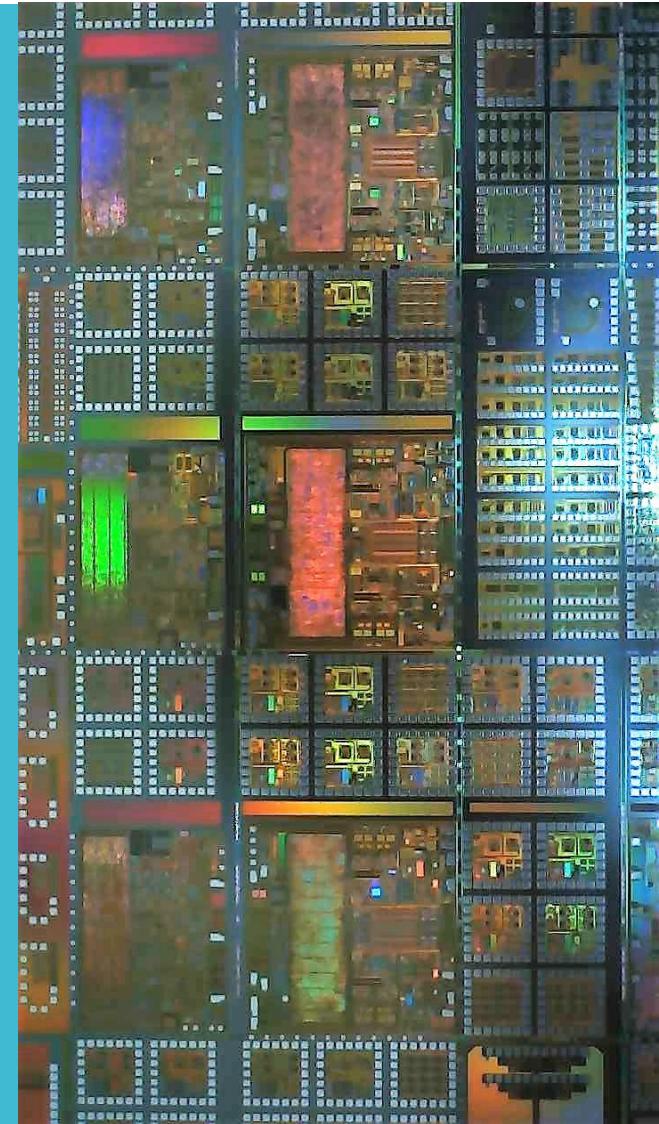


# Class 6: Schedule Management – Part II

## Agenda:

- SC Milstone Schedule
- SC Schedule



# Course Overview

(15 minutes)

Class 1

Introduction &  
Foundations

Class 2

Project Life cycle

Class 3

Risk Management

Class 4

Quality Management

Class 5

Scheduling Part I

Class 6

Scheduling Part II

Class 7

Special Assignment

Class 8

Open discussion  
with Industry expert

# Process Group and Knowledge Area Mapping

Knowledge Areas	Project Management Process Groups © WWW.PM2.BIZ				
	Initiating	Planning	Executing	Monitoring and Controlling	Closing
<b>4. Project Integration Management</b>	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work 4.4 Manage Project Knowledge	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	4.7 Close Project or Phase
<b>5. Project Scope Management</b>		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
<b>6. Project Schedule Management</b>		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
<b>7. Project Cost Management</b>		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
<b>8. Project Quality Management</b>		8.1 Plan Quality Management	8.2 Manage Quality	8.3 Control Quality	
<b>9. Project Resource Management</b>		9.1 Plan Resource Management 9.2 Estimate Activity Resources	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	9.6 Control Resources	
<b>10. Project Communications Management</b>		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Monitor Communications	
<b>11. Project Risk Management</b> © WWW.PM2.BIZ		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses	11.6 Implement Risk Responses	11.7 Monitor Risks	
<b>12. Project Procurement Management</b>		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	
<b>13. Project Stakeholder Management</b>	13.1 Identify Stakeholders	13.2 Plan Stakeholder Engagement	13.3 Manage Stakeholder Engagement	13.4 Monitor Stakeholder Engagement	

# Project Time Management

## PMI Time Management framework

1. Plan Schedule Management
  2. Activity Definition
  3. Activity Sequencing
  4. Estimate Activity Resources
  5. Estimate Activity Duration
  6. Project Schedule Development
  7. Schedule Control
- Sometimes these estimation activities are grouped as one.



