

Portfolio #6

Computers are machines that automate processes from creating this document, spreadsheets, or even simple arithmetic calculations, are done in these machines that we use in day to day basis, computer is an electronic device that manipulates information or data, it has the ability to store, retrieve, and process data. There are two major components of computers the hardware aspect, and software aspect, hardware is the ones that does the grunt work or the that do processing in terms of providing calculation, and software perse is the instruction or the guide on what to do with the process, and what to do next.

With the emerging variety of use cases like data-centers, cloud storage/computing, AI learning, ML learning there are computers tailor fit for that kind of uses, so on this discussion we will explore more about the different types of system units, from your personal computer, to supercomputers that people use to host servers.

Type of computers	Name/ Brand	CPU	Memory	Processi ng Speed	Calculat ing power	Workin g principl e	Energy Consump tion	Field in use
Supercomputer	Fugaku	ARM-bas ed CPU	4.85 PiB	442 PFLOPS	1.42 Exaflop s	Parallel Proces sing	30 MW	Fugaku have been used to covid-19 related research
Mainframe	IBM z15	CISC-Ba sed CPU	40 TB	5.2 GHz	N/A	Batch/ti me-sha ring	N/A	Enterprise operations, mainly for banking, or large companies like data centers.
Mini Computers	HP Victus	AMD R5 5600H	16GB	3.30 GHz	N/A	Single-User	200W	Used for sing users daily drive, writing essays, entertainment
Server	Dell PowerEdge R6515	AMD EPYC	2TB	3.35 GHz	N/A	Client-Server Model	550-700 W	Hosting server, databases, and enterprise systems
Workstation	HP Z	Intel	64 GB	3.5 GHz	N/A	Multi-U	300W	Used for

		Xeon				ser/Specialized		graphics processing, CAD, or simulation/animations
Micro Computers	Raspberry Pi 5	ARM Cortex A76 CPU	2-8GB	2.4GHZ	N/A	Embedded systems/ IoT	27W	Robotics hobby projects, light-weight processing, small web hosting

Compare and contrast:

Micro Computer vs Mini Computer

Micro computer is a really small computer mainly used for hobbies, and embedded systems, and is limited by it's processing speed which only an ARM cpu, while the mini computer is used for many purposes like servers for small companies, automation,

Reference:

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