Desk Top Lab

Renesas Ready Ecosystem Partner Solution Sensorless Motor Control

Desk Top Laboratories Inc.

Solution Summary

We support the development of custom motor drivers based on customer requirements using Renesas' <u>RA</u>, <u>RX</u>, and <u>RL78</u> families, and provide motor control software, evaluation tools, and hardware for zero-level prototyping.

Features/Benefits

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

Diagrams/Graphics



<0th order prototype hardware>

- Experimental high voltage inverter 300VA to 10kVA
- Experimental low voltage inverter 5A to 100A peak Output
- CPU card

Target Markets and Applications

- Air conditioner compressor
- FAN
- Water pump

- Refrigerator compressor
- Oil pump
- · Various motor control applications

www.desktoplab.co.jp/service.html



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)
- 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.





Contact us : <u>saka@desktoplab.co.jp</u>