

This assignment is **mandatory** and is due **Monday 1/29 11:59pm**.

## For both the analog and digital teams

Please complete your section(s) of the analog design doc or the digital design doc (see Piazza for the links) with the following items:

- 1-2 sentence description of the functionality of your block/system
- Specs (if applicable)
- Other blocks/systems with which your block needs to interface
- Must-have goals - goals (features, or specs) which must be met for the basic functionality of your block/system. (e.g. description & specs for a basic ADC which may be a bit slow and inefficient but otherwise functions)
- Stretch goals - extra goals (features, spec optimization) which would be nice/desired but not strictly necessary (e.g. more optimized/faster/efficient ADC)

## For the analog team only

Based on your research into your target block/system and your readings of last year's blocks, create a draft/rough schematic of your block, showing the implementation, ports, possible tuning bits, etc.

Include your schematic alongside your write-up above.

## For the digital team only

Create a skeleton Chisel module of your block/system with some interface in your assigned repo on Github. Your repo assignments are located on Piazza. By the deadline of this assignment, you should check in your code to the appropriate repository for your block/system.

- Note: the interface doesn't have to be fixed. **You will not be locked into using this interface for the rest of the semester** - this is just an initial push to get you all thinking about how your blocks/systems will work together.
- Feel free to trash this skeleton module after the deadline if it doesn't end up fitting.
- No need for an implementation yet (but consider starting to write unit tests! [example](#))
- For complex interfaces like TileLink, you don't need to actually integrate your repo yet - you can just leave it as a comment - e.g. "`// TileLink interface`".

Please check in your code to your assigned Github repo. Do NOT paste your code into the design doc. (That's what Git is for.)