

D3 Design Completion Form.

This form should be filled in during the laboratory session. You must get a supervisor to initial each entry and then sign off the completed form at the end. Don't leave all the validation till the end.

You must keep this form safe and make copies of it. The original or a copy must be bound into your report when you submit it¹. You should also keep a copy each for your own records. Unless the original form is included in the submissions the group will not get any marks for technical achievement.

Preparation.

Derivation of equations for gain for each stage and the combined circuit (logbook).	<i>AK</i>
A paper design with values for all components (logbook).	<i>AK</i>
Simulation of the above design.	<i>AK</i>

In the laboratory.

First stage

Input impedance in Ohms.	60.1k	<i>AK</i>
Output impedance in Ohms	3.84k	<i>AK</i>
Voltage Gain	6.47	<i>AK</i>
Advanced		
Voltage gain with C_e removed.	3.67	<i>AK</i>
Voltage gain with C_e bridging R_{e2} and R_{e1} .	114.0	<i>AK</i>
Frequency response measured, recorded in logbook and graph drawn.		<i>AK</i>

Second Stage.

Input impedance in Ohms.	44.7k	<i>AK</i>
Output impedance in Ohms	15.8	<i>AK</i>
Voltage Gain	0.99	<i>AK</i>

Multi-Stage.

Input impedance in Ohms.	60.0k	<i>AK</i>
Output impedance in Ohms	180.4	<i>AK</i>
Voltage Gain	5.92	<i>AK</i>

Conclusion.

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Handin date ² .	23/2/15	Alex Wooten	Signed Off By. <i>AK</i>

You should handin a paper copy of the report plus a zip file containing an electronic copy of your report, all the simulation files and results. Aside from the report each partner should submit the same files.

¹ One partner has the original the other a copy.

² One working week after laboratory date.