Second:

Graphics processing unit (GPU)

- A **GPU (Graphics Processing Unit)** handles **graphics,** images**, and lots of small tasks at once**.
- **GPU is great for gaming ,AI,video ,science**
- **Made for parallel tasks and visual powe**
- **GPU uses:**

- Renders images and videos — (shows pictures, animations, and 3D graphics.)

- Accelerates gaming performance —(gives smoother and faster graphics.)

- Speeds up video editing — (makes editing faster and smoother.)

- Helps in AI and machine learning —(trains models much faster.)

- Used in data science —(processes lots of data at once.)

- Image of a GPU:

- **GPU**: NVIDIA GTX 1660, 6 GB VRAM
- Types of GPU:

  Integrated GPU:

  Built into the CPU.

  Uses system memory

  Good for basic tasks (browsing, watching videos).

  Dedicated GPU:

  Separate from the CPU

  Has its own memory .

  More powerful – good for gaming, AI, editing.

- **KEY PARTS of a GPU:**

  Cores: Thousands of tiny processors for multitasking.

  VRAM (Video RAM): Stores graphics and textures.

  Shaders: Create visual effects.

  Cooling system: Keeps it from overheating.

- **Popular GPU brands:(** NVIDIA,AMD ,INTEL)