Abstract

Stability control system is one of the most critical systems inside an aircraft. Design verification and validation of such a system is very essential to reduce development cycles and cost of system development. This paper evaluates the possibility and effectiveness of SCADE software in the design verification of stability controller model of an aircraft. Dataflow and state machine can be integrated in the SCADE suite for the formal verification of temporal logics of the hardware system. This technique is effective in finding out violations of system invariants at an early stage of the design phase. Graphical simulations and system analysis demonstrate the efficiency of this approach.
References

- Esterel Technologies http://www.estereltechnologies.com/industry/avionics/.

Index Terms

Computer Science Verification And Validation
Keywords
Stability Control Design Verification And Validation Data Flow State Machine Scade Suit Formal Verification