# Analog Electronics

## Experiment 3: Class B and class AB amplifier

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Slot: L33+L34

## Aim:

To design and analyze the class B and class AB amplifier.

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# Class B amplifier

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## Design:

$I_L$ =9.0765/10

=0.90765A

I dc =2*I L /π

= 0.57782A

P in =V cc x I dc

=6.93384W

P o =V out x $I_L$

=4.1191W

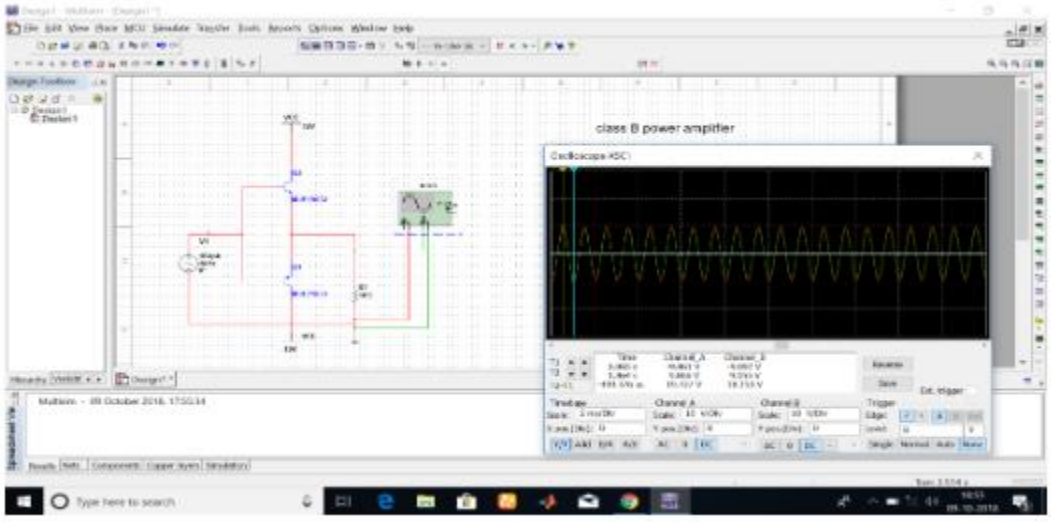
η(efficiency)=[P o /P in ] x 100

=59.4%

Power dissipated by each transistor:

P=(P in -P o )/2;

= 1.40737W

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# Class AB amplifier

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## Design:

I L =9.838/10

=0.9838A

I dc =2*I L /π

= 0.62630A

P in =V cc xI dc

=7.5156W

P o =V out xI L

=4.839W

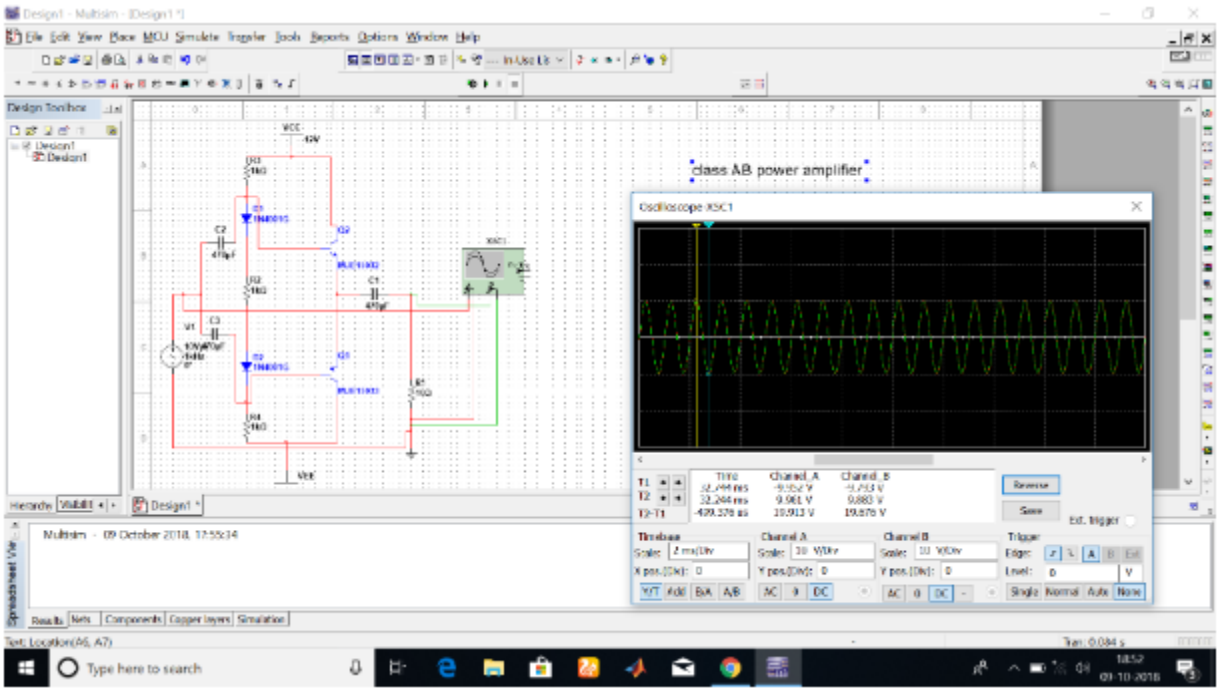
η(efficiency)=[P o /P in ] x 100

=64.4%

Power dissipated by each transistor:

P=(P in -P o )/2;

= 1.3383W

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The end.