Project Overview How To

by *Gerrit Muller* USN-SE

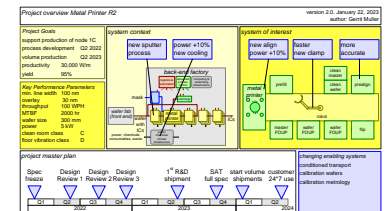e-mail: `gaudisite@gmail.com`

`www.gaudisite.nl`

Abstract

A project overview shows the overview of a project on a single slide or sheet. The overview helps the team to share the same understanding of scope, objectives, and timeline.

March 24, 2023
status: draft
version: 0.2

Project Overview Canvas

Project Title	meta information, e.g. version, date author, owner

Project Goals

- specific and quantified

Key Performance Parameters

- specific and quantified

system context

- visualization (drawing, block diagram, 3D model, or photo) of the system context
- indication of changes in the context

system of interest

- visualization (drawing, block diagram, 3D model, or photo) of the system
- indication of changes in the system of interest

project master plan with timeline

- timeline with 5 to 10 milestones, especially deliverables
- specific and quantified

optional information, e.g.

- enabling systems
- stakeholders
- external or internal interfaces
- constraints, e.g. applicable legislation

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Example Project Overview
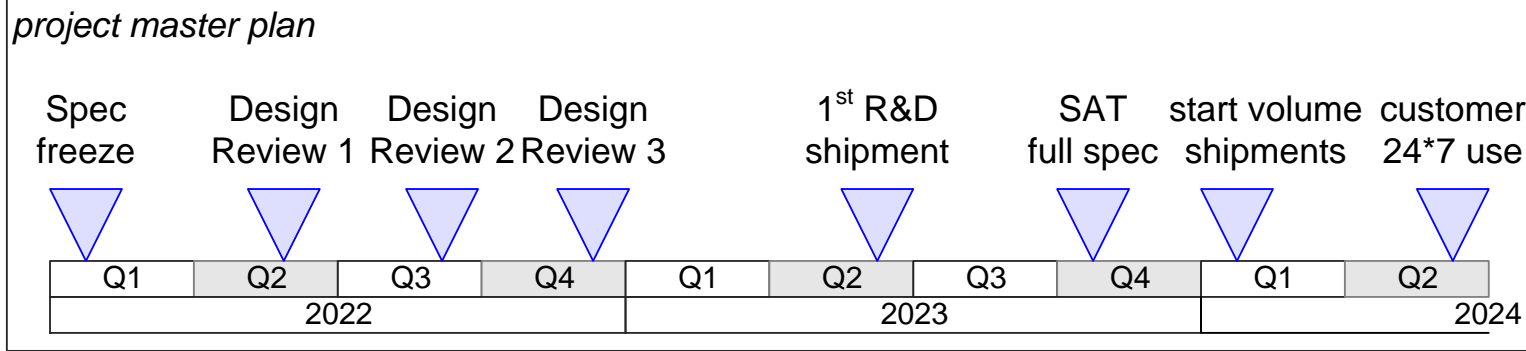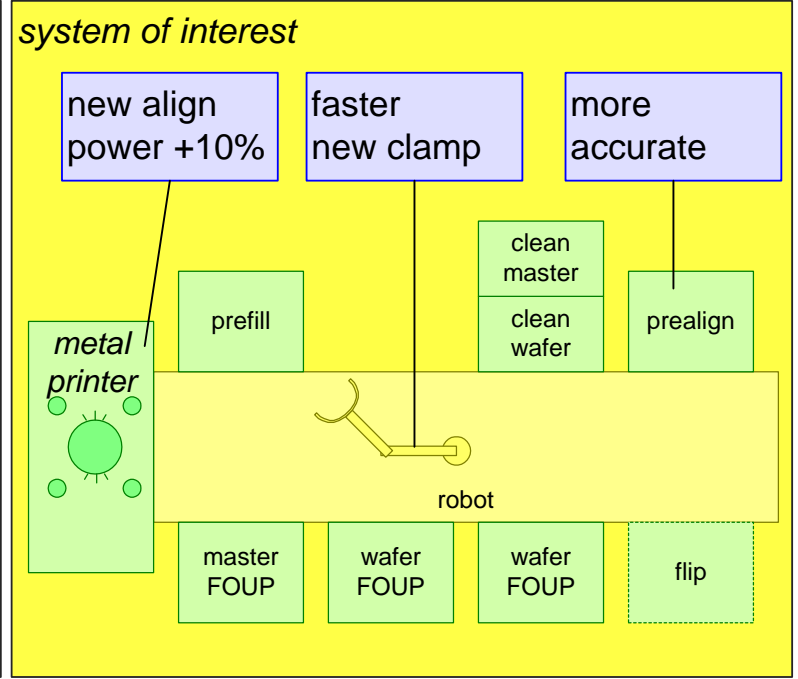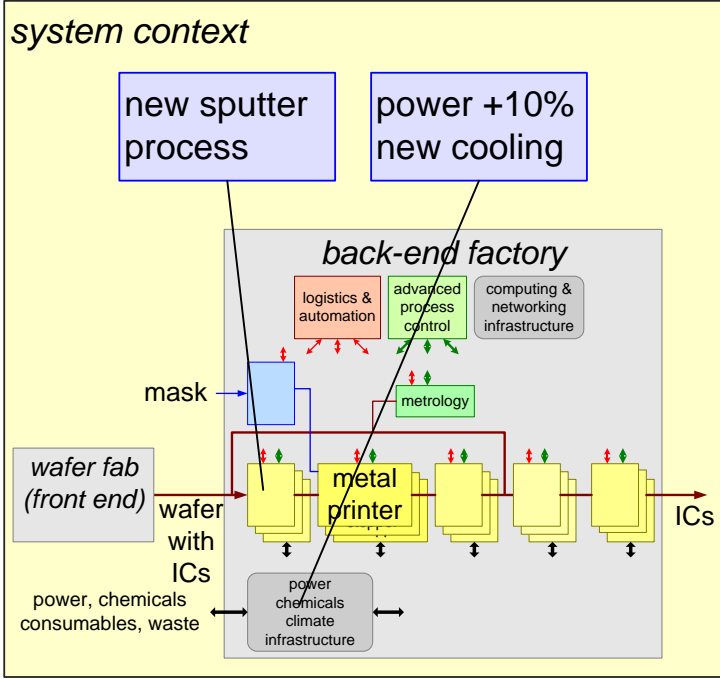
Project overview Metal Printer R2

