ANALYSIS OF EFFECT OF THERMAL PASTE TYPES WHEN OVERCLOCKING

THESIS

submitted by

Dimas Satria Sidiqurrohman

14.62.0017

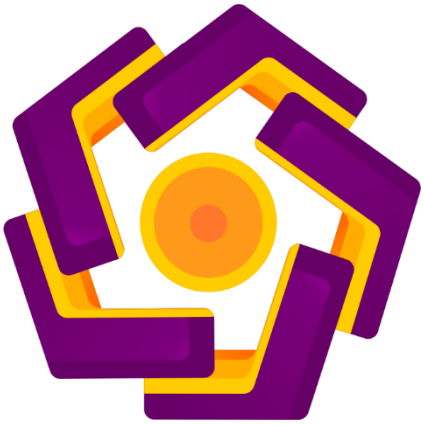
to

FACULTY OF COMPUTER SCIENCE
UNIVERSITY OF AMIKOM
YOGYAKARTA YOGYAKARTA
2018

ANALYSIS OF EFFECT OF THERMAL PASTE TYPES WHEN OVERCLOCKING

THESIS

To meet some requirements
Achieve a bachelor's degree
On the Information Systems Study Program



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APPROVAL

THESIS

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prepared and arranged by

Dimas Satria Sidiqurrohman

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has been approved by the thesis supervisor

on December 7, 2018

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THESIS

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has been retained in front of the Board of Examiners
on December 7, 2018

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to obtain a Bachelor degree in Computer
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STATEMENT

I the undersigned declare that this thesis is my own work (ORIGINAL), and the contents in this paper there are works that have been asked by others to obtain an academic degree in a higher education institution anywhere, and my knowledge is not there works or opinions ever written and / or published by others, except that in writing referred to in this text and mentioned in the bibliography.

Everything associated with the script and the work that has been made is the responsibility of my own.

Yogyakarta, December 7 2018

Dimas Satria Sidiqurrohman

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MOTTO

“A goal is a dream with a deadline.” – Napoleon hill

“If you don’t go after what you want, you’ll never have it. If you don’t ask, the answer is always no. If you don’t step forward, you’re always in the same place.” – Nora Roberts

“Without some goal and some efforts to reach it, no man can live.” – Fyodor Dostoyevsky

“You have brains in your head. You have feet in your shoes. You can steer yourself in any direction you choose. You’re on your own. And you know what you know. You are the guy who’ll decide where to go.” – Dr. Seuss

“Don’t say you don’t have enough time. You have exactly the same number of hours per day that were given to Helen Keller, Pasteur, Michelangelo, Mother Teresa, Leonardo da Vinci, Thomas Jefferson, and Albert Einstein.” – H. Jackson Brown Jr.

DEDICATION

The author of this thesis presented at:

1. Allah Almighty has provided guidance and mercy to me
2. My parents and all my familys who always support me and pray for me
3. Mr. M. Rudyanto Arief, S.T, M.T as my supervisor who has guided me all this time and help my thesis completed
4. All my best friends from high school who always give me support and advice
5. All my friends from Amikom University who give their support and orison for me
6. All my friends in Jogja and Solo who give me their support and give me happiness also help me relieves stress
7. My beloved brother Mr. Husein who give me a lot of his time to me
8. To her who always make me want to completed this thesis as soon as posible
9. All parties who have been involved either directly or indirectly in the process of preparing this thesis which cannot be mentioned one by one

FOREWARD

Praise the author turning to God Almighty for all the abundance of His blessings and mercy, so I can carry out and complete this thesis.

Thesis with the title "ANALYSIS OF EFFECT OF THERMAL PASTE WHEN OVERCLOCKING" was developed as one of the requirements for a degree Bachelor of Strata-1 Information Systems Studies program at the University of Amikom Yogyakarta.

The authors recognize that the completion of the writing of this because of the help of many people. Therefore, on this occasion I wish to thank:

1. Allah who has given his grace to me to completed this thesis.
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The author realizes there are still so many shortcomings in the preparation of this thesis. Therefore, criticism and suggestions are something that is our hope for the future progress and improvement of science in Indonesia.

TABLE OF CONTENTS

TITLE i
APPROVAL ii
LEGITIMATION iii
STATEMENT iv
MOTTO PAGE v
DEDICATION vi
FOREWORD vii
TABLE OF CONTENTS ix
LIST OF FIGURES xi
LIST OF TABLES xii
ABSTRACT xiii

PART I 1
PRELIMINARY 1
1.1 Background 1
1.2 Formulation of the problem 3
1.3 Scope of problem 3
1.4 Purpose and Objective 5
1.5 Research methods 6
1.6 Writing system 7

CHAPTER II 8
THEORETICAL BASIS 8
2.1 Literature review 8
2.2 Basic theory 11
2.2.1 understanding Processor 11
2.2.2 Understanding Intel Kabylake 12
2.2.3 Definition Thermal Paste 13
2.2.4 Definition and Objectives Overclock 15
2.2.5 Stability Against Temperature Influence System 16

