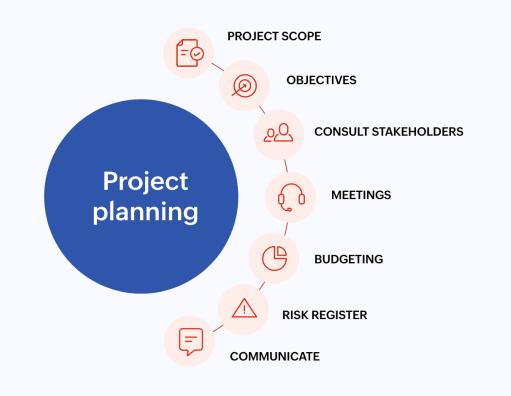
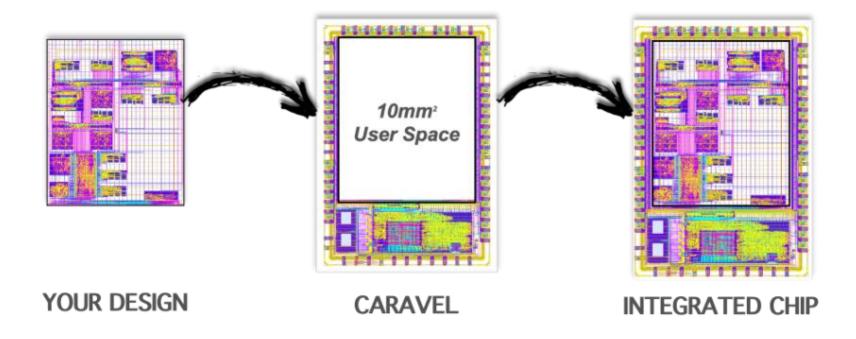
#### P R O J E C T P L A N N I N G

sdmay25-28



## **PROJECT OVERVIEW**

- Digital ASIC (Application Specific Integrated Circuit)
- Reprogrammable ISA
  - o Extending RISC-v o CLU in ALU
- eFabless Process
- Caravel
- Verilog



#### PROJECT MANAGEMENT STYLE

#### • AGILE

- o Iterative
- o Collaborative
- o Client involvement
- o Flexibility
- ROLES
  - o Scrum master
  - o Client
  - o Development team

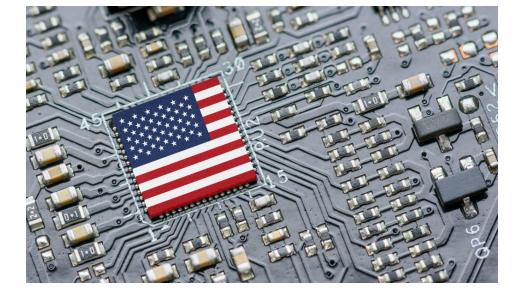


#### TASK DECOMPOSITION

- Gantt Chart
  - o Phases
- AGILE Decomposition
  - o Issues & Assignment
- ◯ GitLab.org > Issue Boards Strategic Initiatives Search or filter results... O 2018 Q3 🛍 🕕 3 💀 231 🕂 O Phase 2 Rollout 🛍 [) 2 🐼 23 🕇 Login reset flow gitlab-org/css\_tooling#1 auto closed Geo Payments upgrade gitlab-org/gitlab-svgs#4 1 Login flow with security questions 23 gitlab-org/gitlab-selenium-server#2 payments Deprecate cash payments gitlab-org/test-zero-config-ci-6#2 AP3 SL3 payments

	Project Start Date	8/26/20	024 (Monday)	Display	Week	6 DONE	DAYS	Week 6 V	Week 7	Week 8	Week 9	Week 10	Week 11
1	Prep			-			-						
1.1	Chip forge Tutorials	ALL	Mon 9/16/24	Mon 9/30/24	15	100%	11						
1.2	CprE 381 Lab hardening		Mon 9/30/24	Mon 10/14/24	15	60%	11						
1.2.1	Lab 1		Tue 10/01/24	Mon 10/07/24	7	100%	5						
1.2.2	Lab 2		Tue 10/08/24	Mon 10/14/24	7	50%	5						
1.3	RISC-v design decision	Calvin	Wed 10/02/24	Sun 10/06/24	5	20%	3						
1.3.1	Research options	Calvin	Mon 10/07/24	Fri 10/11/24	5	0%	5						
1.3.2	Narrow to 3	Calvin	Sat 10/12/24	Mon 10/14/24	3	30%	1						
1.3.3	Decide on RISC-v		Mon 9/30/24	Mon 10/14/24	15	100%	11						
1.4	RISC-v Knowledge	Camden	Mon 9/30/24	Sun 10/06/24	7	100%	5			-			
1.5	Caravel Knowledge	Camden	Tue 10/08/24	Mon 10/14/24	7	20%	5						
1.6	Expandable ISA knowledge		Tue 10/08/24	Fri 10/11/24	4	0%	4						
1.6.1	Compiler		Fri 10/11/24	Mon 10/14/24	4	0%	2						
1.6.2	Adding instructions to compiler	Camden	Tue 10/08/24	Mon 10/21/24	14	10%	10						
1.6.3	Research CGRA	John	Tue 10/15/24	Thu 10/17/24	2	0%	3						
1.7	Acquire VMs for design	Camden	Mon 10/14/24	Mon 10/28/24	15	30%	11						
1.7.1	Access VM	Camden	Tue 10/15/24	Wed 10/16/24	2	100%	2						
1.7.2	Get basic setup done	Camden	Thu 10/17/24	Fri 10/18/24	2	10%	2						
1.7.3	Get required software installed	Camden	Sat 10/19/24	Thu 10/24/24	6	0%	4						
1.7.4	Test software to ensure functionality	ALL	Fri 10/25/24	Mon 10/28/24	4	0%	2						
1.8	Caravel Pins	Nick	Tue 10/15/24	Mon 10/21/24	7	0%	5						
2	Design	y i											
2.1	[Task]				1	0%	-						

### KEY MILESTONES



#### **CPU IP Adoption**

CLU (Custom Logic Unit) Creation

CLU Integration

Chip Hardening

Efabless Verification

Send off to fabricate! (April 11th)

Client's (Dr. Duwe's) Satisfaction

# **KEY RISKS & MITIGATION**



# Infeasibility

Chance: Unlikely Consequence: Major Mitigation: Talk through ideas thoroughly with our advisor.





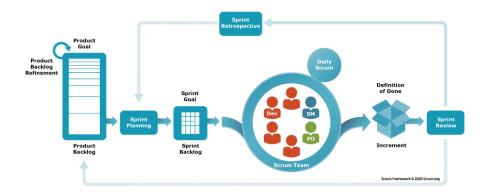
Chance: Likely

Consequence: Minor

Mitigation: Ensure that issues are addressed as quickly as possible. Careful planning.

# CONCLUSION

- We have developed a good understanding of the frameworks for effective project management, SCRUM, AGILE, Gantt charts
- Going forward we can effectively manage the many steps/tasks needed





**Gantt Chart** 

