



Real-Time Execution of SIMPACK Models under Simulation Workbench

WESLEY NARDONI AND RAMESH PRAVEENKUMAR

SIMPACT UGM - SEPTEMBER 27, 2017

AGENDA

- Concurrent Real-Time –Who we are
- Simulation Workbench
 - Real-Time Simulation - The Right Way
 - SIMPACK Support
 - Driving Simulator

COMPANY OVERVIEW



CONCURRENT IS A GLOBAL SOFTWARE
AND SOLUTIONS COMPANY

WE SERVE MARKETS REQUIRING
UNCOMPROMISING PERFORMANCE

AEROSPACE

SPACE

DEFENSE

FINANCIAL

AUTOMOTIVE

HEALTHCARE

ENERGY

MANUFACTURING

EVERY CONCURRENT APPLICATION IS
BUILT ON OUR CORE FOUNDATION
OF LINUX AND REAL-TIME
TECHNOLOGY



ONE STOP SOLUTION
PROVIDER

GLOBAL PRESENCE

HQ: FLORIDA

OFFICES: MICHIGAN, SOUTH
CAROLINA, CALIFORNIA, UK,
GERMANY, FRANCE, JAPAN,
CHINA/HK

FOUNDED 1966

51 YEAR HERITAGE
IN HIGH PERFORMANCE SOLUTIONS



APPLICATIONS & CUSTOMERS

WE SERVE APPLICATIONS REQUIRING
UNCOMPROMISING PERFORMANCE



OUR CUSTOMERS INCLUDE MANY
OF THE WORLD'S LEADING COMPANIES



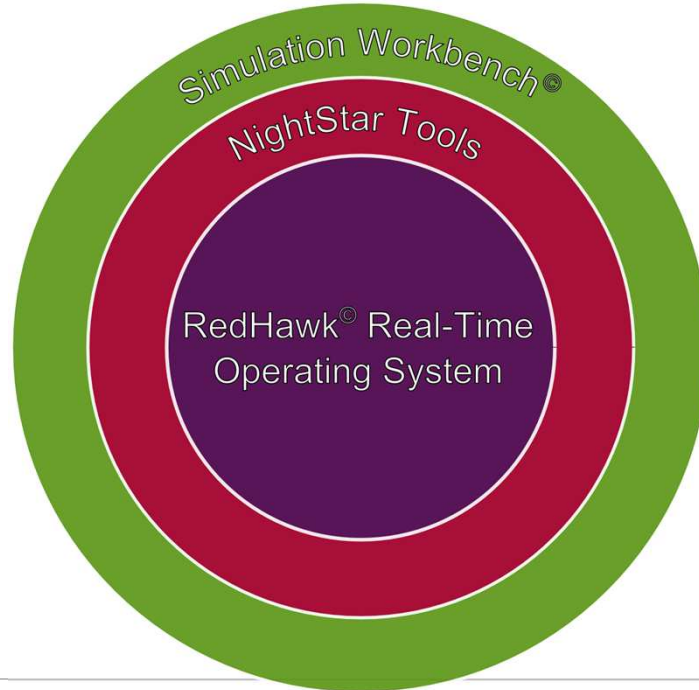
U.S. AIR FORCE



SIMULATION WORKBENCH

Introduction

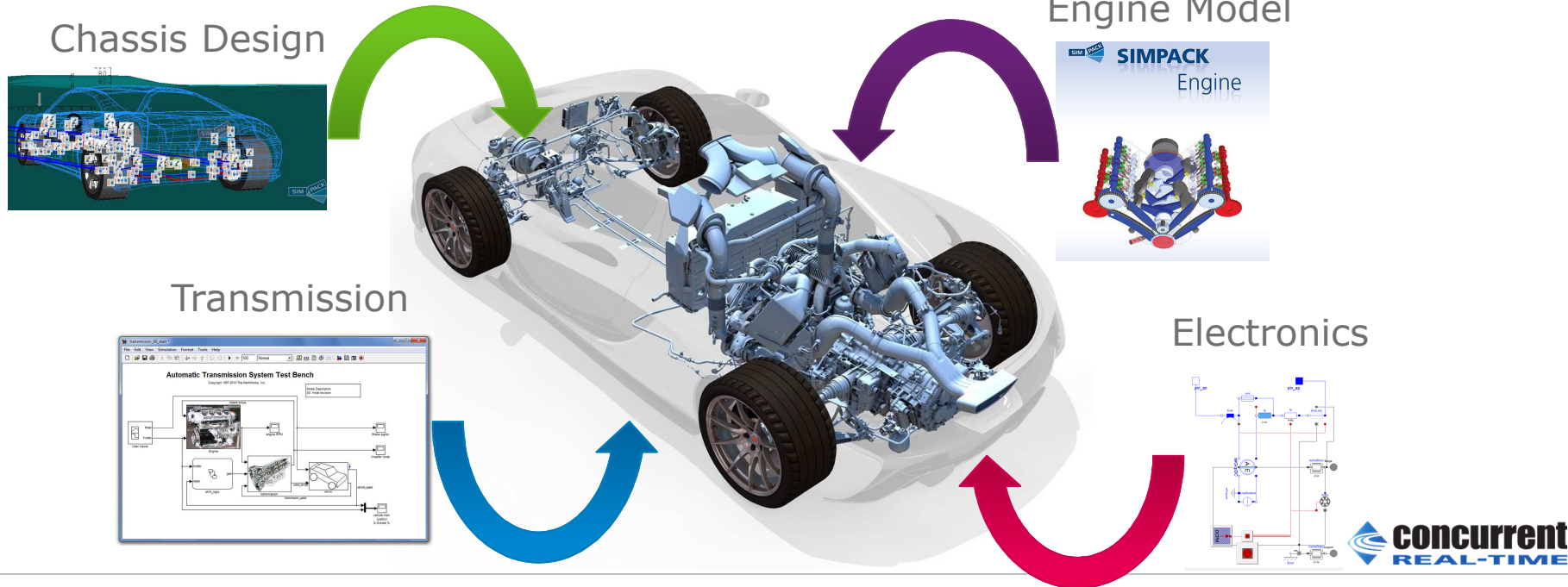
- Built on top of our own real-time OS and tools