# Project Time Management

1. Plan Schedule Management
2. Activity Definition
3. Activity Sequencing
4. Estimate Activity Resources
5. Estimate Activity Duration
6. Project Schedule Development
7. Schedule Control

## Technique to develop schedule

### 1. Put all tasks sequentially:

- Don't invest time to improve schedule by parallelizing tasks.
- Focus on including all necessary tasks to complete the project objective successfully.

### 2. Optimize Schedule

- Now put focus in parallelizing tasks.
- Consider time restrictions (SS, SF, FS, FF)
- Consider Leads and Lags
- Run reverse engineering on the schedule.
  - Look the schedule from Finish to Start. This may help to identify tasks which duration may be shorter by:
    - Reducing task duration itself
    - Providing higher priority to task execution
    - Assigning more resources to task.
- Repeat the optimizing steps focusing on critical path.

**Note:** once the schedule plan is finished during Planning phase, then it will be monitor during project execution (consider that **critical may change** as tasks execution may be delayed.

# Project Time Management

1. Plan Schedule Management
2. Activity Definition
3. Activity Sequencing
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## Some Time Management tips

**1. Parkinson's Law:** Work expands to fill the time available for its completion.

- This law suggests that we tend to use all the time we have allotted for a task, even if it could be completed sooner. This can lead to inefficiency as we might stretch out the work or focus on less important details.

**2. Hofstadter's Law:** It always takes longer than you expect, even when you take into account Hofstadter's Law.

- This law highlights our inherent difficulty in accurately estimating how long tasks will take. We often underestimate the potential for unexpected delays and complexities, even when we try to be realistic.

**3. Luchini's Law:** If you take a long time to do revisions, then you will need to make more corrections.

- This law emphasizes the importance of timely revisions. When we delay reviewing and revising our work, we risk introducing more errors or inconsistencies that require further correction, ultimately slowing down the process.

**4. Illich's Law:** After a certain point, adding additional effort reduces productivity.

- This law points to the concept of diminishing returns. There's a limit to how much effort contributes to productivity. Beyond that point, adding more effort can lead to burnout, decreased quality, or even negative results.

**5. Pareto Principle (80/20 Rule):** Roughly 80% of results come from 20% of the effort.

- It's a reminder that we should focus our energy on the critical few tasks or issues that will have the most significant impact on the project's success.



