

## **SNS COLLEGE OF TECHNOLOGY**

Coimbatore-35
An Autonomous Institution



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

## **DEPARTMENT OF MECHATRONICS**

#### 19MCB302- INDUSTRIAL ELECTRONCIS & APPLICATION

III YEAR V SEM

UNIT 3 – DC-DC CONVERTER

TOPIC - SMPS

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#### **APPLICATION**

















A switched-mode power supply (SMPS) circuit which is designed for obtaining the regulated DC output voltage from an unregulated DC or AC voltage.









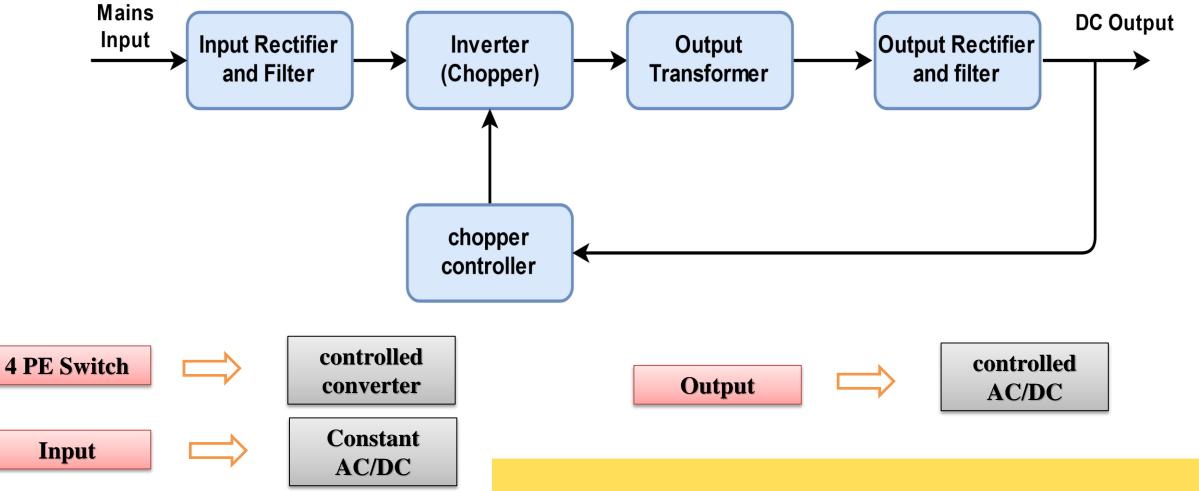
## **SMPS** advantages:

- High efficiency
- Compact
- Costs
- Flexible technology

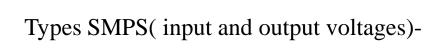


#### <u>SMPS</u>









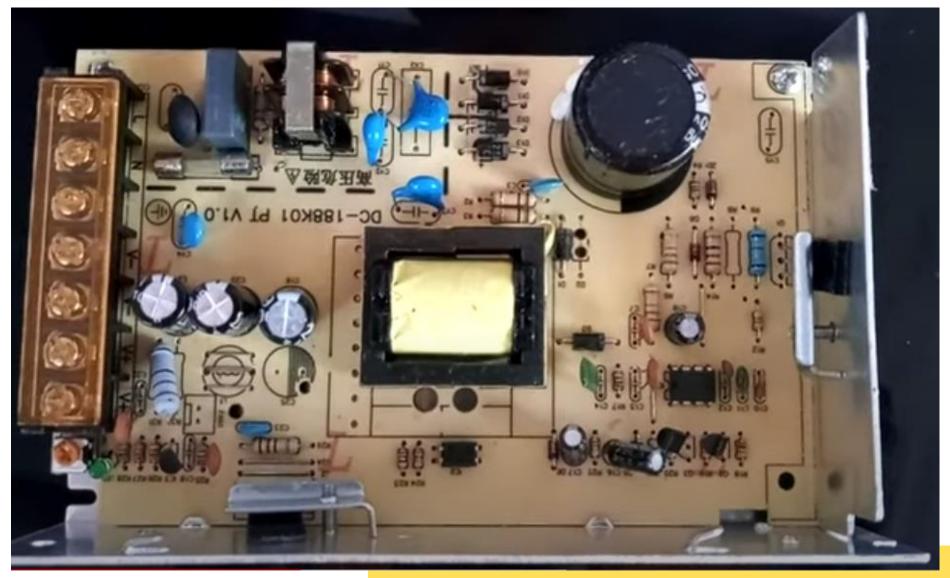


- AC to DC
- DC to DC
- DC to AC
- AC to AC



# **Practical Explanation**







# Assessment - find the SMPS ciruit..? And Application.?

















#### References

- 1. <a href="https://www.google.com/imgres?imgurl=https%3A%2F%2Fwww.wikihow.com%2Fimages%2Fthumb%2Fd%2Fd4%2FBuild-a-Personal-Desktop-Computer-Step-1.jpg%2Fv4-460px-Build-a-Personal-Desktop-Computer-Step-1.jpg.webp&imgrefurl=https%3A%2F%2Fwww.wikihow.com%2FBuild-a-Personal-Desktop-Computer&tbnid=v6T5quW9TYLvMM&vet=12ahUKEwinjpnOvt3qAhVEQn0KHRirBX8QMyhLegQIARB4..i&docid=95vwhi20Uhp5sM&w=460&h=345&q=Desktop%20component&ved=2ahUKEwinjpnOvt3qAhVEQn0KHRirBX8QMyhLegQIARB4</a>
- 2. <a href="https://www.edgefxkits.com/blog/switching-mode-power-supply-smps-application/">https://www.edgefxkits.com/blog/switching-mode-power-supply-smps-application/</a>
- 3. <a href="http://www.egr.unlv.edu/~eebag/EE-442-642%20Introduction%20F14.pdf">http://www.egr.unlv.edu/~eebag/EE-442-642%20Introduction%20F14.pdf</a>
- 4. <a href="https://www.youtube.com/watch?v=djbJm-xWo2w">https://www.youtube.com/watch?v=djbJm-xWo2w</a>
- 5. https://www.youtube.com/watch?v=jx5l2Fbil8U