version 2.0. January 22, 2023
author: Gerrit Muller

Project Goals

support production of node 1C

process development	Q2 2022
volume production	Q2 2023
productivity	30,000 W/m
yield	95%

Key Performance Parameters

min. line width	100 nm
overlay	30 nm
throughput	100 WPH
MTBF	2000 hr
wafer size	300 mm
power	5 kW
clean room class	C
floor vibration class	D

system context

new sputter process

power +10% new cooling

back-end factory

logistics & automation

advanced process control

computing & networking infrastructure

mask

metrology

wafer fab (front end)

wafer with ICs

metal printer

ICs

power, chemicals consumables, waste

power chemicals climate infrastructure

system of interest

new align power +10%

faster new clamp

more accurate

clean master

clean wafer

prefill

prealign

metal printer

robot

master FOUP

wafer FOUP

wafer FOUP

flip

project master plan

Spec freeze	Design Review 1	Design Review 2	Design Review 3	1st R&D shipment	SAT full spec	start volume shipments	customer 24*7 use

Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
2022				2023					2024

changing enabling systems

conditioned transport

calibration wafers

calibration metrology

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Project Overview Canvas

<table>
<tr><td>Project Title</td><td style="text-align:right">meta information, e.g. version, date
author, owner</td></tr>
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Work Breakdown Structure