SIMULATION WORKBENCH

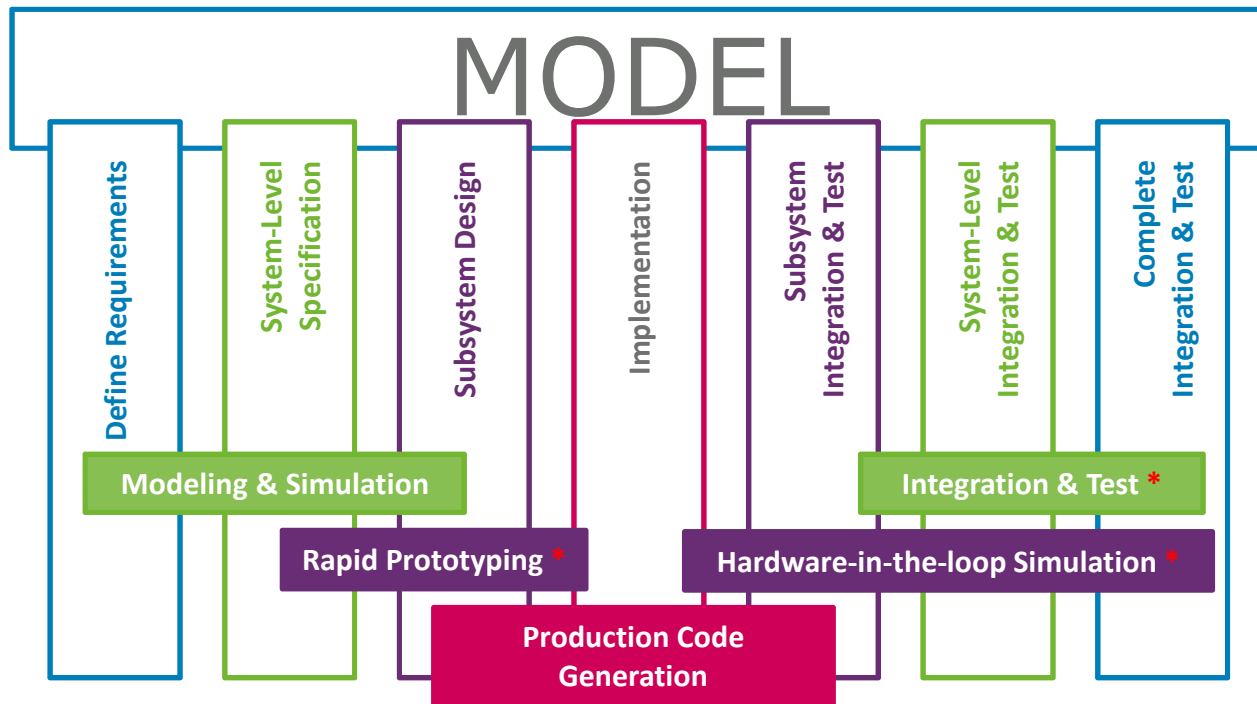
Introduction

- Framework to simulate models in real-time



SIMULATION WORKBENCH

Where do we fit-in in MBD



* SIMulation Workbench is used in these phases of Model-Based Design 

SIMULATION WORKBENCH

Real-Time Simulation - The Right Way

- COTS Hardware
 - Immediate support for latest hardware
 - Multi-core support
 - Avoid vendor lock-in
 - Wide offering of I/O Cards
 - Extensive support for third-party modeling packages



Tall

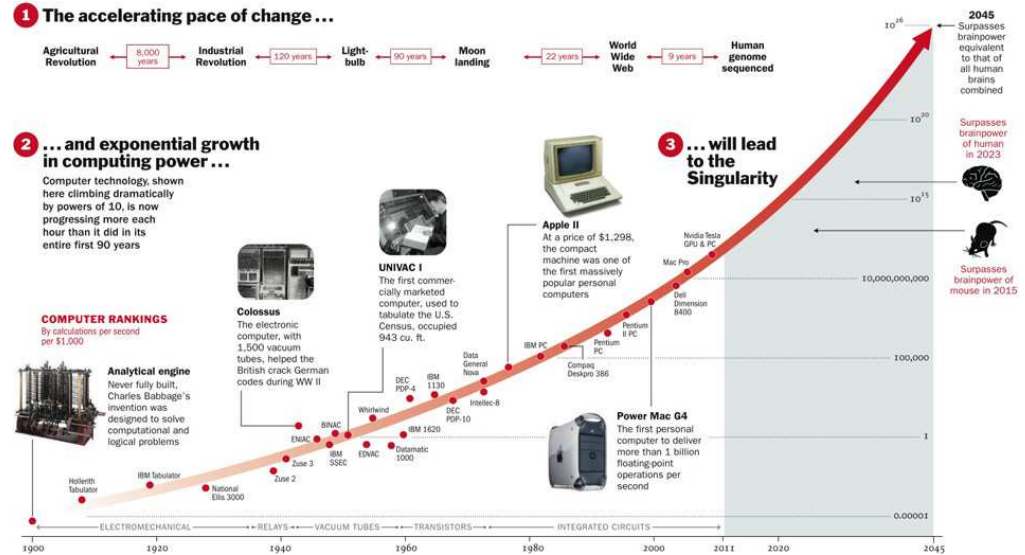
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Venti

