

# Computer hardware design

- Given three types of storage devices used in technology systems
- Explain what automated technology system is
- What is RFID?
- Explain the function of hardware components

## Introduction

The term hardware is used to describe any of the physical devices and components used within a technology system. It includes different types of computer and other digital devices for inputting and outputting and data storage.

## Fetchers and usage of hardware devices.

System	fetchers	Key usage
Personal computer (pc)	Processor type e.g. single core Quad core Dual core  Process speed 1.6 or 2.6 GHz or higher type of operating systems e.g. windows,mac,linux Amount of bod random access memory e.g. 4gb or higher The network should be wired or wireless	Running apps such as office

Servers	fetchers	Key issues
Personal computer	powerful computer and lots of space	Controlling a network
Laptop computers	portable computer	Mobile computer Connectivity
Gaming console	Computers design for gaming with a high quality graphics card	Gaming
Programmable portable devices	Anything with a digital control for example microwave oven	Controlling hardware

### Input devices

- Keyboard
- mouse
- microphone
- digital camera
- scanner
- sensors

### output

- speakers
- monitor
- headphones
- chargers
- force feedback devices
- printers

### storage

solid state drive (ssd)

optical media

dvd

cd

Hard drive

### Automated systems

Automated technology systems (also known as automated computer system) monitor and perform activities on our behalf examples include central heating systems that regulate our environment and robots that manufactory

Automated system	What is it?	Input devices	Output devices
Self-service check out	Most supermarkets use a self-service where you are allowed to scan your purchases	<p>Scales are used to weigh the goods before and after scanning.</p> <p>A scanner is used to read the barcode from the item and to read your loyalty cards</p> <p>payment inputs are taken from cards coins or notes</p>	Monitors and speakers are used to give or to explain instruction on how to use the check out a printer is used to print out a receipt and an output device is to give change
Production line	To make cars or other products	<p>Optical sensors to locate product components</p> <p>Pressure sensors to feel product components</p>	Controlling robots to make products

Magnetic strip readers used to read cards with a black box on the card

Optical character readers to scan documents and text

Optical mark readers to input surveys

RFID known as smart labels used as barcode on products and also can be used in mobile phones