# Milestones & Baseline

Challenges

Scheduling

Execution

	Start	End	Days	Weeks	Months
<b>Design Cyle</b>	5-Dec-24	3-Jul-25	210	30	7
<b>RTM Cycle</b>	5-Dec-24	7-Jun-27	914	130	30
<b>Feasibility &amp; Planning</b>	26-Sep-24	5-Dec-24	70	10	2
Feasibility Start	26-Sep-24				
Kickoff Meeting	5-Dec-24				
<b>Development</b>	5-Dec-24	3-Jul-25	210	30	7
Development Start	5-Dec-24				
Top Level Design Review	19-Jun-25				
Layout Review	19-Jun-25				
First Silicon Tape Out	3-Jul-25				
<b>Validation</b>	3-Jul-25	5-Apr-26	276	39	9
Validation Start	3-Jul-25				
Fab Time (SHR)	26-Jul-25	18-Oct-25	84	12	3
Wafer ready (pinned & Baked)	18-Oct-25	24-Nov-25	37	5	1
Probed Wafer	8-Dec-25				
Blind Build	6-Dec-25				
Offshore Assembly (initial coverage)	12-Jan-26				
First Customer Samples (aggresive date)	2-Mar-26				
First Customer Samples (safe date)	17-Apr-26				
Silicon Review	5-Apr-26				
<b>Development (2nd Spin - All Level)</b>	5-Apr-26	25-May-26	50	7	2
Development Start	5-Apr-26				
Design Review	18-May-26				
Layout Review	25-May-26				
Silicon Tape Out	25-May-26				
<b>Validation (2nd Spin - All Level)</b>	25-May-26	7-Jun-27	378	54	13
Validation Start	25-May-26				
Fab Time (HR)	23-Jun-26	1-Oct-26	100	14	3
Wafer ready (pinned & Baked)	29-Oct-26	5-Dec-26	37	5	1
Probed Wafer	8-Nov-26				
Blind Build	9-Nov-26				
Production Packaged Parts	7-Dec-26				
Final Samples	4-Jan-27				
Qualification Start - Stop	4-Jan-27	3-May-27	119	17	4
Probe PTC Start - Stop	17-Jan-27	25-Feb-27	39	6	1
Final Test Capability Start - Stop	12-Mar-27	3-May-27	52	7	2
Silicon Review	28-Dec-26				
PPR Risk Assessment	9-May-27				
<b>Release To Market (RTM)</b>	7-Jun-27				
<b>Launch</b>	7-Jun-27	9-Aug-27	63	9	2
PPAP	26-Jul-27				
<b>Release To Production (RTP)</b>	9-Aug-27				

Design  
cycle time  
7 month

[Link](#) (wafer)  
[Link](#) (fab)  
[Link](#) (metal layers)  
[Link](#) (fab2)  
[Link](#) ("Proyecto")

Assy parts  
Silicon Review  
~3 month

Assy parts  
Tape Out  
~4 month

~2 month

Qual end  
RTM  
~1 month

# Deliverables

## **1 - Feasibility**

Feasibility Plan – CT

Out of Bounds Criteria - CT

Preliminary Business Case – MKT

Project Charter - PM

## **2 - Planning**

Design Intent Spec - SE

Concept Datasheet - DE

Feasibility Summary - CT

Risk Register - CT

Pre-Qual Planning – Qual E + CT

Preliminary DFMEA – Safety E.

Safety Deliverable Checklist – Safety E.

Safe Launch Exec Summary – TE

Preliminary Probe Pad placements - LE

Preliminary Bond Diagram – LE

Preliminary R&D Customer Package Outline Drawing – Package E.

Independent Quality Review - "KO Readiness Review" – PM + CT

Kick-Off (Development Phase Gate) – PM + CT



# Deliverables

## 3 - Development

Design DFMEA – Safety or DE

Design Review - DE

Silicon Validation Plan – SE

ATE Test List – TE

Probe /FT Test Stimulus User Guide – TE

Safe Launch Exec Summary - TE

Qualification Plan – Qual E.

Layout Review - LE

Master Design Checklist - DE

Risk Register - CT

Customer Package Outline Drawing - PE

Tape Out Approval Document - CT

# Deliverables

## 4 - Validation

Design Evaluation Report - DE  
Systems Evaluation Report - SE  
ESD Characterization & Qualification - ESD  
Silicon Review - CT  
Probe Silicon Review + Final Silicon Review - TE  
PTC Probe Approval Package  
PTC FT Approval Package  
Tri-temp Distribution (in PPAP format)  
Final Datasheet  
Qual Results Summary  
QAF  
Yield and Test Time  
Test Coverage Summary  
Risk Register  
Safety Deliverable  
Pre-Production Release (PPR) Risk Assessment Form

# Deliverables

## **5 - Launch**

PPAP Electrical Distribution

Safe Launch Exec Summary

ASIL Certificate

Release To Production (RTP) Form