Rapid Control Prototyping with Raptor™

Take control of your system development from the start without paying the high cost typical for most rapid control prototyping hardware. Our embedded Model-Based Development (eMBD) platform, Raptor™, provides the speed and flexibility of traditional rapid control prototyping using the MATLAB / Simulink environment, but uses hardware that costs a small fraction of similar systems.

The Raptor tool chain is a suite of software tools matched with off-the-shelf controller products designed to assist businesses as they develop control software for complex electromechanical systems. Developers can easily create, compile, build, and flash the model onto ruggedized, off-the-shelf hardware without the hassle of manual programming. In addition, each Raptor enabled ECU ranges in pin count, I/O capabilities, and processor configuration to better suit a variety of applications while costing significantly less than typical prototyping hardware.

With fast development iterations using model-based simulation, rapid-prototyping, controls development, and ruggedized, off-the-shelf hardware, developers can optimize their control system design in a cost efficient manner.

FEATURES

Run MATLAB/Simulink models on open ECU hardware in minutes using this intuitive software environment to rapidly develop control strategies.

Automatically compile, build, and flash the control model diagram without manual programming.

Rugged ECUs are built to handle extreme environments while costing less than that of purpose-built prototyping hardware.

Simplify wiring by directly connecting to sensors and actuators, this hardware can be used on vehicles or in the lab. No extra signal conditioning needed.

Flexible ECU options that range in pin count, I/O capabilities, memory, processor configuration and ASIL capability.

Application Engineer → Models → Raptor™ → Source Code → Compiler Linker → Software Package → Loader

Direct to Target Automated Build

Rapid Prototype Development

Get your prototype up and running quickly with the Raptor tool suite. Utilizing the graphical programming environment of MATLAB/Simulink, developers can quickly and easily develop software using multiple block libraries with numerous interface functionalities and configurable I/O capabilities. Our tools allow you to automatically build, test, and integrate prototype models, as well as make real-time calibration changes, without manual programming.

High Quality Controllers

Automatically integrate your controls software onto rugged, cost-efficient hardware built to endure the harshest of environments. New Eagle offers a variety of trusted ECUs that range in pin count, input, output, memory, and processor configuration, and are tailored to suit a variety of applications. With our ASIL capable, IP6k9k compliant controllers that can typically operate in temperatures ranging from -40°C to +105°C, our ECUs are built with the most rigid standards available.

Scalable Solutions

With our Raptor enabled ECUs and tools engineers will save money and time throughout the development cycle. Not only can these ECUs be used during the initial prototyping stages, but these controllers are also scalable and intended for volume production. Utilize the same hardware and tools throughout the entire system lifecycle and avoid extra iteration cycles that are normally required for production hardware.