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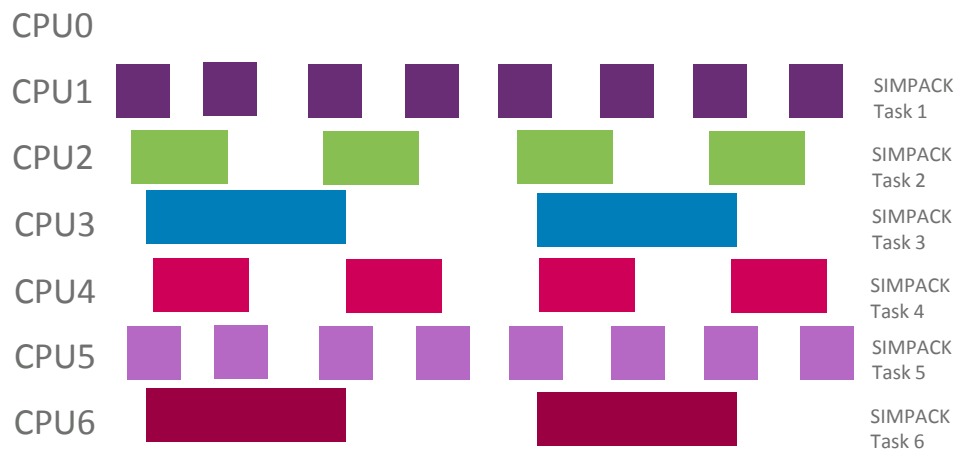


SIMULATION WORKBENCH

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Real-Time