- visualization

- *builds upon the Product Breakdown Structure*

Project Master Plan

- PERT plan with major milestones

project organization
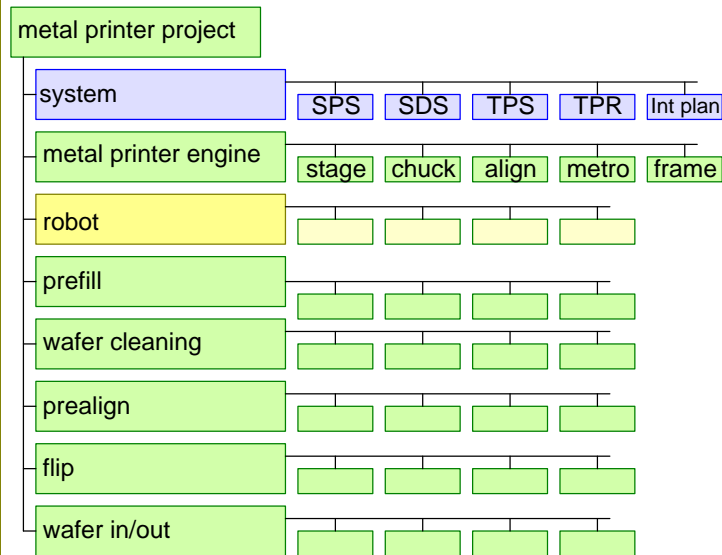
- allocation of roles

- specific additions or deviations

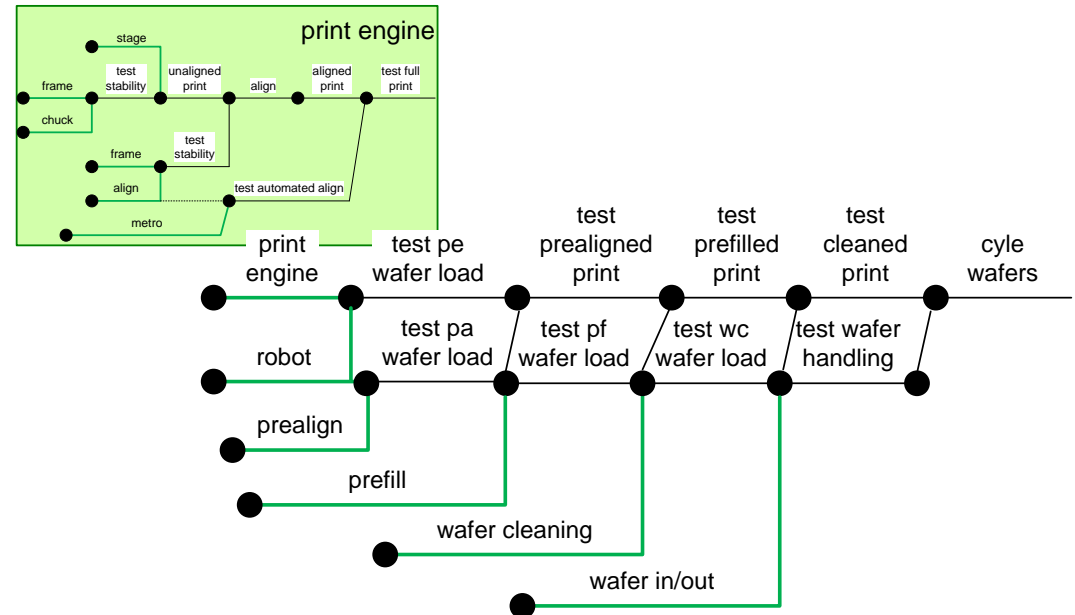USN ESI

Example Project Overview

Metal Printer

Work Breakdown Structure

- metal printer project
  - system — SPS | SDS | TPS | TPR | Int plan
  - metal printer engine — stage | chuck | align | metro | frame
  - robot
  - prefill
  - wafer cleaning
  - prealign
  - flip
  - wafer in/out

Project Master Plan

print engine

- stage
- frame — test stability — unaligned print — align — aligned print — test full print
- chuck
- frame — test stability
- align — test automated align
- metro

print engine — test pe wafer load — test prealigned print — test prefilled print — test cleaned print — cyle wafers

robot — test pa wafer load — test pf wafer load — test wc wafer load — test wafer handling

prealign

prefill

wafer cleaning

wafer in/out

project organization

Project Leader: P.L. Eader

Product Manager: P.M. Anager

Architect: Archie Tect

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