Lesson Material – (2) Presentation Slides

A CLASS The Active Classroom
The Education University of Hong Kong

Slide 11

Slide 12

6. Power Supply Unit

- Converting AC power to DC power for the component

Slide 13

7. GPU (Graphics Processing Unit)

- Specially designed for heavy graphic load work.

Slide 14

BUILD A PERSONAL COMPUTER (PC)

Slide 15

Why DIY your own computer?

- Fully customise the parts base on your needs
- Save money by comparing to pre-built computers with similar hardware
- Upgrading single component without concerning the warranty
- Learn a new skill : D

Slide 16

Tools

Required
Screwdrivers

Optional
Scissors   Flashlight   Cable

Slide 17

Safety 101

Hands away from the connectors
(Stay away from anything is gold)

Keep yourself and the component away from electrostatic discharge
(Touch something metal and grounded)

Slide 18

Safety 101

Screws are fine when they are fine
(Keep the screws tighten with proper pressure)

Keep the hardware away from magnetic
(Use wooden table without magnetic tray)

Slide 19

Safety 101

Power the device only when it is ready
(Connect the power cord only when all works are completed)

Stay yourself safe by holding for a few minutes after unplugging
(Start working on the component 1-2 minutes after unplugging the power cord)

Slide 20

Let's Build

A CLASS **The Active Classroom**
The Education University of Hong Kong

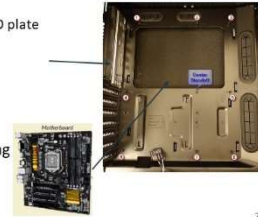### Step 1: Open the Case

1. **Remove** the back screws
2. **Take** side cover off

21

Step 2: Mount Motherboard

1. **Screw** standoffs into the case
2. **Install** the I/O plate
3. **Fasten** the motherboard on top of the mounting standoffs
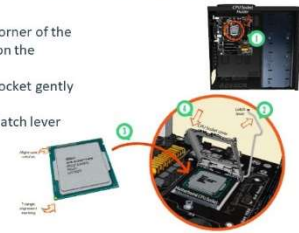

22

Step 3: Mount Processor (CPU)

1. **Lift up** the latch lever
2. **Open** the CPU socket cover

23

Step 3: Mount Processor (CPU)

3. **Hold** the CPU by *its sides*
4. **Line up** the triangle on the corner of the CPU to the triangle marked on the motherboard
5. **Place** it down into the CPU socket gently
6. **Close** the socket cover
7. **Lock** it by putting down the latch lever

24

Step 4: Install CPU cooler

1. **Apply** thermal paste to the back of CPU
2. **Fix** the CPU cooler in position
3. **Plug** the power cable attached to the cooler fan into the motherboard

25

Step 5: Install Power Supply (PSU)

1. **Mount** the PSU and fasten with screws to the case
2. **Plug** the largest cabling connector into the motherboard
3. **Plug** the 8-pin cable into the CPU

26

Step 6: Mount RAM

1. **Press to open** the clips of the RAM slots
2. **Line up** the notch on the RAM stick with the slot
3. **Press** it firmly down into the slot

27

Step 7: Install Graphics card

1. **Remove** the expansion slot covers from the rear of your case
2. **Slots** the graphics card into a PCI expansion slot
3. **Tighten** the screws of the slot graphics card
4. **Plug in** the power cable from the PSU into the graphics card (if needed)

28

Step 8: Mount storage drives

1. **Mount** drives in the case drive bays
2. **Connect** the drive to the motherboard
3. **Plug in** power cable to the drives from PSU

29

Step 9: Connect Front Panel Connectors

1. **Identify** the cabling from the front panel ports of the PC

30

System Unit of Computer

31

Exit Ticket
What do you think?

32