

Exam

- Chapters 1-10 of the book
- “Oral with preparation”
- Questions on paper, ~60 min preparation time, Open Book
- May write down answers, summary of answers, scribbles for your own reminding, ...
- Followed by oral part
- With questions as starting point for the exam, the oral is (hopefully) not exclusively about these questions
- Make an appointment with me, in next exam period or first 2 weeks of next quarter (before Nov 18th, I will be to a conference on 18th and 19th)
- When you are ready (that is, when you have studied enough)
- See next slides for example exam questions

Example Exam Question 1

1 Detailed Routing

Consider channel routing, the left-edge algorithm and the channel routing problem below. - Denotes a position not to be connected.

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TOP = 5 1 1 2 3 2 4
BOT = 4 2 - 5 - 3 3
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- a. Draw the vertical constraint graph for this channel and explain its significance for the channel routing problem.
- b. Draw the horizontal constraint graph (or interval graph) for this channel and explain its significance for the channel routing problem.
- c. Give a solution for this channel using the left-edge algorithm.

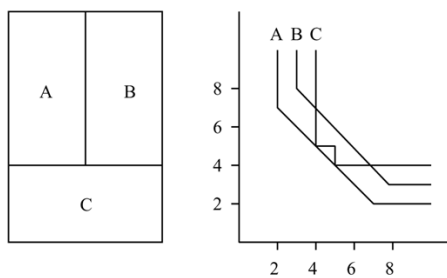
3 Global Routing

- a. What is the difference between *sequential* and *concurrent* global routing?
- b. What are their relative advantages and disadvantages?

Example Exam Question 2

2 Floorplanning

Consider the floorplan and shape function below.



$$A = (2,7) (7,2) \quad B = (3,8) (8,3) \quad C = (4,5) (5,5) (5,4)$$

- Give the shape function of the total floorplan.
- Determine the dimensions of the modules such that the total area of the floorplan is minimal.