



# EEL3701 Practical 1

### Practical 1:

- **REMOTE**
- Mon, 26 Feb
- 8:20pm
- Honorlock w/ Zoom



Read the following on our website's Exams page

- *3701 Honorlock Rules & Polices*
- *Instructions extracted from practical*

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- 115 minutes (plus 5 minutes for setup).
- Relevant topics include:
  - > Labs 0-3 (including **all** switch & LED circuits); HW 0-8; DAD usage.
- Something relatively simple.
- You will design, debug, and demo for a PI, Dr. Schwartz.
- **NOT** allowed:
  - > **Labs, homework, notes, etc.**
  - > Other student's info.
  - > Another computer, calculator, ...
  - > Cell phone, until your are done and ready to take the required pictures
  - > Documentation of any kind (HW, Labs, Notes, Pinouts).
  - > Pre-built circuits; anything not specifically mentioned as allowed.
  - > Access to anything else not specified.

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# EEL3701 Credit **ONLY** Given for What's Demoed/Simulated

- In order to get partial credit:
  - > If you cannot demo everything, it is up to you to figure out a way to demo at least part of the requirements.
  - > **Points are only awarded for items that are demoed/simulated**, not for designs that are not demoed/simulated.
  - > No points are awarded for designs without demo or simulation.

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### Provided Before Practical

- Prior to the practical, a PI (probably **NOT** your lab PI), will send you a Zoom link to use for the practical.

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### Provided During Practical

- The following information will be provided to you **in the practical**:
  - > On **Family, Device & Board Settings** (or **Assignments | Device**)
    - Select “**Board**”
    - Change the **Family** to “**MAX 10**”
    - Change **Development Kit** to “**MAX 10 DE10 – Lite**”
    - **De-select** the checkbox labeled “**Create top-level design file**”.
  - > When needed, chip descriptions, part numbers, and pin numbers.

<p>On <b>Family, Device &amp; Board Settings</b> (or <b>Assignments   Device</b>)</p> <ul style="list-style-type: none"> <li>• Select “<b>Board</b>”</li> <li>• Change the <b>Family</b> to “<b>MAX 10</b>”</li> <li>• Change <b>Development Kit</b> to “<b>MAX 10 DE10 – Lite</b>”</li> <li>• <b>De-select</b> the checkbox labeled “<b>Create top-level design file</b>”.</li> </ul>
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## Bring to the Practical

- Bring the following to the practical and **within reach**:
  - > **Your PC, with web cam & speakers**
  - > **Your entire 3701 kit (all parts)**
    - Your 74'xxx devices
    - *DE10-Lite*, USB cables, and if necessary, a USB expander
  - > **Your DAD**
  - > One blank piece of scratch paper, with nothing written or printed on either side
- Your breadboard, when the exam begins:
  - > Can have the following on your breadboard:
    - Vcc and GND connected to the PLD PCB and the power rails
    - Note: **During** the practical, don't forget to **connect your DAD's ground, DE10-Lite's ground, and breadboard ground**, thus making a necessary common ground.
  - > Can**NOT** have the following on your breadboard :
    - Any other components or wires
    - Switch circuits or components
    - LED circuits or components
    - 74'xxx ICs

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## Losing Internet Connection

- If you ever have WiFi or other internet connection problems just before or when your practical begins, use your **phone** to connect to Zoom.
  - > Zoom chat with the relevant PI.
    - Describe the issue and continue to try to get back in!
    - The PI will contact Dr. Schwartz.
  - > **As an emergency backup (if you internet goes out), you should learn how to setup your phone as a WiFi hotspot.**

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## Honorlock Problems

- If you are having problems with Honorlock, contact Honorlock and keep trying!
- Also send a Zoom chat message to the PI.
  - >The PI will contact Dr. Schwartz.

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## EEL3701 Honorlock Room Scan, if Requested

- The room scan should be thorough and take about one minute. See [Honorlock: Proper Room Scan](#) (on the front page of our website).
  - >Be sure to how your desk, computer monitor, walls, floor near your computer, and ceiling.
- In addition to the complete room scan, show each of the following:
  - >Both sides of scratch paper
  - >Your breadboard (containing nothing not allowed)

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## EEL3701 Honorlock ID Scan Extras

- After your Honorlock ID scan, show the following to your camera.
  - > Both sides of your scratch paper.
  - > Your breadboard (containing nothing not allowed).
- You will scan and submit images of this paper with CamScanner or equivalent as specified later in this document.

