

# Actuator System Options

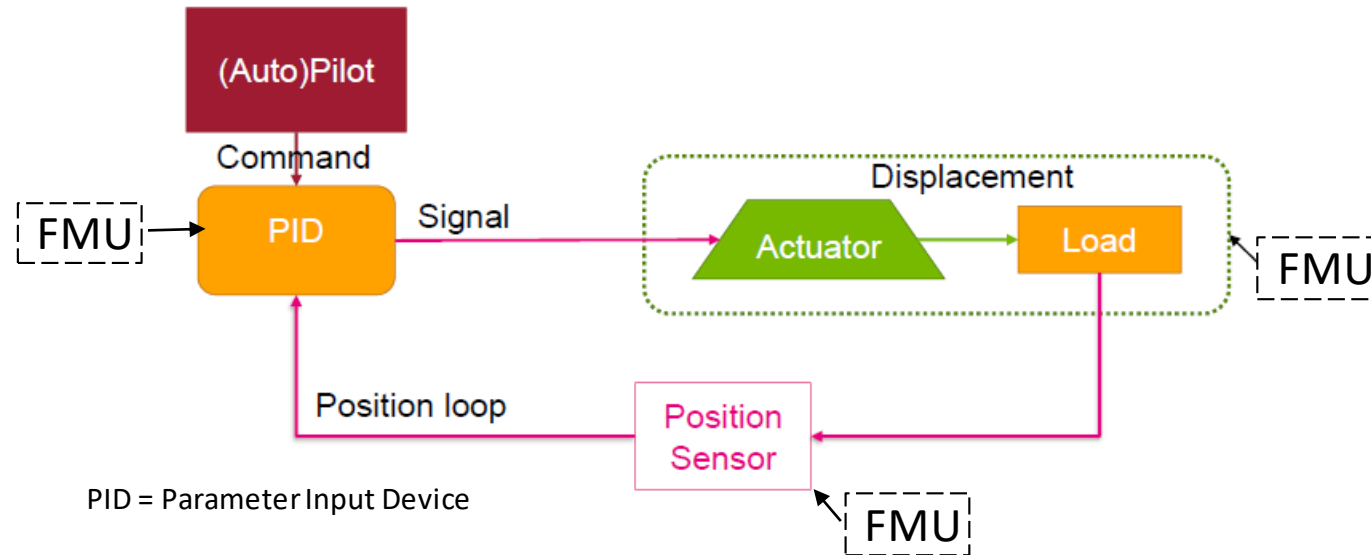
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The Boeing Company

