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What Is Hard Disk?

- A Hard Disk (HDD) Is A Non-Volatile Computer Storage Device Using Rapidly Spinning Platters Coated With Magnetic Material To Store Digital Data Permanently, Allowing Your Computer To Boot Up And Save Files Like Documents, Photos, And Apps Even When Powered Off. It Works With A Read/Write Head On A Moving Arm That Magnetizes Tiny Spots On The Spinning Disks To Save Data, Functioning Like A Modern, High-Capacity Record Player For Binary)

What Is The Hard Disk Short Answer?

- A Hard Drive Or Hard Disk Drive (HDD) Is A Type Of Data Storage Device That Is Used In Laptops And Desktop Computers. An HDD Is A “Non-Volatile” Storage Drive, Which Means It Can Retain The Stored Data Even When No Power Is Supplied To The Device.

What Are The Three Types Of Hard Disks?

- The Types Of Technology Currently Used In Computer Hard Disks Fall Into 3 Categories, Solid-State Drives, Magnetic Drives, And Hybrid Drives.



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What Is Ram?

- *RAM (Random Access Memory) Is Your Computer's High-Speed, Short-Term Memory, Used To Temporarily Store Data For The CPU To Access Quickly, Allowing Programs And Files To Run Smoothly; It's Called "Random Access" Because The Processor Can Fetch Any Data Directly, Not In Sequence, But It's Volatile, Meaning Everything Stored In RAM Is Erased When You Turn The Computer Off. Think Of It As A Fast Workspace On Your Desk, Holding What You're Currently Using, While Your Hard Drive (SSD/HDD) Is The Filing Cabinet Where Everything Is Stored Long-Term.*

What Is RAM And Its Types?

- *RAM (Random Access Memory) Is Volatile, High-Speed Computer Memory For Active Data, With The Two Main Types Being DRAM (Dynamic RAM) For Main System Memory (Slower, Cheaper, Needs Refreshing) And SRAM (Static RAM) For CPU Cache (Faster, Pricier, No Refresh Needed). Modern DRAM Further Evolves Through Generations Like DDR1, DDR2, DDR3, DDR4, And DDR5, Offering Better Speeds And Capacity.*

What Is RAM And ROM In A Computer?

- *RAM (Random Access Memory) Is Fast, Volatile Memory For Active Data (Lost On Shutdown), Used For Running Programs; ROM (Read-Only Memory) Is Slower, Non-Volatile Memory For Permanent Instructions (Retained Without Power), Like The BIOS For Booting The Computer.*



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What Is Processor?

- A Processor, Or Central Processing Unit (CPU), Is The "Brain" Of A Computer, A Crucial Chip That Executes Instructions From Software, Performs Calculations, Manages Data Flow, And Controls All Other Hardware To Run The Operating System And Applications. It Works By Fetching Instructions From Memory, Decoding Them, Executing The Commands (Arithmetic, Logic, I/O), And Then Outputting Results, A Cycle Happening Millions Of Times Per Second. Modern Cpus Use Multiple Cores For Multitasking And Feature Components Like Alus, Control Units, And Cache For Speed.

What Is A Processor Short Answer?

- Answer: A Processor, Or "Microprocessor," Is A Small Chip That Resides In Computers And Other Electronic Devices. Its Basic Job Is To Receive Input And Provide The Appropriate Output. While This May Seem Like A Simple Task, Modern Processors Can Handle Trillions Of Calculations Per Second.

What Is An I3, I5, And I7 Processor?

- I3, I5, And I7 Are Intel's Processor Lines That Indicate Performance Tiers: I3 Is Entry-Level For Basic Tasks, I5 Is Mid-Range For Mainstream Use, And I7 Is High-End For Demanding Applications. Generally, As The Number Increases, So Do The Number Of Cores, Clock Speed, And Cache Memory, Resulting In Greater Processing Power And Better Performance. However, It's Important To Compare Specific Model Numbers, As Newer Generations Of An I3 Can Outperform Older I7.



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What Is Cmos Cell?

- CMOS Stands For **Complementary Metal-Oxide-Semiconductor**. The CMOS Battery Provides Power To The CMOS Chip On A Computer's Motherboard, Which Stores Essential System Information Like The Date, Time, And Hardware Settings, Even When The Computer Is Turned Off.