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## EEL3701 Zoom during Practical

- Prior to opening Honorlock, connect to our Zoom link for Practical 1; a PI will send you **your** Zoom link.
  - > Log in to UF's Zoom (with 2-step authentication) <https://ufl.zoom.us/>. Use your **FULL** name in Zoom.
    - Be sure your speaker is **on** & video **off**. (No headphones or ear buds allowed).
  - > In Zoom, be sure to turn off your video before opening Honorlock.
  - > You will start in a single Zoom room, but when you are ready to demo, you will be assigned to private breakout room (with a PI).
- If you have a **question**:
  - > Use Zoom chat to talk to your PI directly.
    - When the PI is in a breakout room, checking off another student, the chat is not available to the PI.
    - Be patient; each PI will have several students.
  - > Do **not** ask for any feedback on a design.
  - > The PI will **not** tell you if your answer is correct or if you have done everything necessary.

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## EEL3701 Paper Submission at End of Practical

- **DURING** the exam
  - > Use of MS-Word (or similar) and email is **NOT** allowed.
  - > No physical phone connection to your computer is allowed.
  - > No printer/scanner is allowed.
- Be sure to **view** the file on your phone **before** submission to assure that it is **complete and clear**.
- Bring **1** completely blank piece of paper and pens/pencils.

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## EEL3701 Paper Submission at End of Practical

- Only after you are completed the rest of the exam (or when 5 minutes are remaining), do the following.
  - > **Archive** your work in **Quartus**.
    - Upload the Quartus archive to your Canvas/Honorlock quiz.
  - > Use your cell phone and CamScanner (or similar) to create a **SINGLE PDF** file.
    - After picking up your phone, **no more writing/work** is allowed!
    - Take a clear picture of your breadboard.
    - Take a clear picture of each utilized side of your scratch paper.
      - The scratch paper must include the **switch/LED legends**.
    - All of this should be in a **SINGLE PDF** file. View the file on your phone before submission to assure that it is complete.
    - Upload this **SINGLE** file to the **Practical 1 – Phone** Canvas assignment.

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## Integrity

- After touching your phone or archiving Quartus, **no more writing/work** is allowed!
- Once you start scanning your paper/breadboard or start archiving you Quartus project, you are **no longer allowed** to make any changes (including the following):
  - > Your circuit design on your breadboard.
  - > Your Quartus design, simulation, or PLD program.
  - > Your scratch paper.
- No more work is allowed, other than the required submission of the two files.

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## Honorlock During Practical

- In Honorlock, you must share your computer screen, video, and audio with the proctoring PI at all times. Do **NOT** close Honorlock until after your demo.
- If you are finished before the time is up, let the PI know, and when the PI has time, they will let you demo.
  - > Tell the PI you are ready by sending **READY** in the Zoom chat.
  - > The PI will instruct you to close Honorlock and you will perform the required demo.
- If you are not finished until the deadline, the assignment will automatically close when time is up. It is therefore **critical** that you upload your files before time is up!
  - > If you do not, then you will **earn a zero** on the Practical.
- When demoing, you will also share your screen and your camera with Zoom.

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## Time Remaining

- Keep your speakers on so that you can hear any announcement that the PI makes.
- The PI will **VERBALLY** tell you when 5 minutes are remaining (and also a few other times, like 37 minutes and 10 minutes remaining).

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## Demo for Practical

- You will have only **ONE chance** to demo your work
  - > If you think you are ready, read the question **AGAIN** to be sure that you completed **ALL** parts of the Practical.
  - > Be prepared to run your design, as instructed, with your DAD connected as specified.
  - > Before closing Honorlock, upload the required files to the Practical Quiz.
  - > **After** you have uploaded your files, notify your PI by sending the message **READY** in the Zoom chat. Do **NOT** leave the Zoom meeting.

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## Demo for Practical

- If you have not demonstrated your solution at least **five minutes** before the practical is due, at that time, you must **stop working** and start the process to upload your files to the Practical Quiz.
  - > Failure to upload your files before the end of the practical will result in a **grade of zero**.
- After completing your uploads, continue in Honorlock and do **not** leave the Zoom meeting.
  - > You **must NOT** leave the Zoom meeting until you demo something (or to tell your PI that you are giving up); if you do give up without a demo, you will earn a zero.
  - > Once you leave Zoom, you will not be able to reenter the Zoom Practical.

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## Finishing your Practical

- After you have demonstrated your Practical solution, close Zoom.
  - >Your are done!

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## Immediately Prior to the Practical

- Below has been shown to prevent problems that have happened to a few students in the past. It wouldn't hurt and could save some aggravation.
  - > Verify that you have your UF ID, passport, or driver's license (for the Honorlock scan).
  - > Clear your cache in Chrome.
    - Reinstall the Chrome Honorlock Extension.
    - Close then reopen Chrome.
  - > Verify that you have the files that you need (and are allowed) available from your desktop.
  - > Reboot your computer.
- Be sure that there is enough light for your face to be clear during the exam (for Honorlock). If not, find a lamp or a different area.

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## Immediately Prior to the Practical

- Close **all programs/applications** other than Chrome.
- Close **all Chrome tabs** other than Canvas.
- Turn off any potential pop-ups that could occur during this assignment.

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*The End!*