

# **Computer Workshop**

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## **Unit-2**

### **Assembling Desktop**

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# Objectives

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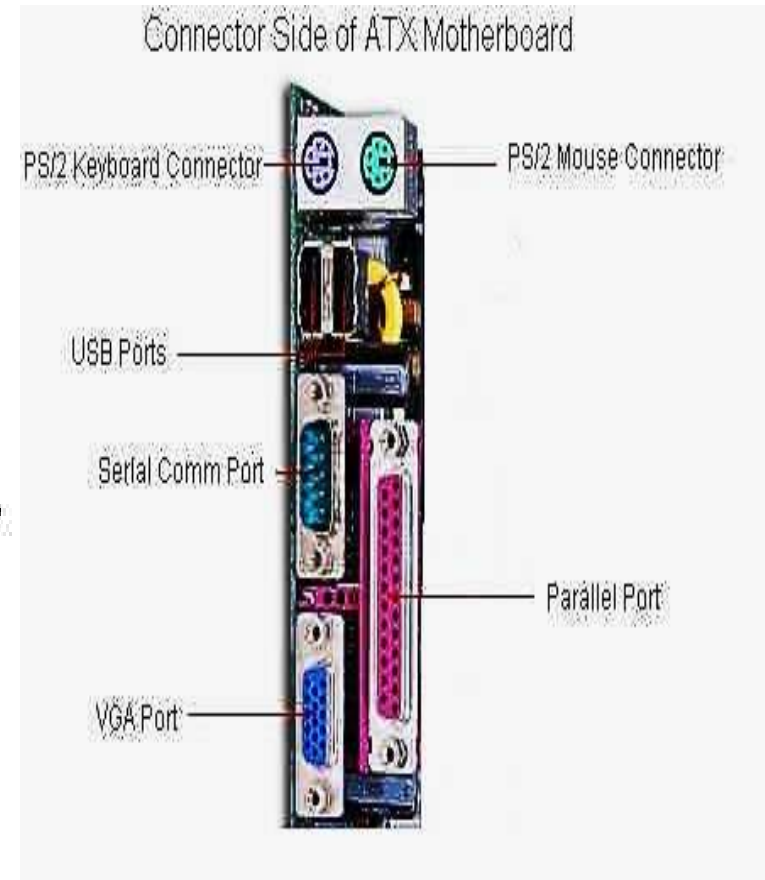
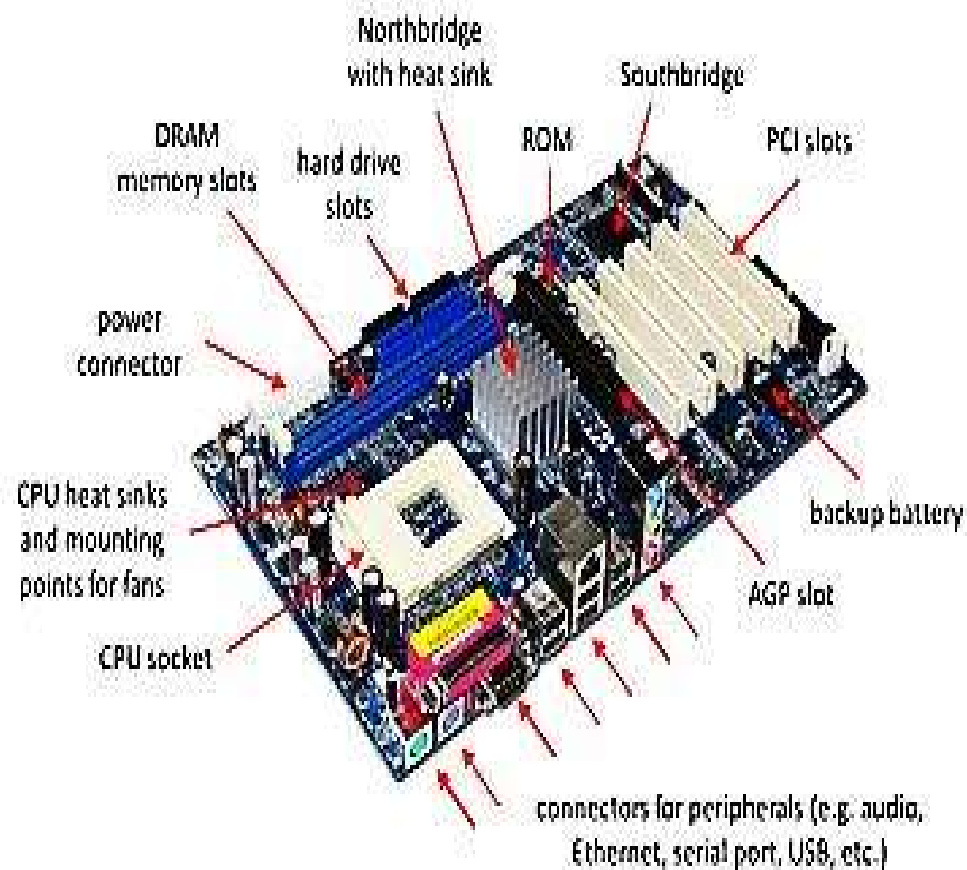
- *To demonstrate assembling and disassembling of PC with power supply, internal cabling, Motherboard and PCI Device*

