

Name \_\_\_\_\_

Group # \_\_\_\_\_

## CPADS HW Activity II – Part I

### “Snap, Crackle, Pop!”

The goal of this second activity is to become familiar with CPU installation. You will practice removing and reinstalling different types of CPU’s in a couple of different motherboards. PLEASE ASK IF YOU HAVE ANY QUESTIONS DURING THIS ACTIVITY!

### 1. CPU Installation - Practice

Inserting the CPU in the socket was once a harrowing experience (do it wrong and you bend a bunch of pins). Nowadays, almost all CPU sockets are Zero-Insertion-Force (ZIF), meaning you do not need to use any force to seat the CPU – unless, of course, you forget to raise the locking lever!

After placing the CPU in the socket and installing thermal paste (i.e. goo), you need to figure out how to lock the heatsink/fan to the motherboard. Usually it is a good idea to figure this out before applying the goo – dry fitting will not hurt the CPU. Different heatsinks require different techniques, but almost all heatsinks will need a bit of force to get them locked. Some only require your fingers to press down tabs, others have levers that lock after attaching clips to a retention bracket, and still others need a screwdriver to press down and latch clips to the front and back of the socket. Once you get the heatsink/fan locked, give it a little twist to make sure things are seated properly (it would really stink to have it pop off when the machine is running).

Lastly, **REMEMBER TO PLUG IN THE FAN CONNECTOR TO THE MOTHERBOARD** or face the consequences when your CPU overheats!!!

Each row contains different motherboard/CPU combinations. Each person should remove the heatsink/fan and CPU from the motherboard. Complete the table by listing the information about the CPU. Then reinstall the CPU and remount the heatsink/fan (do not apply any thermal compound). Please don't break anything – ASK if you have any questions. Once both people have completed the first motherboard, perform the same tasks for the second motherboard. When you are done, you should have removed/replaced one AMD and one Intel CPU.

|                   | CPU<br>Manufacturer | CPU<br>Family | CPU<br>Speed | CPU<br>L2 Cache | CPU<br>Socket |
|-------------------|---------------------|---------------|--------------|-----------------|---------------|
| AMD Motherboard   |                     |               |              |                 |               |
| Intel Motherboard |                     |               |              |                 |               |