

## ■ SSJ100 LGSCU DESIGN AND TEST APPROACH

Hardware-in-the-Loop Simulation (HILS) for Design, Test, Integration and Rapid Control Prototyping

- ▶ The tight development schedules associated with most new aerospace and defense programs do not allow embedded system testing to wait for a prototype to be available
- ▶ Aircraft development programs are using desktop and HIL simulation to perform design, test, and integration in parallel
- ▶ A flight test is extremely costly and therefore the goal is to minimize any development occurring with flight test
- ▶ Using HIL simulation, the flight controls may be developed well before a real aircraft is available
- ▶ Using HIL simulation instead of flight test for the development of critical components such as flight controls has the potential to reduce any safety risks associated with testing



VALAVIA  
Independent Electronics R&D Lab

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