



Input Devices

Keyboards

QWERTY	Most common layout; inefficient for speed.
DVORAK	Optimized for faster typing speeds by placing common letters on the home row.
Membrane Keyboard	Uses pressure pads; inexpensive but less tactile feedback.
Mechanical Keyboard	Uses individual mechanical switches; durable with better tactile feedback.
Wireless Keyboard	Connects via Bluetooth or radio frequency (RF).

Pointing Devices

Mouse	Optical or laser; used for cursor control. DPI (Dots Per Inch): Sensitivity measure.
Trackball	Stationary device with a ball; requires less desk space.
Touchpad	Integrated into laptops; uses finger gestures for control.
Touchscreen	Allows direct interaction with the display.
Stylus	Pen-like device for precise input on touchscreens or graphic tablets.

Other Input Devices

Microphone	Converts sound into an electrical signal.
Webcam	Captures video and images.
Scanner	Digitizes documents and images.
Barcode Reader	Reads barcodes for product identification.
MIDI Controller	Musical Instrument Digital Interface; used for music production.

Output Devices

Display Devices

LCD (Liquid Crystal Display)	Common in laptops and monitors; uses liquid crystals to display images.
LED (Light Emitting Diode)	Backlit LCDs; energy-efficient and brighter.
OLED (Organic Light Emitting Diode)	Emits light directly; better contrast and viewing angles.
Projector	Projects images onto a screen or surface.
Resolution	Number of pixels (e.g., 1920x1080 - Full HD).
Refresh Rate	Frequency at which the image is updated (e.g., 60Hz, 144Hz).

Audio Output

Speakers	Produce sound from electrical signals.
Headphones/Earphones	Personal audio output devices.
Sound Card	Processes audio signals for output.
DAC (Digital-to-Analog Converter)	Converts digital audio signals to analog.

Printers

Inkjet Printer	Sprays ink onto paper; suitable for photos and color documents.
Laser Printer	Uses toner and a laser to create images; faster and more efficient for text documents.
3D Printer	Creates three-dimensional objects from digital designs.
Thermal Printer	Uses heat to create images on special paper; common in receipts.

Storage Devices

Internal Storage

HDD (Hard Disk Drive)	Mechanical storage; higher capacity but slower.
SSD (Solid State Drive)	Flash memory; faster and more durable than HDDs.
NVMe SSD	High-performance SSD that connects directly to the PCIe bus.

External Storage

USB Flash Drive	Portable flash memory storage.
External HDD/SSD	External versions of internal drives.
SD Card	Secure Digital; used in cameras and mobile devices.

Optical Storage

CD (Compact Disc)	Stores up to 700MB.
DVD (Digital Versatile Disc)	Stores up to 4.7GB (single-layer) or 8.5GB (dual-layer).
Blu-ray Disc	Stores up to 25GB (single-layer) or 50GB (dual-layer).

Communication Interfaces

Wired Interfaces

USB (Universal Serial Bus)	Connects various peripherals; different versions (USB 2.0, 3.0, 3.1, 3.2, USB4) with varying speeds.
HDMI (High-Definition Multimedia Interface)	Connects displays and audio devices; transmits both video and audio signals.
DisplayPort	Alternative to HDMI; commonly used for connecting high-end graphics cards to monitors.
Ethernet (RJ45)	Connects to a network; provides wired internet access.
Audio Jacks (3.5mm)	Connects headphones and microphones.

Wireless Interfaces

Wi-Fi (Wireless Fidelity)	Connects to wireless networks; different standards (802.11a/b/g/n/ac/ax) with varying speeds and ranges.
Bluetooth	Connects short-range wireless devices; used for headphones, keyboards, and mice.
NFC (Near Field Communication)	Enables short-range communication; used for mobile payments and data transfer.