Simulation - The Right Way

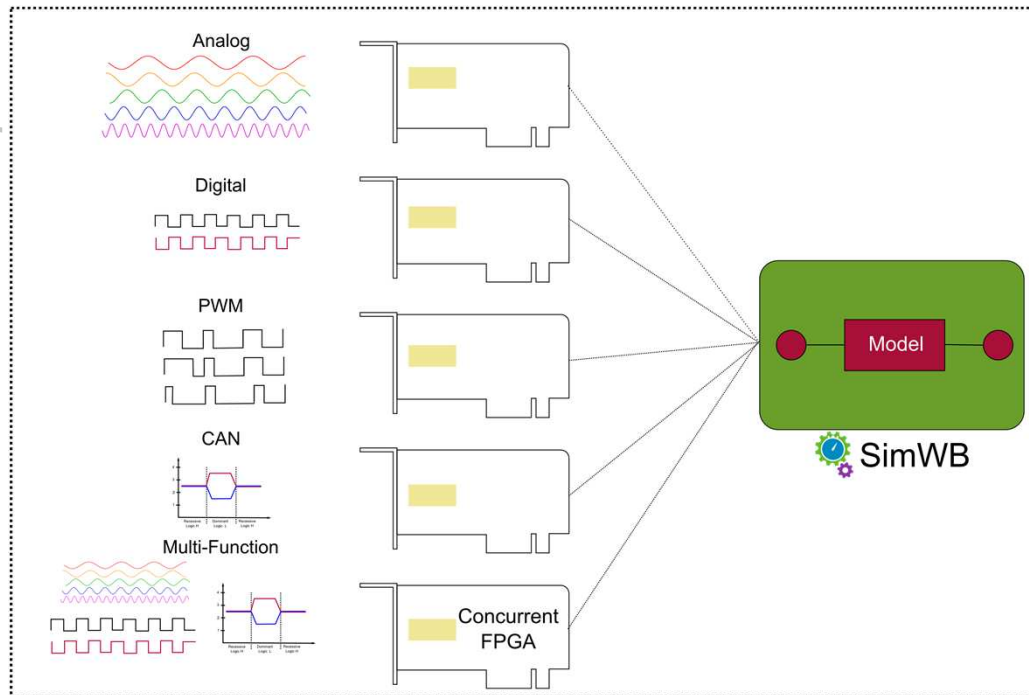
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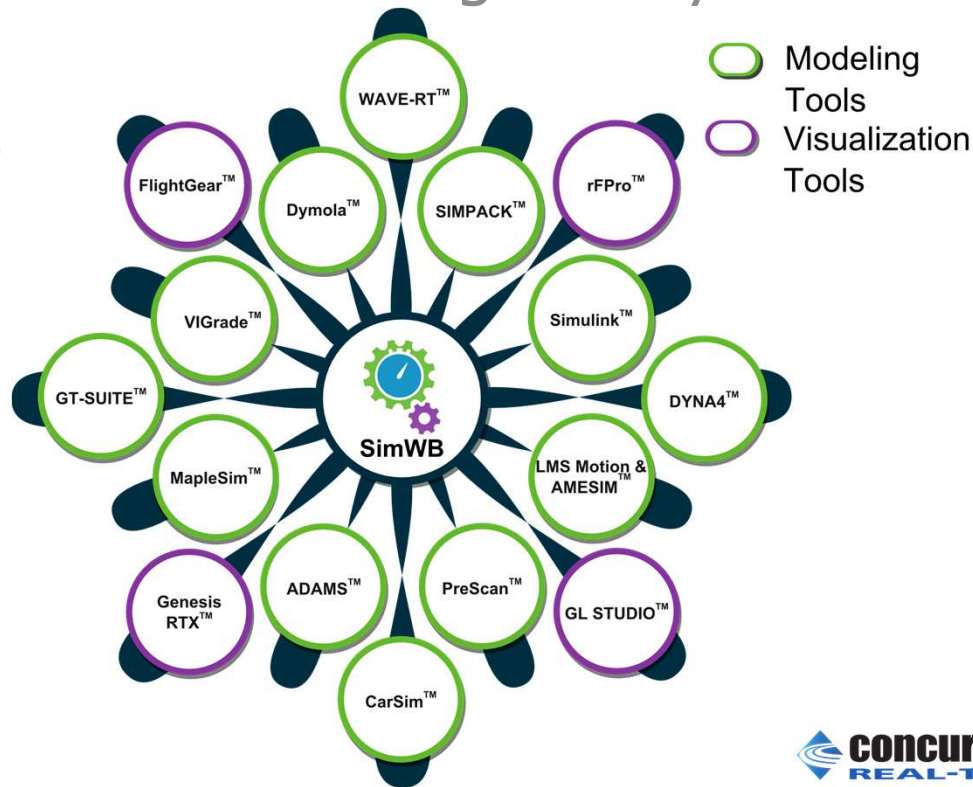


