

RA Ecosystem Partner Solution

Sensorless Motor Control



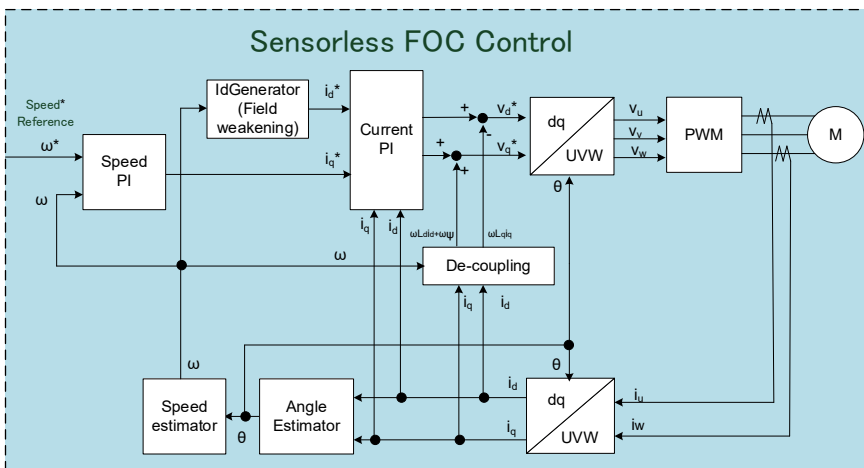
Solution Summary

A custom motor driver solution service using Renesas [RA MCUs](#)

Feature/Benefits

- Sensorless Field Oriented Control software for BLDC motor
- Software PFC control
- Auto Tuning Tool for sensorless Field Oriented Control
- Realtime waveform viewer ICS++

Block diagram



Realtime waveform viewer ICS++



Target Markets and Applications

- Various motor control applications such as Air conditioner compressor, Refrigerator compressor, FAN and Pump

Desk Top Lab

Desk Top Lab is a company that aims to provide customers with motor control technology know-how.

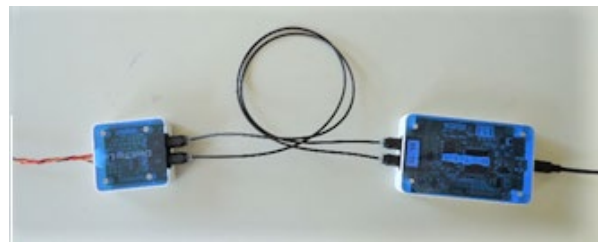
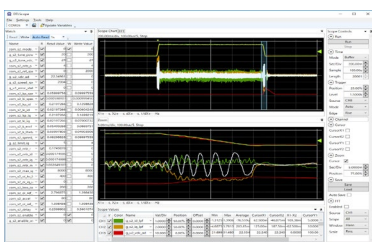
Desk Top Lab mainly provide the following services.

- 1) Custom motor control board
- 2) Custom motor control software with full source code
- 3) Motor control technology consultant
- 4) Debugging tool for motor control
(Realtime waveform viewer)
- 5) High voltage / Low voltage inverter for first trial
(From 1A to more than 100A)
- 6) Standard CPU card for above inverter
(RA, RL78, RX, RH, RZ series for motor control)



We provide motor control software in plain source code that is easy to understand.

We also provide a real-time waveform viewer tool “ICS++” dedicated to motor control that allows safe debugging even with high-voltage inverters by insulating them with optical fibers.



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