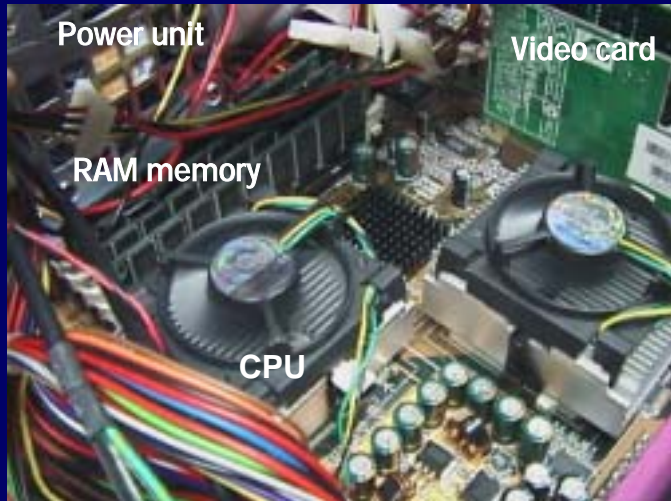


# Boewulf PC Cluster: How to make and use it



PC units mounted in a 19" rack



M/B (chipset w/ bios)

1. Collect commercial PC parts **¥150-200k/unit**  
Mandatory: CPU, memory, M/B, LAN card, power unit  
Optional: HDD, CD drive, Video card  
Need 1 set: monitor, K/B, mouse, TCP/IP hub
2. Assemble screw drivers, glove  
Fix M/B  
Fix parts CPU memory cards HDD  
Connect cables signal, power, LAN, monitor
3. Install O/S and basic softwares  
boot and install Linux + MPI (free)  
Fortran f90, HPF (expensive !)
4. Set system environments  
TCP/IP network  
NFS mount: export the master's /home  
NIS: enable the master node functionality  
MPI, PBS
5. Programming  
F90 + MPI for distributed memory architecture  
or HPF