

# UNIC-CASS Design-to-Tapeout Meet-up #2 (Aug 30, 2023)

Moderated by:

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# Meetup #2 Agenda

- 9.00 – 9.15: Welcome & announcements/updates (Sergio Bampi & Jorge Marin)
- 9.15 – 9.55: “Introduction to the digital design flow” by Rodrigo Wuerdig (Federal Univ. of Rio Grande do Sul, Brazil)
- 9.55 – 10.10: Q&A

# UNIC-CASS Milestones - 2023

<b>Date</b>	<b>Activity</b>
June 22 <sup>nd</sup>	First Call for Participation
July 28 <sup>th</sup>	Deadline for Students Proposal submission
Aug 17 <sup>th</sup>	WW UNIC-CASS Webinar (world-wide) – Stream from CASS Resource Center
Aug 18 <sup>th</sup>	Announcement : 27 Design teams Selected
Aug 23 <sup>rd</sup> – Oct 30	-Design-to-Tapeout Mentoring sessions -Learn from specially curated educational materials
Nov 6, 2023	Efabless Deadline for Clean & Top-level layout submission
April 2024	Start Chip test/bring-up

# Design-to-Tapeout activities schedule I

Activities	Date/ Deadline	Purpose	Your Deliverables (provide info/links on your GitHub)	We will provide/handle
<u>1<sup>st</sup> Meet-up</u>	Aug 16, 2pm UTC	Introduction & Goal-setting		Kick-off with the selected Design Teams.
<u>Weekly meet-ups</u>	Aug 23, <b>Aug 30</b> , Sep 6, Sep 13, Sep 20	Mentoring and Design groups to present progress. Invite short presentations on topics such as Caravel/Caravan, best practices, pitfalls to avoid. Invited talks. Candidates: eFabless, Digital Flow, Analog Flow , Pitfalls on Schematics, Pitfalls on custom-layout.		
<u>1<sup>st</sup> Design submission</u> [Mock tapeout]	Sept 22		TBD	1. Merge designs 2. Run local pre-checks
<u>1<sup>st</sup> Design Review &amp; Feedback</u>	Sept 29			Feedback on the “merge-run pre-check”

# Design-to-Tapeout activities schedule II

Activities	Date/ Deadline	Purpose	Your Deliverables (provide info/links on your GitHub)	We will provide/handle
<u>Weekly meet-ups</u>	Oct 4, Oct 11	Guide to final submission and solve teams' issues.	A check-list of to-dos to the Design Teams. Evaluate status of potential "drop-outs".	
<u>2<sup>nd</sup> Design submission</u>	Oct18		TBD	Check all blocks are LVS, DRC clean.
<u>2<sup>nd</sup> Design Review &amp; Feedback</u>	Oct 22		Maybe a 1-week extension for late bugs detected	Delivery by Design teams of their finished blocks in GDSII.
<u>eFabless pre-check</u>	Nov 3		Deliver 2 Caravelle drop- ins to e-Fabless to check	
<u>Tape-out</u>	Nov 6	Finish line!		List of "winner teams" included in this Tapeout. List of unfinished Designs to candidate for April, 2024 Tapeout