SIMULATION WORKBENCH

Real-Time Simulation - The Right Way

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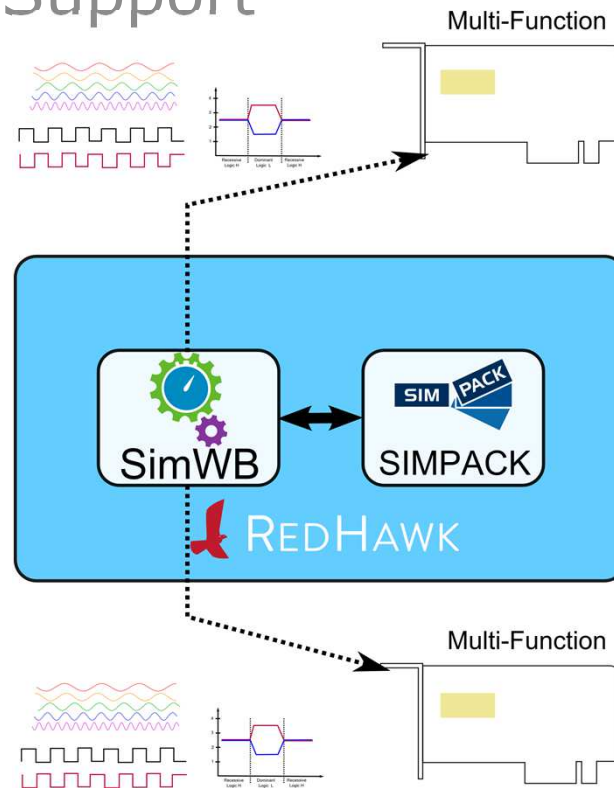
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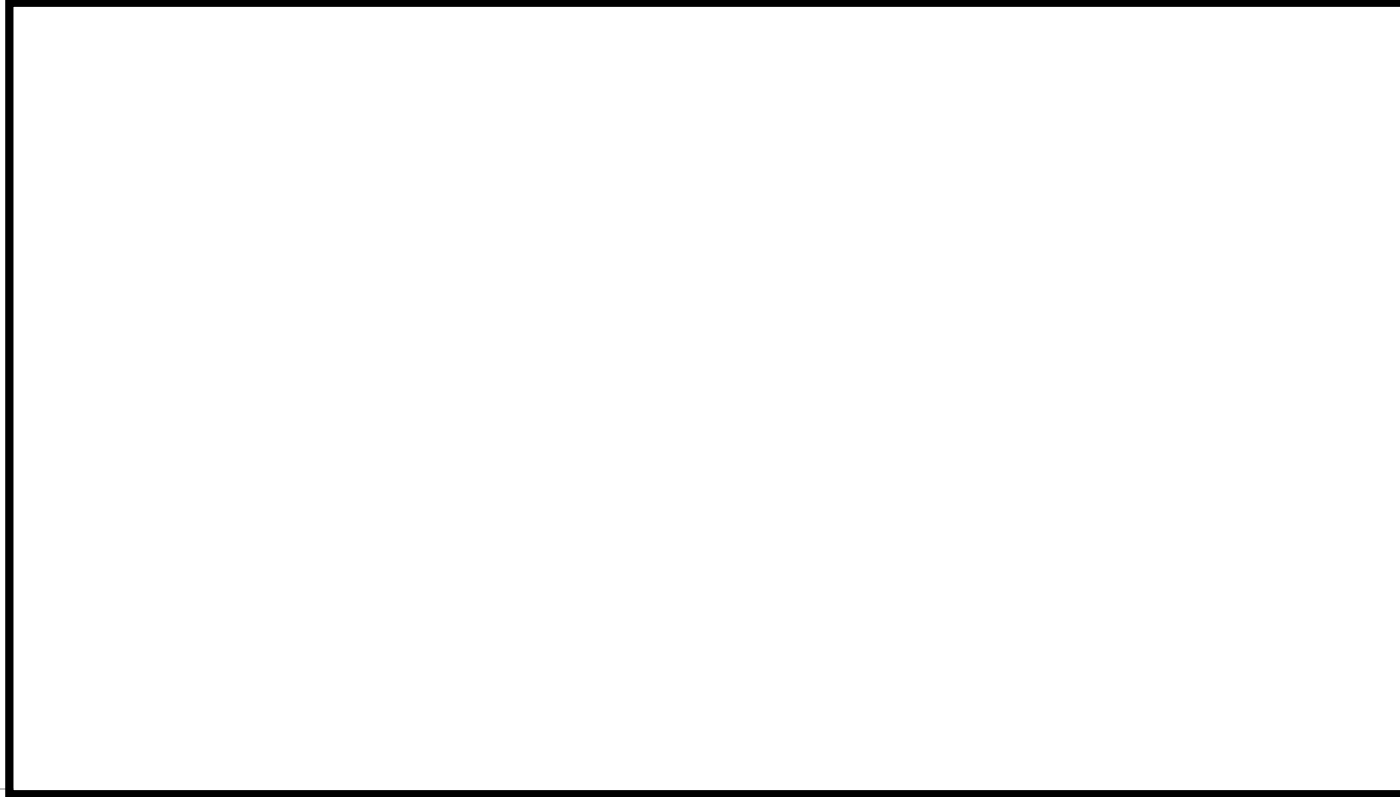
SIMPACK Support

- Easy point-and-click interface to import SIMPACK models into SimWB
- SIMPACK leverages SimWB's Multi-Core support to the fullest extent
- >200 DoF models



