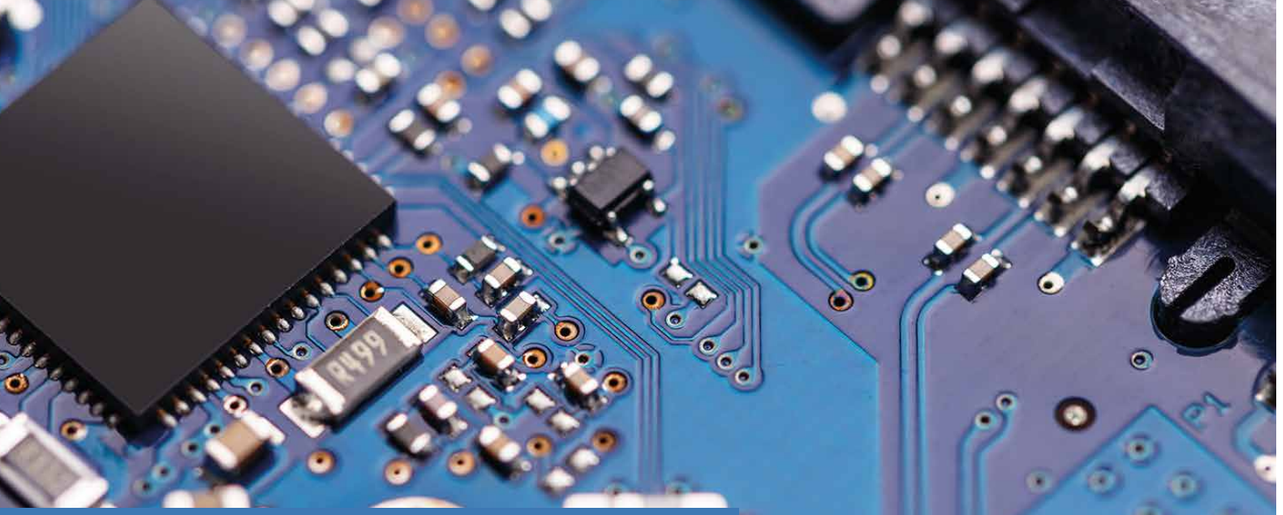

Interconnected
Motor Control
made easy

idastroem.de

Our Mission

Your successful solution

When you choose to design-in our proven motor control solution you receive a complete system with batteries and support included.

Hence you can tackle demanding technologies like sensorless control of BLDC and stepper motors with confidence and without taking unnecessary risks.

Convenient and easy to use tools for diagnosis and bring-up enable you to perform these tasks like maintenance yourself.

Our Promise

Experience how we solve your specific motion control challenge together as partners

30
No experiments
30 year experience

We know for sure what works and what doesn't

Reliable and Robust
EMC compliant and proven

Design-in EMC compliant Hardware und robust Software modules

Modular & Efficient
Short development cycles

Proven modules provide fast prototypes and concept studies

Research
Always state-of-the-art

Ongoing development and improvement of our motor controllers

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https://www.idastroem.de
info@idastroem.de

Evaluation-Kit
Sensorless Control
For BLDC motors

available at Q3/2020

idastroem.de

STM32MP157-DK2 from STMicroelectronics

TFT Display with Touchfunction

ext. Monitor (HDMI)
USB-Mouse

Ethernet for web-based user interface

12-36V Input

BLDC-Motor connector

Motor driver
idastroem BLDC_MP15x

Convenient control and usage in real-time

Are you eager to find out for yourself within seconds whether sensorless control of BLDC motors is fitting for your application?

Use our latest evaluation kit for this task, which can be controlled conveniently via touch screen or remote over ethernet in a web browser based user interface.

Flexible usage - with and without pc computer

The evaluation kit is immediately ready after power on and does not require an additional computer. Choose your maximum drive current, velocity and direction on the touch screen and observe the result on the motor immediately.

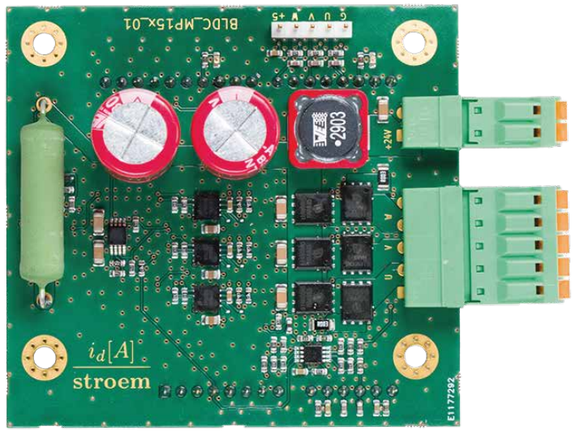
For sophisticated analysis connect the evaluation kit with your pc computer using ethernet or wifi interface.

