

THIRD ASSIGNMENT

ORGANIZATION AND ARCHITECTURE COMPUTER



Disusun oleh:

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ASPECT	HDD (Hard Disk Drive)	SSD (Solid State Drive)
Definition	A hard disk drive (HDD) , hard disk , hard drive , or fixed disk is an electromechanical data storage device that uses magnetic storage to store and retrieve digital information using one or more rigid rapidly rotating disks (platters) coated with magnetic material.	A solid-state drive (SSD) is a solid-state storage device that uses integrated circuit assemblies as memory to store data persistently. It is also sometimes called solid-state disk , ^[1] although SSDs do not have physical disks. SSDs may use traditional hard disk drive (HDD) form-factors and protocols such as SATA and SAS, greatly simplifying usage of SSDs in computers. ^[2]
Maximum Capacity	14 Terabyte (the maximum capacity of a single piece HDD that claimed by Seagate. Usually used for corporation)	4 Terabyte (this kind of highest capacity is made by Samsung brand)
Speed	HDD has higher latency, longer read/write times, and supports fewer IOPs (input output operations per second) compared to SSD.	SSD has lower latency, faster read/writes, and supports more IOPs (input output operations per second) compared to HDD.
Price	Only around \$0.03 per gigabyte, very cheap (buying a 4TB model)	Expensive, roughly \$0.20 per gigabyte (based on buying a 1TB drive)
Size	HDD is around 2,5 inch – 3,5 inch	SSD dimension between 1,8 inch to 3,5 inch
Advantage	<ul style="list-style-type: none"> • HDD is cheaper than SSD • More capacity 	<ul style="list-style-type: none"> • Faster than HDD • Low power consumption • Durable than HDD
Disadvantage	<ul style="list-style-type: none"> • HDD is slower than SSD • Higher power consumption • Produce noise while operating • Not durable compared to SSD 	<ul style="list-style-type: none"> • Expensive • Less capacity
Picture		