# Objectives

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- To Know the different parts of the PC
- Assemble your own PC
- Step by step demo to assemble the PC (Setting of motherboards, memory, hard disk, processors, CD-ROM, SMPS and other devices)

# Review of unit-1



# Preparation

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**Area to Work-  
Table/Open Space**



**Tools – Screw Driver, Pliers, Anti-Static Wrist Strap, Screw, Standoff**



# Precaution

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- Before starting to disassemble the computer tower, completely power down and unplug the computer.
- Remove any jewelry made of metal from your fingers, including bracelets, rings, and watches. Even when your device is unplugged, there can still be some electric charge left..
- Make sure your hands are completely dry to avoid damaging any mechanical parts as well as to avoid electrocution.
- For the same reason as above, avoid sweat by working in a cool environment..
- Before touching any part within the tower, put your hands against another metal surface (such as the computer casing) to remove static charge, which may damage sensitive devices.
- Prepare a place to keep any screws you may remove. A container or piece of paper with labels for each part (casing, motherboard, CD drive, etc) is ideal to avoid confusion between the similar-looking screws.

# Precaution

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- Handle all parts with care. Place each piece you remove carefully down onto a stable surface.
- If a component does not come out easily, do not forcefully remove it. Instead, check that you are removing it correctly and that no wires or other parts are in the way.
- Be careful when holding the motherboard, it's underside actually quite pointy and able to hurt you.
- Never attempt to remove the power source, a box attached to the side or bottom of the unit to which all cables are connected.
- When removing any cables, wires or ribbons, make sure to grasp the wire at the base or head to keep it from breaking.
- Take note that the three of the most damaging things to a computer are moisture (sweat, drinking water), shock (electric or from being dropped) and dust.

# Precaution

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*Have a safe experience in assembling  
your computer!!!*





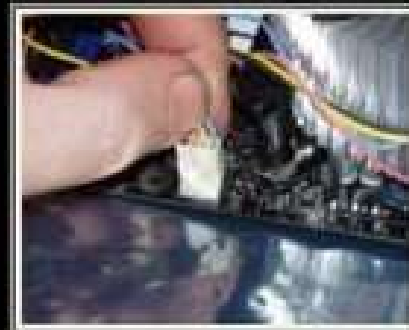
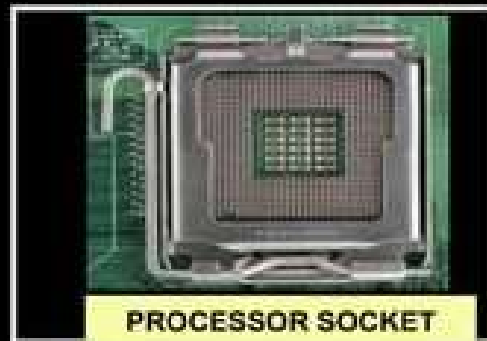
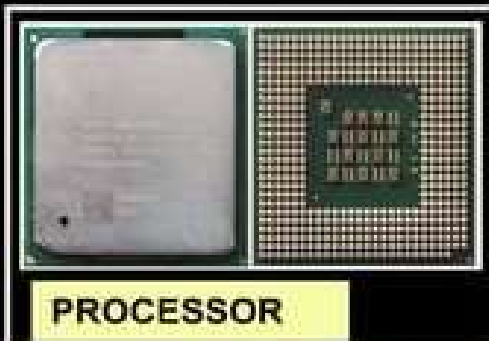
# Component list