What ever method you choose, in both cases you observe the controller state, like phase currents, velocity and torque precisely and synchronized to the control loop at the speed of 32 kHz.

Therefore you can tune the controller easily yourself.

Evaluation-Kit
Sensorless Control
For BLDC motors

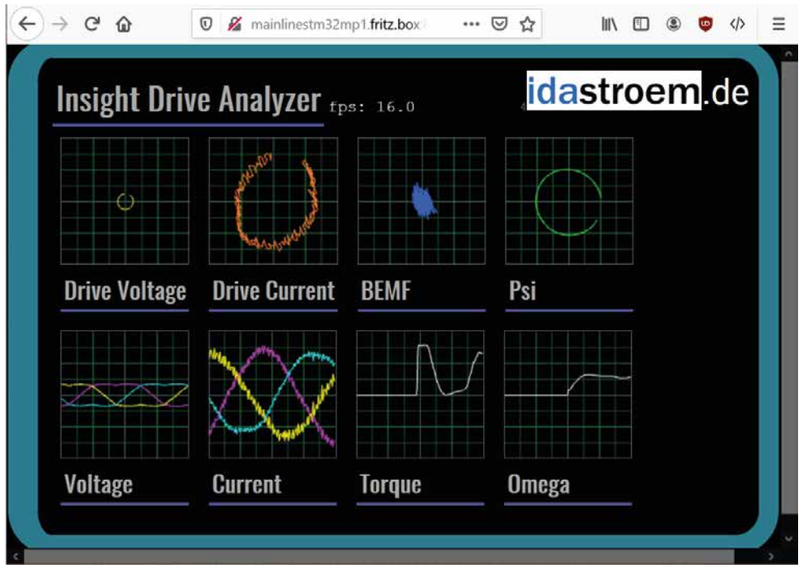
Evaluation-Kit
Sensorless Control
For BLDC motors



Motor Driver

Input voltage range:	12 - 36 V
Output current (rms):	7 A (no cooling)
Peak current (rms):	14 A (no cooling)
HALL-Inputs:	5V pull-up
PWM-Frequency:	32 kHz
Control loop:	31,25 us
Set values:	Torque, Velocity
Motor Driver temperature:	monitored
Under voltage:	monitored
Over voltage:	monitored
I²t-Monitoring:	Driver, Motor and Brake resistor
Voltage clipping: (Brake-Chopper)	Voltage adjustable (up to 40 V)

Realtime Display in Web-Browser

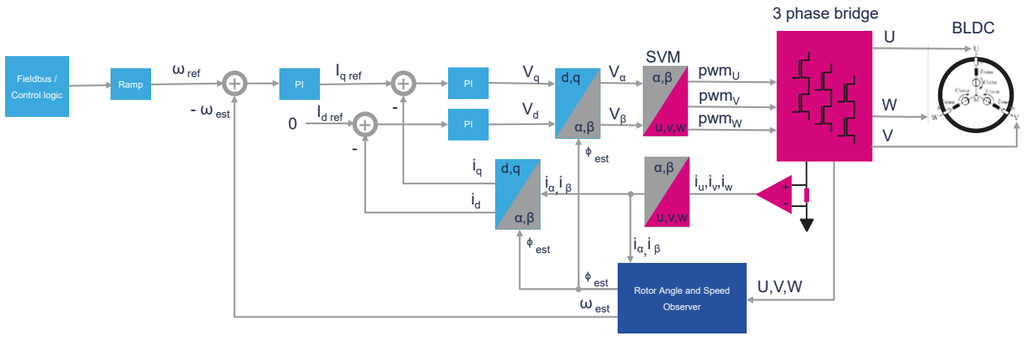


Included components

Motor driver BLDC_MP15x
STM32MP157-DK2
preinstalled memory card
BLDC motor
24V power supply
networking cable
printed getting started tutorial

Sensorless control of BLDC motors

The control system observes the reactions of the motor in response to control signals and computes, based on a mathematical motor model, the current electrical rotor angle and velocity. The motor model is tuned during operation to follow the actual motor parameters closely.
This saves you time consuming and error prone calibration and setup procedures.



Fast Integration in your end product

After successful evaluation you just license the hard- und software modules of your choice and we support you designing in the motor control technology in your product.
With this approach you benefit from shortened development time and application of proven motor control technology.

Save money
Just on drive cable, no sensor

Shortened BOM, easier production, less storage and material usage

A robust solution
No sensor, no problem

Tolerates electrical disturbances and dirt better which means less errors

Start immediately
No Motor-Calibration needed

The controller adapts steadily to the motor in an optimal way.