March 2020

# Minimum System Components

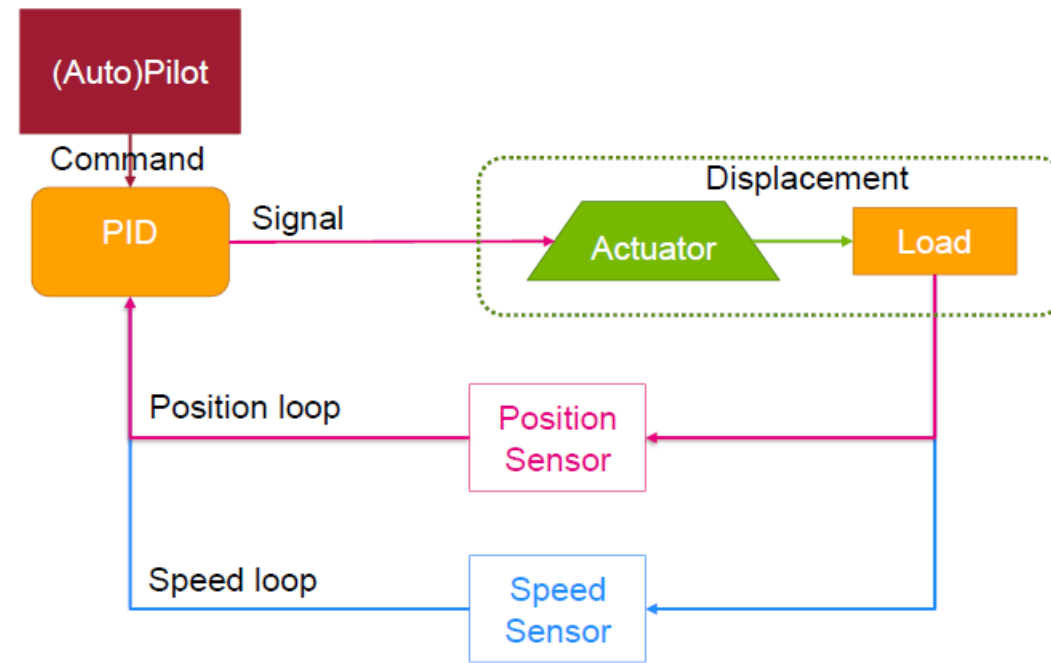
Small scale architecture  
Baseline



# Enhance Actuator Control

Small scale architecture

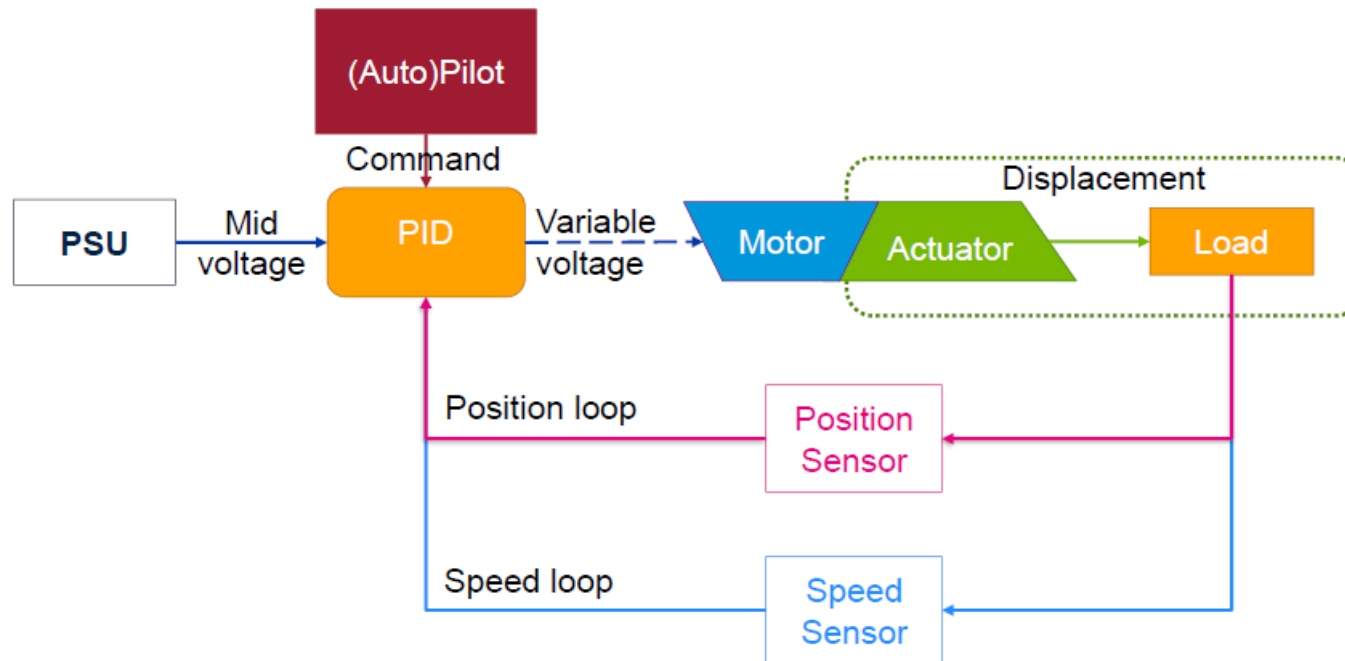
Baseline +1



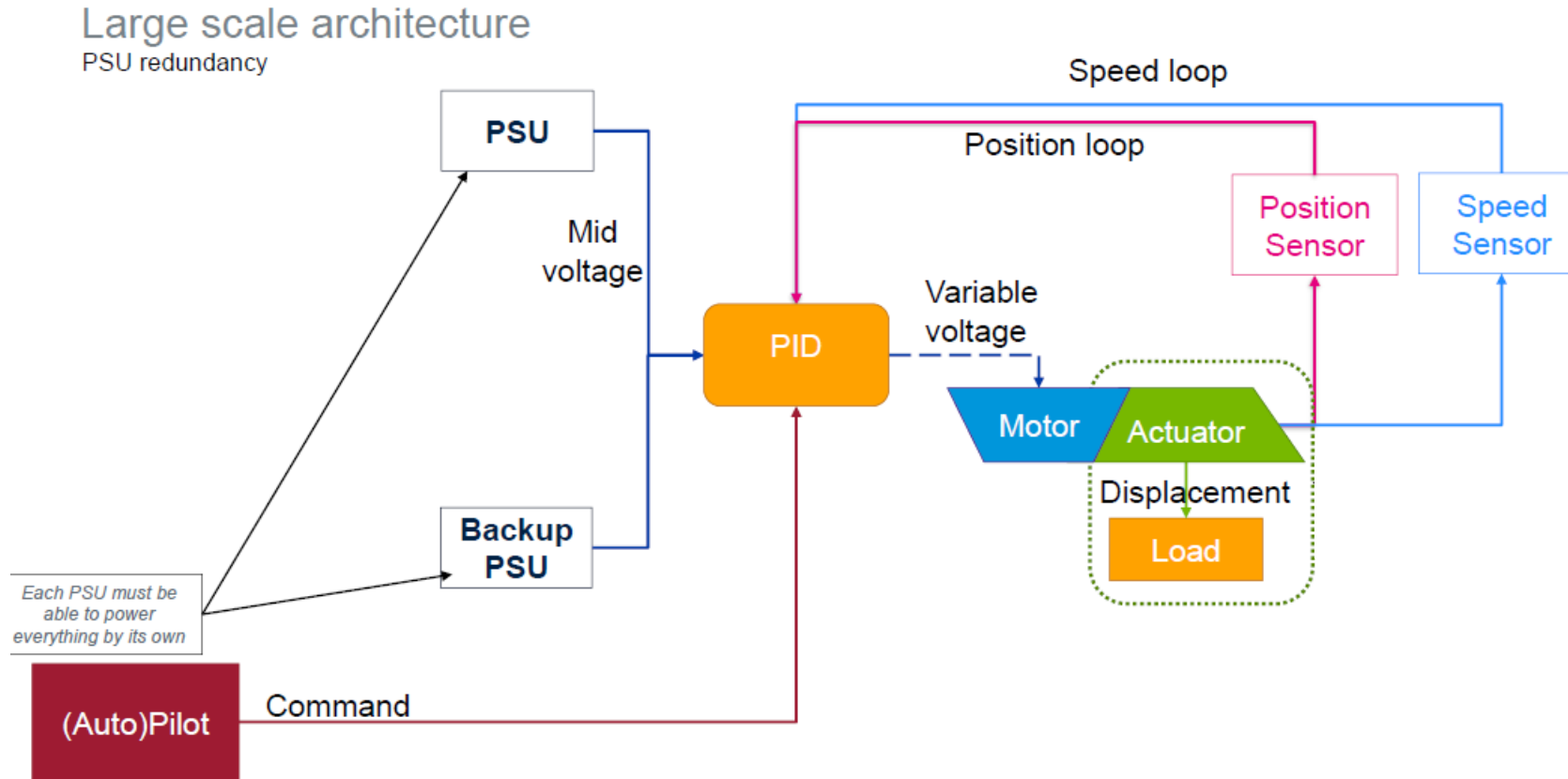
# Enhance Power System

Small scale architecture

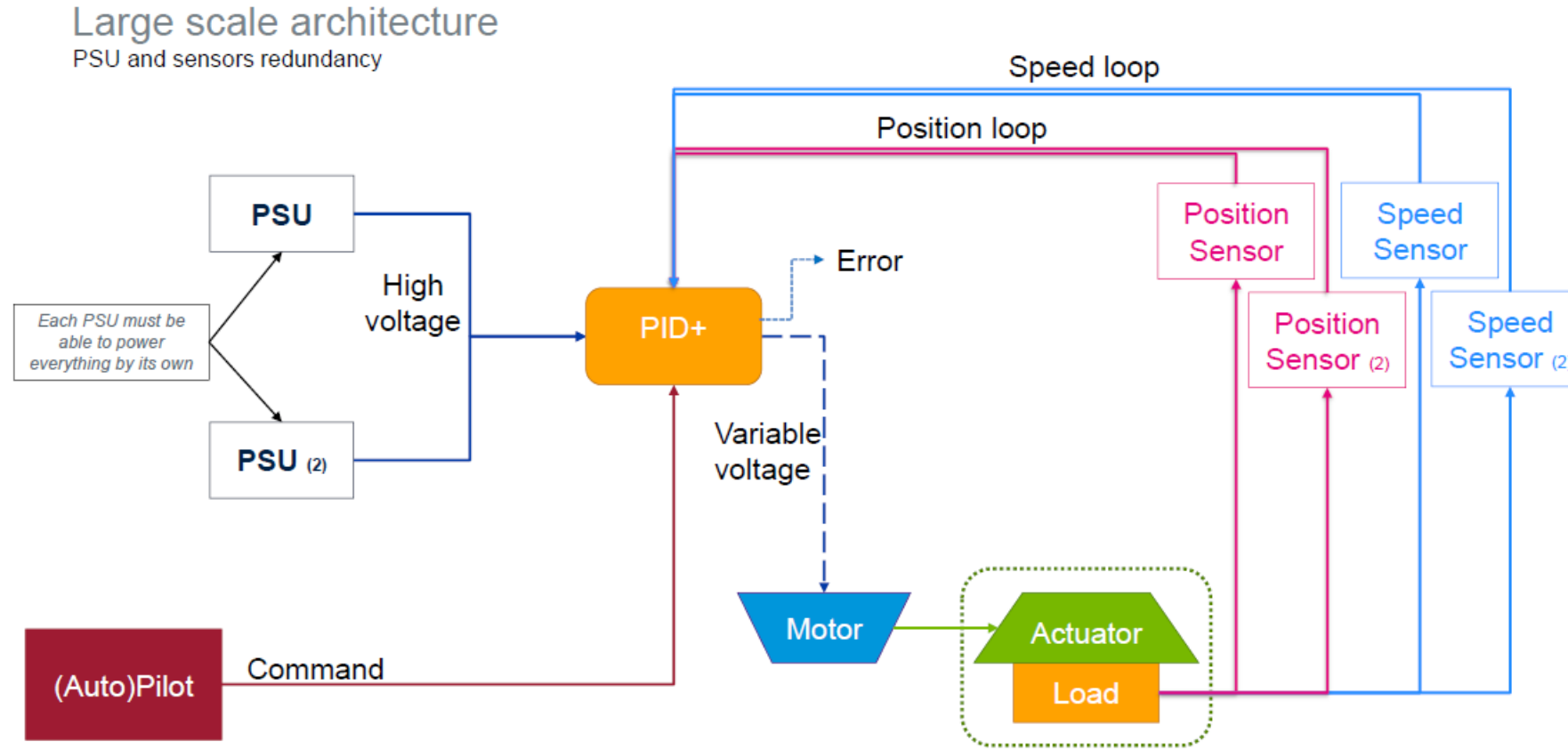
Baseline +2



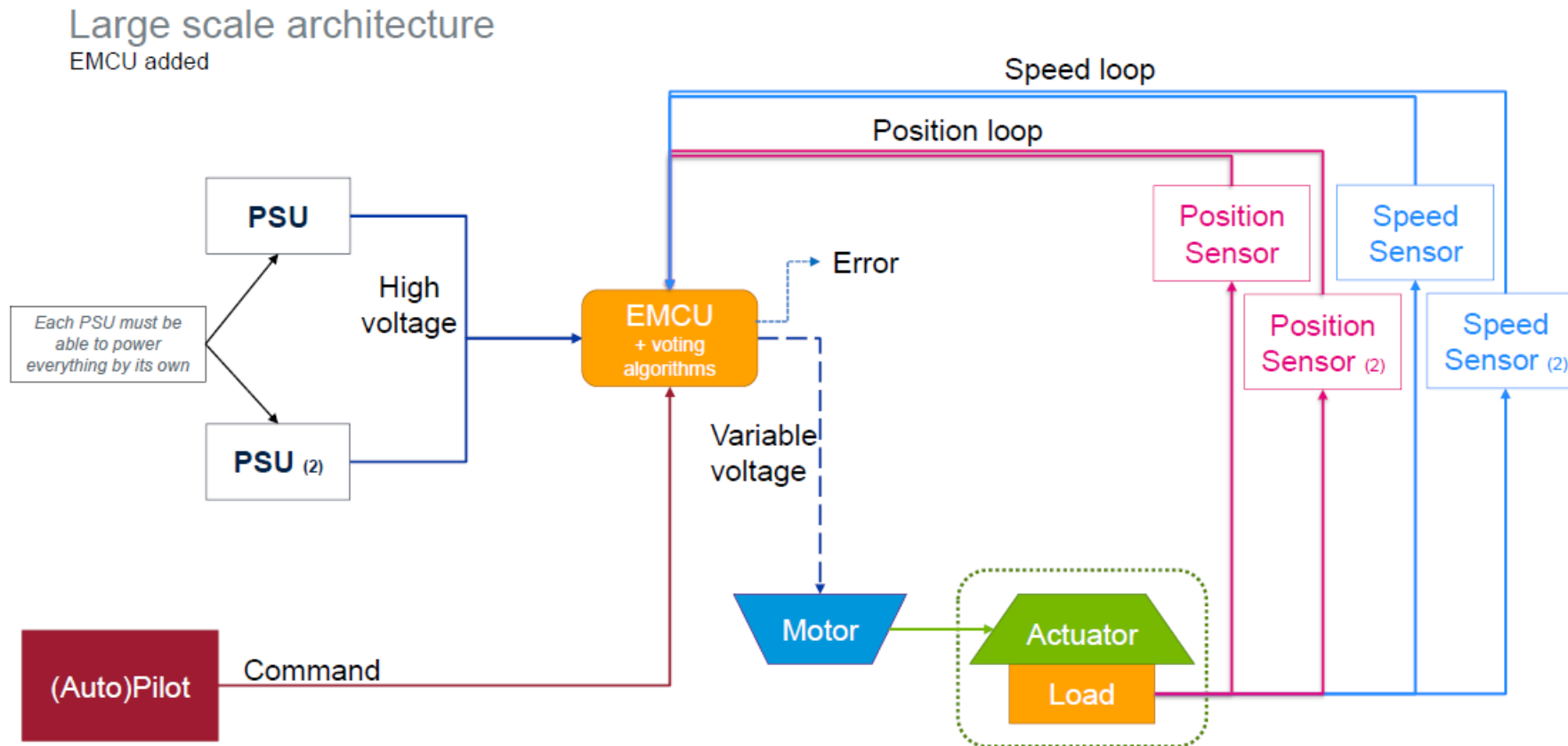
