

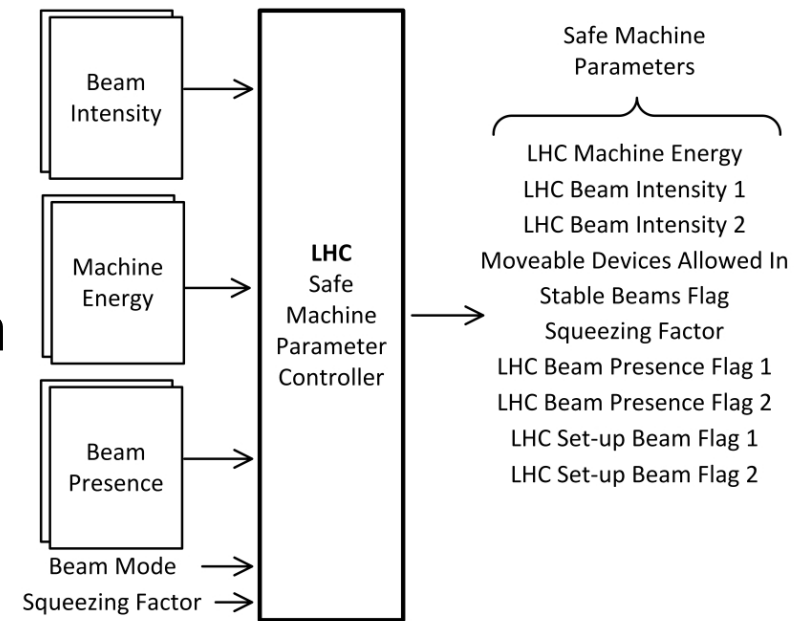
Dependable Design Flow for Protection Systems using Programmable Logic Devices

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WEMMU010

Safe Machine Parameters System

- receives accelerator information
- generates flags & values
- directly transmitted and broadcasted
- protects the LHC during injection procedure and during normal operation
- built using Programmable Logic Devices (FPGA)



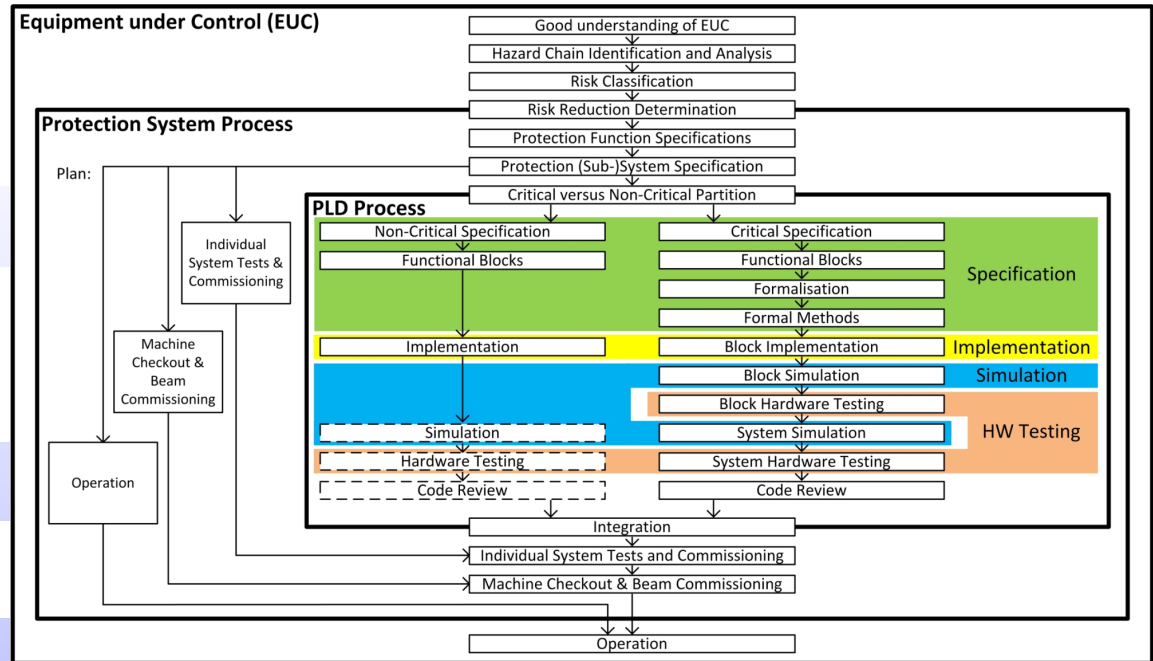
Protection System Lifecycle and PLD process

PSL based on IEC-61508 Lifecycle

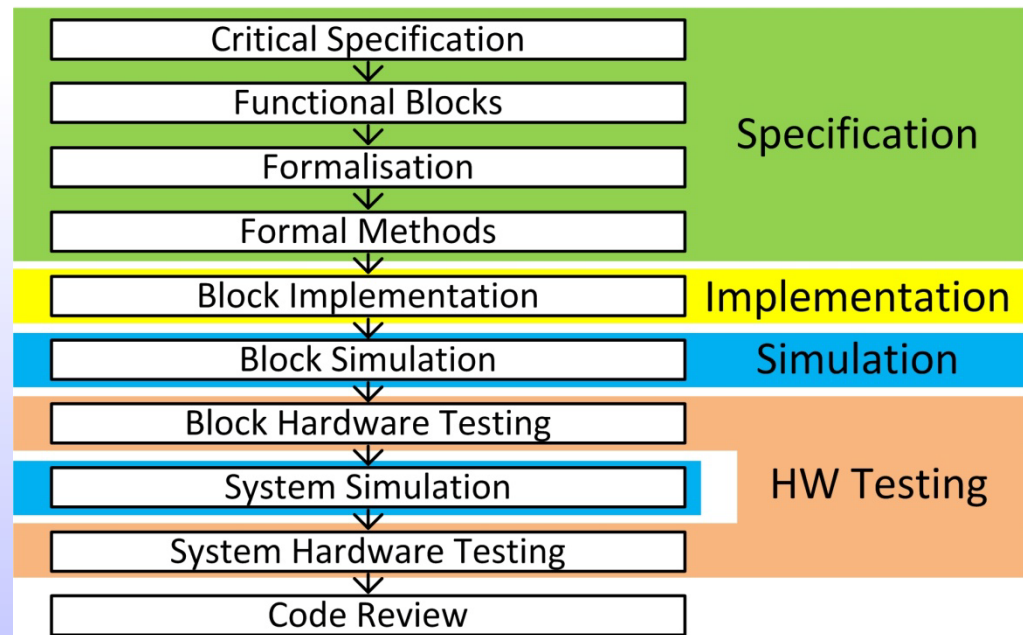
Good understanding of EUC

Hazards analysis

Protection Functions specification



Protection System Lifecycle and PLD process



Focus on PF implementation in the PLD devices