

RX Ecosystem Partner Solution

BFG Motor Control



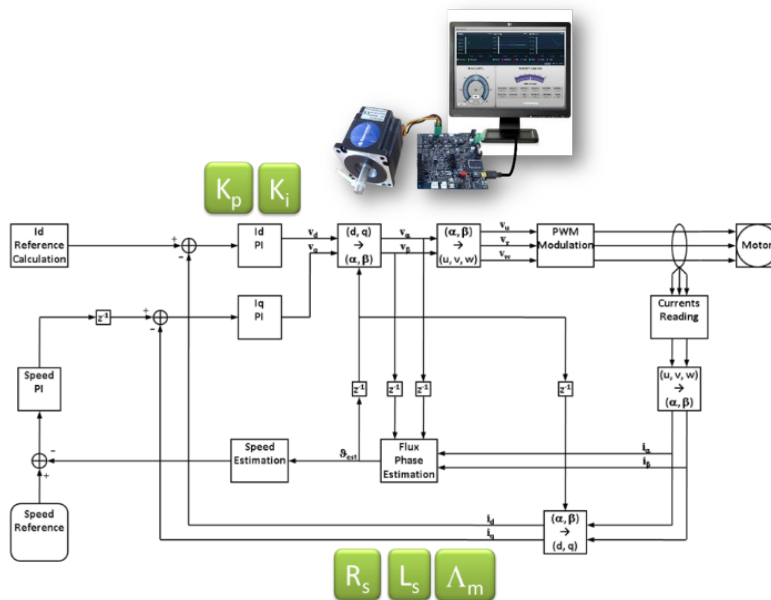
Solution Summary

The BFG motor control reference design and software solution addresses a wide range of embedded motor driven applications. The motor control reference design for [Renesas RX](#) is integrated with the RX motor control development kits for a total project ready solution.

Features/Benefits

- State of the Art 3-Phase BLDC / PMSM Field Oriented Control
- Sensor-less 3-Shunt Method
- Auto Tuning capabilities including Motor parameter identification
- System Parameter enabled to be optimized during system run
- Supports low voltage and external high voltage Inverters
- Supported on toolchains including e2studio

Block Diagrams



Field-Oriented Control

3-Shunt for Sensor-Less

Auto-Tuning & Identification

GUI Motor Demonstrator

Hall Sensor I/F

Encoder I/F

PMOD H/W Extension I/F

DC 48V / 5A PEAK

External Power Stage I/F

Target Markets and Applications

- All Three-Phase Motor Driven Applications for:
 - Smart Appliance
 - Smart Home
 - Smart Buildings
 - Industrial Control



YOUR PARTNER FOR

Embedded Design & Advanced Control Solutions

BFG Engineering

is a development house focused on hardware & software design.

We are operating mainly in the field of **advanced control** for of electric drives, small **machinery automation** and **control of industrial processes**.

Our company is a group of highly **experienced** engineers and technicians.

Our mission is to develop electronics to quickly meet our customers needs and expectations by providing **customized** solutions.

We aim to be more than a solution suppliers and be a "**partner**", communicating a passion for its work in transferring knowledge and technical expertise, offering innovative, requiring continuing education and research, taking care of details and details of products and projects.

By this way we became **Platinum Partners Renesas Technology Europe**, the world leader in the manufacture and supply of microcontrollers.

Remaining consistent in this way they hope to share the development and success of many other partners

From Concept to complete solutions, providing designs and deliver the right solution for embedded control systems enabling specific client customized requirements.

We stay focus on innovation from conception/design to final product.

Benefit: Fast Prototyping, Efficiency, Partnership.

Key Applications Focus Area: Motor/Drive Control.

- Power Generation & Conversion [AC/DC- DC/DC]
- Inductions Heating
- Small Appliances (Coffee Machines, shavers...)
- Metering
- High End User Interface.
- Serial Communications
- Software Porting

<http://www.bfgengineering.it>