BLOOMY®

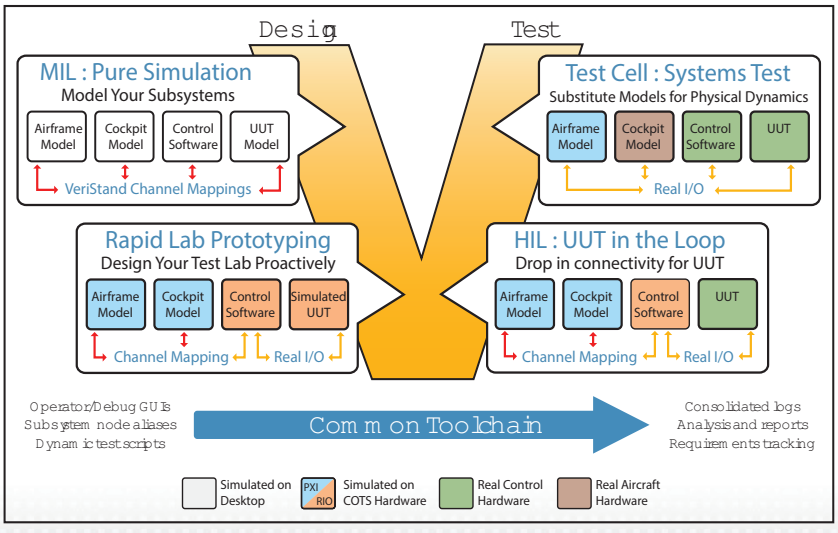
Automated test solutions for the entire product lifecycle

Hardware-in-the-Loop (HIL) Test

Test complex subsystems using closed-loop real-time dynamic simulations

Bloomy's hardware-in-the-loop (HIL) test systems use real-time hardware and software to simulate system parameters across a variety of conditions while acquiring data from the unit under test to measure its performance. HIL testing is especially useful for situations where exercising all modes of a system's behavior is impractical, cost-prohibitive or dangerous.

Bloomy's extensive experience addresses all aspects of product development by providing the tools to perform software-only simulation of the product, product simulation with COTS hardware, and product testing with real hardware in the loop as shown in the diagram below.



TEST APPLICATIONS

- Actuators
- Flight and engine controls
- Air and cargo management systems
- Weapons systems
- Airframe systems
- Flight and data management systems
- Electrical power systems
- Battery management systems

This special niche of test engineering requires the expertise of embedded programmers and control engineers to create the deterministic control loops with analog signals representing temperature, pressure, strain, position, etc., plus various digital and avionic buses including 1553, ARINC429, CAN, and RS-422/485.

Bloomy engineers are experts in the application of National Instruments real-time hardware, LabVIEW RT, LabVIEW FPGA, VeriStand, and integrating models developed by our customers.

Platinum Partner

HARDWARE-IN-THE-LOOP

Call 860-298-9925 or visit
www.bloomy.com

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