What Is The CMOS Function?

- CMOS (Complementary Metal-Oxide-Semiconductor) Is A Type Of Technology Used In Computer Processors, Memory Chips, And Other Electronic Components. It Helps To Regulate The Flow Of Electricity Through These Components, Which Is Crucial For Proper Functioning.

What Is The CMOS In A Computer?

- In Computers, CMOS (Complementary Metal-Oxide-Semiconductor) Refers To Both A Low-Power Semiconductor Technology Used In Chips And, More Commonly, A Small, Battery-Powered Memory Chip On The Motherboard That Stores Essential Startup Settings (BIOS/UEFI), System Date, And Time, Ensuring They're Retained Even When The Computer Is Off.



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What Is Heat Sink?

- *A Heat Sink Is A Passive Device, Usually Metal (Like Aluminum Or Copper), That Absorbs Excess Heat From Hot Electronic Components (Like Cpus Or Leds) And Dissipates It Into The Surrounding Air Or Liquid, Preventing Overheating By Maximizing Surface Area With Fins For Efficient Heat Transfer Via Conduction And Convection. It's A Critical Thermal Management Component, Ensuring Devices Run Efficiently And Preventing Damage.*

Where Is The Heat Sink?

- *The Heat Sink Is Typically Attached To The Electronic Component Using A Thermal Interface Material, Such As A Thermal Paste Or Pad.*

What Materials Are Used For Heat Sinks?

- *Copper Is One Of The Best Materials To Choose For Heat Sinks As It Has A High Thermal Conductivity. But Aluminum Is Most Commonly Used Due To It's Lower Cost And Relatively High Thermal Conductivity.*

What Is A Heat Sink For SSD?

- *What Is A Heatsink? A Heatsink Is A Cooling Structure That Attaches To Your SSD And Cools It Down By Transferring The Heat Away From The Device.*



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What Is Power Supply?

- *A Power Supply Is An Electrical Device That Converts Energy From A Source, Like An Electrical Outlet Or Battery, Into The Correct Voltage, Current, And Frequency For Another Device To Use. Its Main Function Is To Provide A Stable And Appropriate Power Source For An Electrical Load, Such As A Computer, TV, Or Industrial Machine, Ensuring It Receives The Power It Needs To Operate Correctly And Safely. Power Supplies Can Be External (Like A Laptop Charger) Or Internal (Like In A Desktop Computer).*

What Are The Three Types Of Power Supply?

- *There Are Three Subsets Of Regulated Power Supplies: Linear, Switched, And Battery-Based. Of The Three Basic Regulated Power Supply Designs, Linear Is The Least Complicated System, But Switched And Battery Power Have Their Advantages.*

What Is An Example Of A Power Supply?

- *Power Supplies Generally Refer To Generators, Power Plants, Batteries, And Solar Cells (Photovoltaic Cells). This Section Describes The Basic Knowledge Of Power Supply Units (Power Supply Circuits) That Convert Power Into Suitable Power Used For Electrical Appliances.*



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What Is Motherboard?

- *A Motherboard Is The Main Circuit Board In A Computer, Acting As The Central Hub That Connects And Allows Communication Between All Essential Hardware, Including The CPU, RAM, Storage, And Graphics Card, Distributing Power And Data Pathways So The System Can Function As A Whole. It's A Complex Network Of Circuits (Traces) On A Rigid Board With Sockets, Slots (Like *pcie*), And Ports (Like *usb*) For Components And External Devices, Essentially The "Mother Of All Boards" That Makes Everything Work Together.*

Why Is It Called A Motherboard?

- *Why Is It Called A Motherboard? It's Called A Motherboard Because It's The Main Circuit Board. Much Like The Term "Mothership," The Word Motherboard Signifies Its Essential Nature. Additional Circuit Boards Can Be Plugged Into A Motherboard, And These Are Known As "Daughterboards."*

Why Do We Use A Motherboard?

- *The Motherboard Is A Vital Bit Of Kit That Acts As The Central Hub, Connecting Up All The Other Hardware Components Within A Computer. It's A Platform For Essential Components Such As The CPU (Central Processing Unit), GPU (Graphics Processing Unit), RAM (Random Access Memory), Storage Devices And Lots Of Peripherals.*