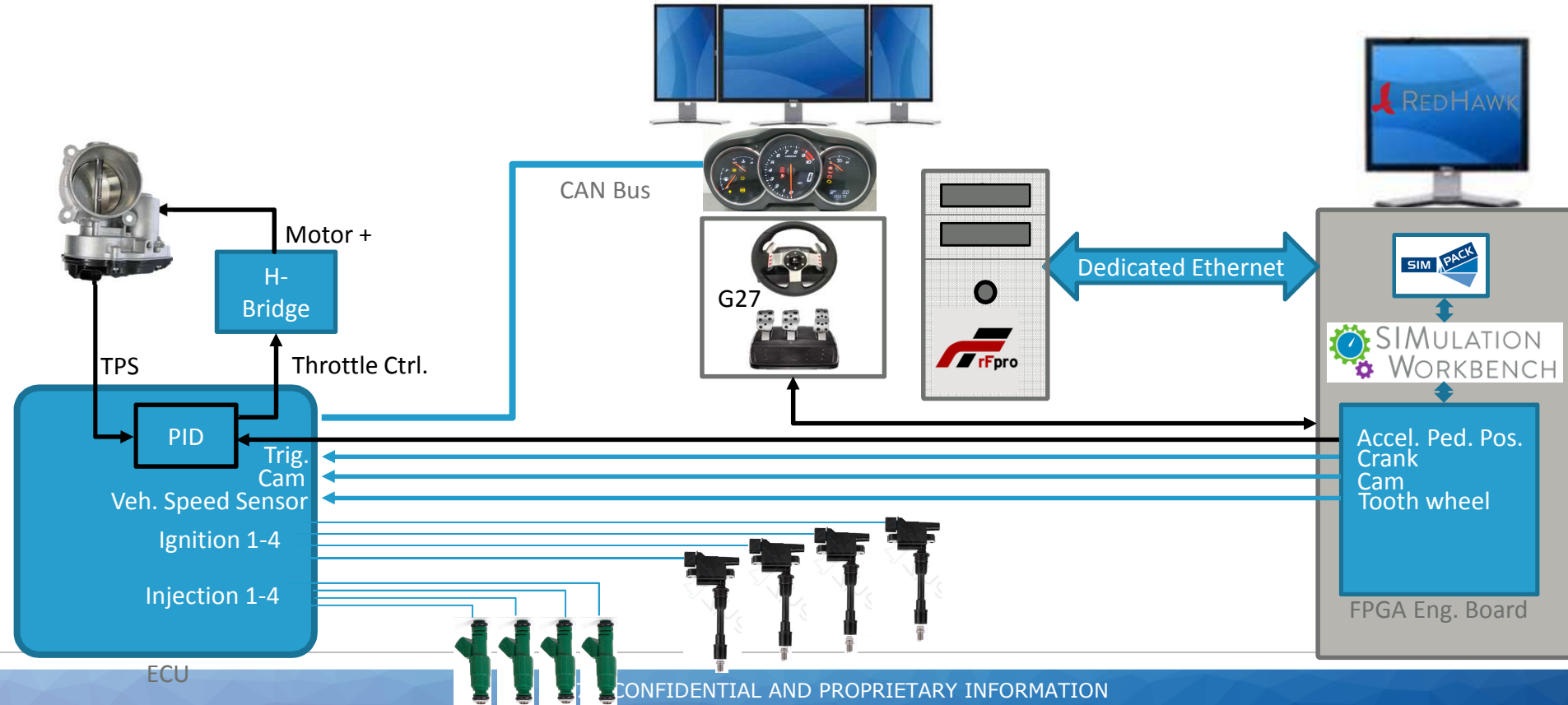
SIMULATION WORKBENCH

SIMPACK Support



SIMULATION WORKBENCH

Driving Simulator



SIMULATION WORKBENCH

Driving Simulator



QUESTIONS?

THANK YOU!