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- **Motherboard**
- **Processor**
- **Memory modules(RAM)**
- **Hard Disk Drive(or SSD)**
- **DVD-RW**
- **Cables**
- **Monitor**
- **Cabinet chassis with SMPS**
- **Spike guard (multi-plug)**

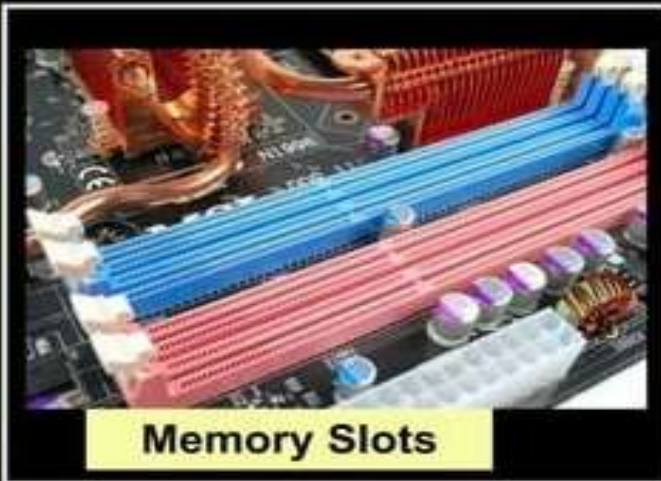
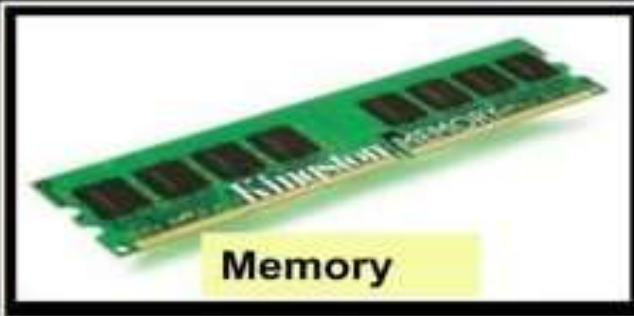
## Step-1: Install the processor and processor cooler onto the motherboard

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## Step2: Install the memory module on the motherboard

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## Step-3: Install the motherboard into the computer chassis

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## Step-4: Installation of HDD and DVD ROM Drive

