

## CHAPTER V

### COVER

#### 1.4 Conclusion

The conclusion that can be drawn after some testing in comparing three types of thermal paste Silicon base, ceramic base, metal base includes:

1. *Thermal paste* Different species have different effects of temperature decrease of the temperature of the processor. For this type silicon thermal paste based on a 4.6GHz processor speed generates heat maximum temperature of  $92^{\circ}\text{C}$  while using metal-based gain maximum temperature of  $77^{\circ}\text{C}$  and for the type of Ceramic based obtain the lowest maximum temperature is  $74^{\circ}\text{C}$ . This temperature is significantly influencing the reliability and stability of the system, and in the trial found that the use of ceramic thermal paste has the greatest influence on the stability of the system.
2. After conducting a series of studies by the method of overclocking the processor using three types of thermal paste of different thermal paste with ceramic-based has the lowest temperature of the other two kinds, as well as ceramic-based have benchmark results Cinebench higher of the two types of the others is because ceramic has a performance consistent in keeping temperature approaching its operational limits.

#### 5.2 Suggestion

In the research that has been done, there are still shortcomings and constraints for existing keterbatasan.

1. In this stability test trials, problems encountered are testing just use watercooling, and that can be done is by adding a coolant manifold aircooling to overcome so that the results can be more optimally
2. On trial for correlations of temperature on the performance, constraints dutemui is testing only use the software CINEBENCH r15, so that ought to further research could add software-games to overcome in order to get a better research results.
3. Increase the speed of the processor to the limit even higher, so that there is one or more thermal paste that cannot maintain the stability of the processor.

