

Introduction about Integrated Modular Avionics

IMA will progressively reshape the Aircraft Systems architecture

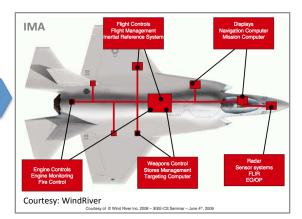
IMA new paradigm

- IMA concentrates in a few similar computers most Aircraft Systems functionalities
- IMA separates, dematerializes, the Aircraft & Systems Functions from the hardware itself
- IMA interconnects the different hardware through multiplex communication instead of point to point communication

No IMA Flight Controls Flight Management Inertial Reference System Navigation Computer Mission Computer Mission Computer Meapons Control Stores Management Targeting Computer Courtesy: WindRiver

IMA major benefits

- Aircraft on board benefits
 - Weight saving due to less computers and reduced wiring for communication
 - Less energy consumption
- Development Lead-time and NRC / RC reduction
 - Better reuse and portability of the software (Functions)
 - Modularity & independence of software applications (Functions); optimized systems integration
- New business models for the Supply chain



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