# Design-to-Tapeout mentoring activities

Aug 23: Introduction to Efabless Caravel/Caravan harness

Aug 30: Introduction to the digital design flow

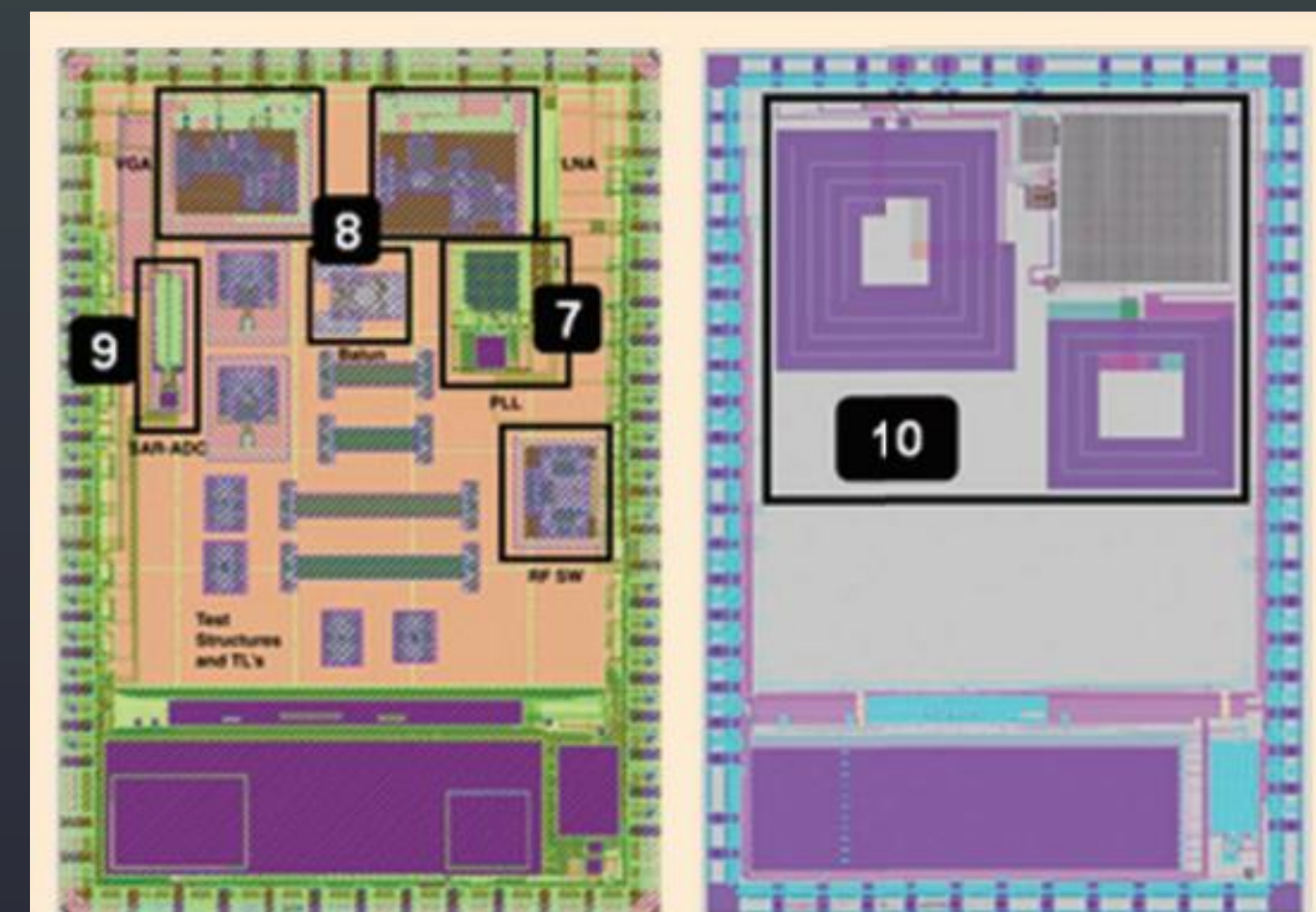
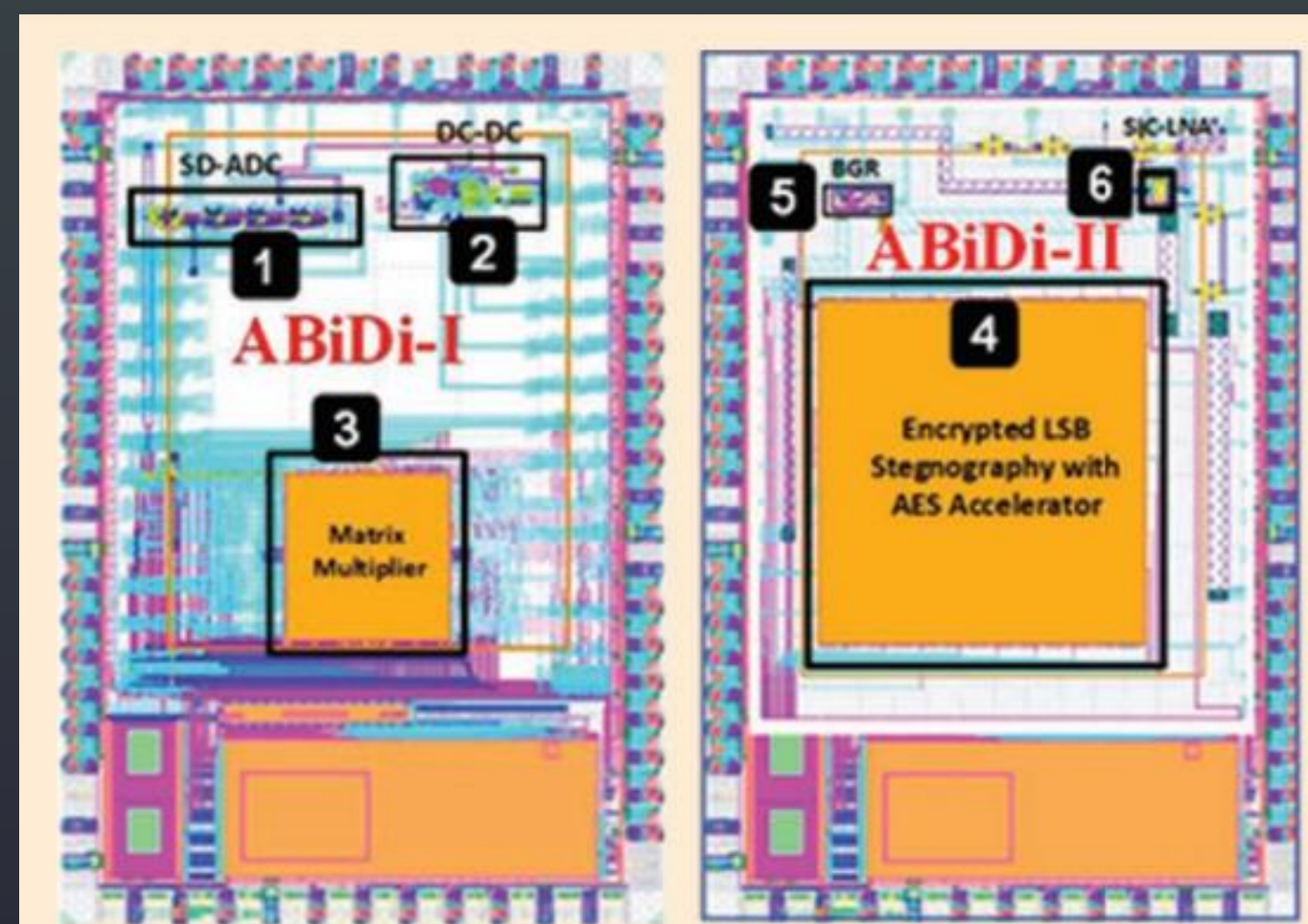
Sep 6: Introduction to the analog design flow

Sep 13: Best practices and pitfalls in digital design

Sep 20: Best practices and pitfalls in analog design

# 1st Design submission [Mock tapeout]

- Challenge: how to fit 27 designs into 4 Caravel/Caravan chips?
- Date: September 22
- As designs consolidate, teams need to organize into groups of ~7 projects and designate a tapeout leader for the merging work
- Mock tapeout will require to use the Efabless online platform precheck to verify initial design → to be explained in detail in next sessions



# Recordings and presentations links

→ UNIC-CASS website:

<https://iee-cas.org/universalization-ic-design-cass-unic-cass>

→ Go to “UNIC-CASS Materials & Tools”

→ Uploaded videos & slides for each session:

<https://iee-cas.org/unic-cass-mentoring-session-recordings-presentations>



**Thank you**