# Add Power System Redundancy



# Add Control System Redundancy



# Enhance Motor Control System



## MBSE Use case for DDP Configuration Management





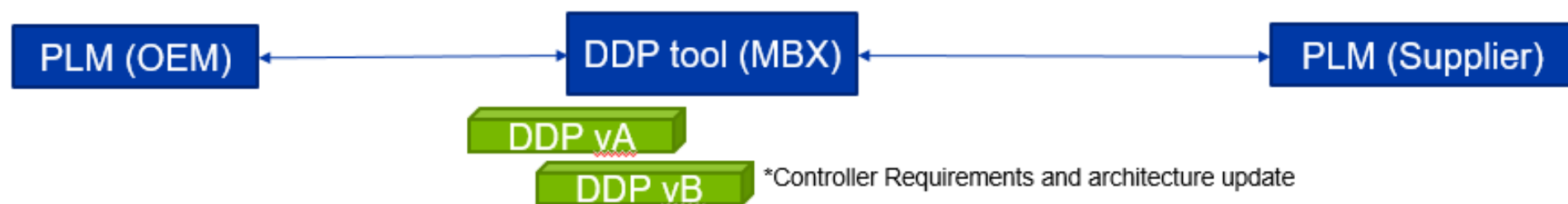
# Stratoliner MBSE Use Case

## MBSE Use case for DDP Configuration Management

### Scenario:

*My DDP rev A contains a requirements model (e.g. ReqIF), architecture model (sysML) and system behavior analysis (FMU/Simulink). Within my sysML model there is a sysML package that links to the behavior analysis model.*

*Assume OEM sends a new DDP revision B with for the new product variant B that includes changes to the actuator controller requirements (e.g. ReqIF) and to the sysML package (as part of my sysML model). I include a sysML model manifest documenting the changes coming from my PLM system*



### Challenge questions:

1. Can the DDP/DDP tool identify and display what models/model entities within DDP vB where changed?
2. Can the DDP exposed metadata related to what was changed, why and for what purpose, at the package, model and model entity levels?
3. Are the links between DDP models/model also updated with DDP vB?
4. The supplier now evolves DDPvB (e.g. implementing some of the design models), can the supplier lock models/model elements that are WIP?

# Proposed DDP V&V Scenario

Large scale architecture

OEM

Supplier

OEM

