**iPad model**

We are using the 12.9 inch iPad pro 2022, as it is quite recent, and the most powerful model

**Motherboard**

Motherboard is the component that ties everything together, and provides power

The ipad model uses Apple iPad Pro 12.9 6th gen A2764 Power Logic Board

Includes

Wifi capabilities, connectors for the CPU, memory, storage, and all other parts of the device[5]

Acts as a circuit board which connects all parts, distributes electricity from the battery, and allows parts to ‘talk to’ each other[4]

**OS**

The iPad uses iPad OS 16

Includes Features for productivity, security, accessibility, and much more[1]:

Siri allows you to quickly perform actions or access apps

Stage manager offers a new way to multitask and improve productivity

Improved security and face ID allows for more convenient and safe sign ins

**Neural Engine**

A marketing term used by apple

For AI use mainly

A group of specialized cores dedicated to speeding up AI operations and machine learning tasks[12]

These tasks include Siri, speech recognition, accessibility assistants, and much more

The Neural Engine itself has 16 cores, and is an extremely powerful way to perform Ai related tasks

**CPU**

“Brain” of the computer

iPad uses the M2 pro chip

Processes and executes instructions, most often from the hardware and software programs running on the device. The CPU performs arithmetic, logic, and other operations to transform data input into more usable information output.[8]

The M2 contains dedicated neural network hardware in a 16-core Neural Engine capable of executing 15.8 trillion operations per second.[9]

**Memory**

Used for immediate data storage and retrieval[6] and this device comes with:

8GB RAM on models with 128GB, 256GB or 512GB storage.

16GB RAM on models with 1TB or 2TB storage.[3]

**Graphics Card**

Responsible for calculating images in a computer, which can then be displayed on a monitor.[10]

The GPU in this device is integrated into the CPU. Integrated GPUs use shared system memory(RAM), which allows them to conserve power by utilizing the existing resources of the CPU.[11] This gives the Ipad more battery life.

**Audio Devices**

Two speakers on either side

**Storage Devices**

NAND flash memory is a type of electronic storage found in devices such as the iPad Pro, with capacities ranging from tiny to big (e.g., 16GB to several terabytes), allowing data to be stored electronically without the necessity of moving components.

**Input Devices**

Apple Pencil has pixel-perfect precision and industry-leading low latency, making it ideal for drawing, sketching, coloring, taking notes.

The Magic Keyboard Folio is the ideal iPad accessory. It has a fantastic typing experience, a built-in touchpad for precise jobs, and a 14-key function row.

**Output Devices**

The AirPods Pro (3rd Edition) are a pair of wireless headphones that have a slew of new and improved features.

Such is personalized spatial audio, fast connections, exceptional detection abilities, and many more. features

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