  2. Linux 2.6.9 (Fedora Core 3, x86\_64)

\*If you succeed in using other version , please inform us. Such information will help other users.

- Attached Application Software: C language, Fortran language interface library. (CD-ROM)
- Host computer: Intel® Xeon CPU and Intel® E7525 chip set are suitable.
- Dimension : 33mm(w) x 313mm(d) x108mm (h), 2 PCI slot occupied
- Interface : Standard **64bit/100MHz or 133MHz full PCI-X** A) You should set BIOS to make PCI

**Cooling fan** : 1.8m<sup>3</sup>/min 65cfm (Please consult with the computer manufacturer.)

Remarks; Micro GRAPE(MG6Af) have a big cooling fan on the boards.  
But BL4/BLX64 are not attached on the board. Thus it needs a extra cool down fan near the board in the box.

\*It is prepared by yourself Please make sure the surface temperature of heat sink **lower than 50** .

Power consumption : DC12V 5A, ATX power supply

### \* Documentation:

User's Manual: [manual blx64](#)  
Library: [g6auser](#)  
Install Guide: [install](#)

\* The difference between Micro GRAPE and GRAPE6-BL4, GRAPE6-BLX64:

	Interface	Linux	Peak Speed	actual speed	Particale	memory
MG6Af	PCI	32bit Linux	125G	90G		126K
BL4	PCI	32bit	131.6G	100G flops		256K
BLX64	PCI-X	64bit	131.6G	125G flops		256K

BLX64 Library is included JP-buffering routine. However BL4 and MG6Af are not included in the library.  
Refer to above User's Manual for BLX64.

**Grape-BLX64 is a upgrade model of MicroGrape. It is special for built-in cluster. Grape-BL4 was developed for joint research of the FIRST project (the Origin of FIRST Generation Objects by HMCS-E) with Center for Computational Sciences University of Tsukuba. It is 30 percent faster than Micro GRAPE by using 64bit PCI-X interface.**  
[First Project](#) [first project](#) [first cluster](#)  
[Tsukuba University Web](#)

**Grape was developed by receiving technology of University of Tokyo**