2.2.6 Understanding Quantitative Research 17
2.2.7 understanding Flowchart 18
2.2.8 Understanding BIOS and UEFI 19
2.3 Overclock method on Kabylake Systems 20
2.4 Components needed 21
2.4.1 processor 21
2.4.2 Graphics Card (VGA) 21
2.4.3 motherboard 21
2.4.4 Memory (RAM) 21
2.4.5 Storage (Storage) 22
2.4.6 Cooling (HSF) 22
2.4.7 Power Supply (PSU) 22
2.4.8 Operating system 23
2.4.9 CPU-Z 23
2.4.10 Prime95 23
2.4.11 HWMonitor 23

CHAPTER III 24
RESEARCH METHODS 24
3.1 Tools and materials 24
3.1.1 Hardware 24
3.1.2 Software 27
3.2 Flow Research 28

CHAPTER IV 33
4.1 scenario Overclocking 33
4.1.1 Checking the BIOS version 33
4.1.2 BIOS settings 35
4.1.3 CPU multiplier settings 38
4.1.4 Voltage settings 40
4.1.5 testing Systems 41
4.1.6 Rating System 42

4.2 Overclocking Results and Analysis Comparison.....44
4.2.1 Thermal Silicon Based.....45
4.2.2 Ceramic-Based Thermal.....47
4.2.3 Thermal Metal Based.....50
4.2.4 Comparative analysis.....52
4.2.4.1 comparison temperature.....52
4.2.4.2 Score comparison.....53
CHAPTER V.....54
CLOSING.....54
5.1 Conclusion.....54
5.2 Suggestion.....55
BIBLIOGRAPHY.....56

LIST OF FIGURES

2.2 Intel Kabylake 12
2.2 Definition of Flowchart 19
3.1 Overclock process using silicon-based thermal 31
3.2 The process of overclock using ceramic-based thermal 32
3.3 Overclock process using metal-based thermal 33
4.1 Bios Version F9a Using CPU-Z 36
4.2 Latest bios version is based on the official webiste 36
4.3 Menu Q-FLASH 37
4.4 The latest version after flashing bios 37
4.5 Display UEFI BIOS 38
4.6 Frequency Advanced Display Settings 39
4.7 CPU Display Upgrade 39
4.8 CPU Clock Ratio 4.2GHz 40
4.9 CPU Clock Ratio 4.4GHz 41
4.10 CPU Clock Ratio 4.6GHz 41
4.11 Menu voltage 42
4.12 BSOD Windows 10 43
4.13 Prime 95 44
4.14 Cinebench R15 45
4.15 CPUID HWMonitor 46
4.16 Results of Cinebench R15 on Silicon based @ 4.2GHz 47
4.17 HWMonitor results on Silicon based @ 4.2GHz 47
4.18 Results of Cinebench R15 on Silicon based @ 4.4GHz 48
4.19 HWMonitor results on Silicon based @ 4.4GHz 48
4.20 Results of Cinebench R15 on Silicon based @ 4.6GHz 48
4.21 HWMonitor results on Silicon based @ 4.6GHz 49
4.22 Silicon-based thermal Results 49
4.23 Results of Cinebench R15 on Ceramic based @ 4.2GHz 50
4.24 HWMonitor results on Ceramic based @ 4.2GHz 50
4.25 Results of Cinebench R15 on Ceramic based @ 4.4GHz 50

4.26 HWMonitor results on Ceramic based @ 4.4GHz 51
4.27 Results of Cinebench R15 on Ceramic based @ 4.6GHz.....51
4.28 HWMonitor results on Ceramic based @ 4.6GHz 51
4.29 Ceramic-based thermal Results.....51
4.30 Results of Cinebench R15 on Metal-based @ 4.2GHz.....52
4.31 HWMonitor results on Metal-based @ 4.2GHz 52
4.32 Results of Cinebench R15 on Metal-based @ 4.4GHz.....53
4.33 HWMonitor results on Metal-based @ 4.4GHz 53
4.34 Results of Cinebench R15 on Metal-based @ 4.6GHz.....53
4.35 HWMonitor results on Metal-based @ 4.6GHz 53
4.36 Metal-based thermal Results.....54
4.37 Comparison of temperature.....55
4.38 Comparison of scores.....55

LIST OF TABLES

2.1 Comparison with previous studies 9
3.1 Hardware used.....25
3.2 Comparison between the three thermal paste used 26
3.3 The software used 28
4.1 Testing frequency stable system 43

ABSTRACT

Analyzing the influence of thermal paste when overclocking on how much the temperature resulting from any type of existing thermal paste, as well as the role of the temperature of the processor to the system performance will be obtained due to the activity of overclock on computers is increasing, from the use of overclock on a daily basis up to use overclock such as when it held its extreme overclocking competition. The purpose of this study was to determine the type of thermal paste is best for use in overclocking to get maximum performance.

Testing is done by increasing the processor speed in accordance with the recommendations provided by the motherboard after a given processor thermal paste according to the order for research, and in its overclock test results using Cinebench r15 and recorded his temperature using HWMonitor. Then look for the lowest temperature that results from three types of thermal paste used in order to find the thermal paste which produce the highest levels of stability due to the stability of a system rated stable when it approaches the operational limits.

Thermal paste of different types has the effect of decreasing the temperature and performance of different.

Keywords: Overclock, Thermal Paste, Benchmark, Temperature.