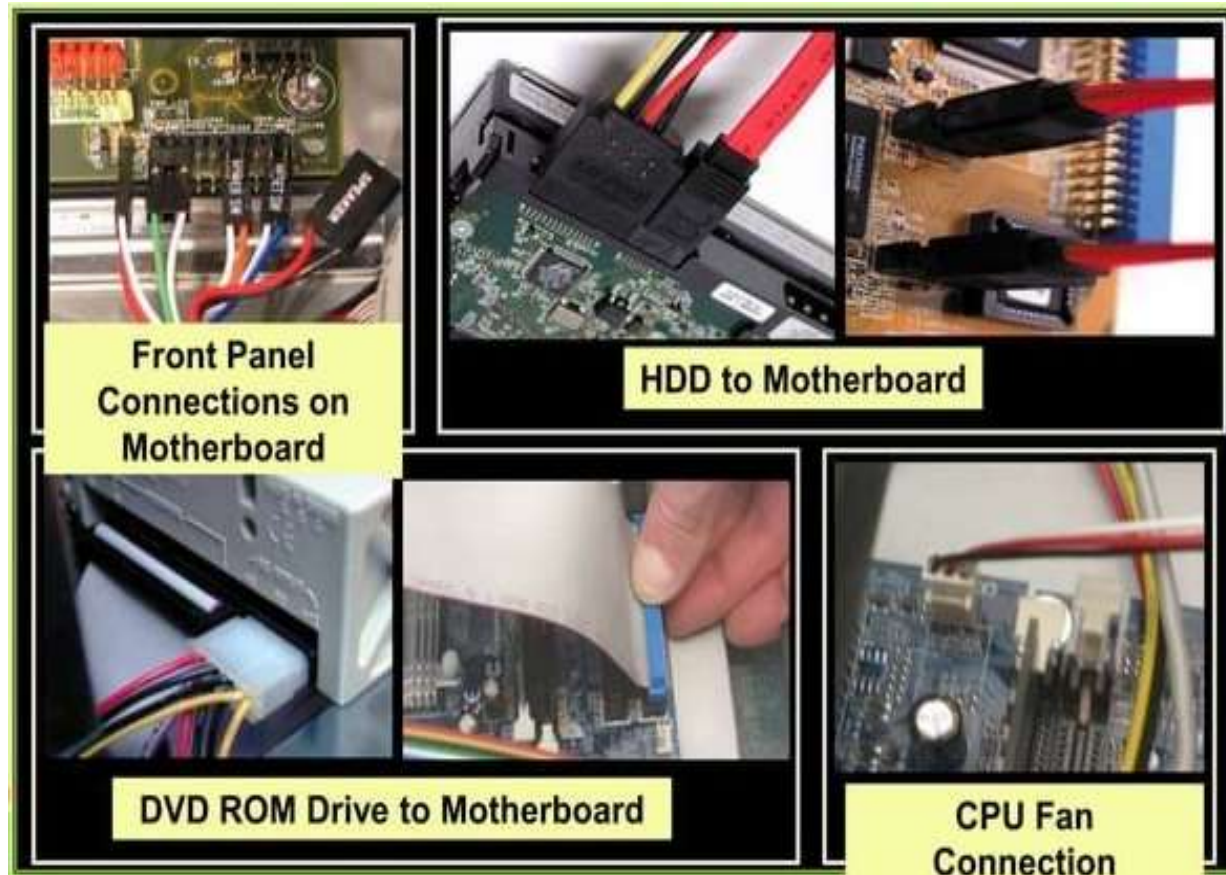
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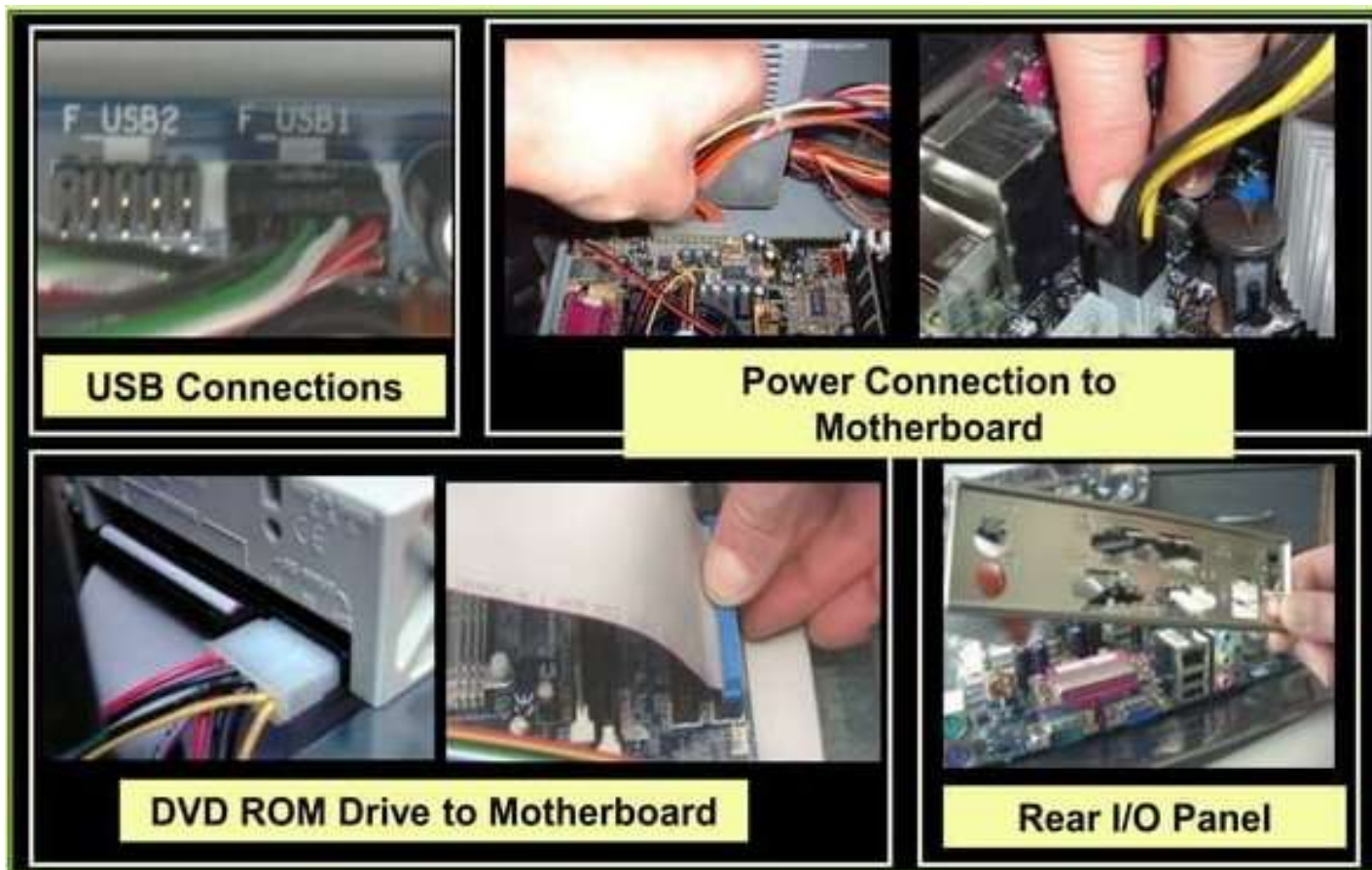
## Step 5a: Component connection inside PC

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## Step 5b: Component connection inside PC

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## Step 6: Connecting the peripherals devices





## Step 7: Powering the computer

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- Switch on the mains
- Switch on the Spike Guard
- Switch on the monitor
- Switch on the CPU System

Now you should get the booting screen

# Glossary

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**PC : Personal Computer**

**I/O : Input Output**

**DVD : Digital Versatile Disk**

**TFT LCD: Thin Film Transistor Liquid Crystal display**

**SMPS : Switched Mode Power Supply**

**HDD : Hard Disk Drive**

**SSD : Solid State Drive**

**PCI : Peripheral Component Interconnect**

# Summary

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- **Step 1: Install the processor and processor Cooler on to the motherboard**
- **Step 2: Install the Memory module on the motherboard**
- **Step 3: Install the motherboard into the Computer Chassis**
- **Step 4: Installation of HDD and DVD ROM Drive**
- **Step 5: Component connection inside PC**
- **Step 6: Connecting the peripheral devices**
- **Step 7: Powering the computer**

# **Assignment**

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- **What do you mean by assembling a computer?**
- **What is the need of assembling a computer?**
- **What are the precaution to be taken before assembling or disassembling of computer?**
- **Write down the steps to assemble the computer.**