

SEMINAR: ROTARY MAGNETIC ANGLE SENSORS & BRUSHLESS DC MOTORS ON THE 18. MAY 2017

**Seminar organised by Endrich GmbH
together with Monolithic Power Systems (MPS).**

Seminar language: English

Place: Hotel Empfinger Hof (South Germany)

Limited number of participants, registration requested

Abstract: Magnetic Angle sensors and Brushless DC motors are becoming widely used in industrial, consumer and automotive

applications, often in combination to provide motor commutation and speed or position control. Product experts from Monolithic Power Systems (MPS) will describe in two sessions the design considerations when using rotary magnetic angle sensors, followed by the different techniques of driving brushless DC motors. Application examples will be demonstrated during both sessions, concluding with a combined field orientated brushless motor control solution incorporating magnetic angle position sensing.

AGENDA

Morning Session:

Designing with Rotary Magnetic Angle Sensors

The following topics will be covered

- Magnetic Angle Sensing vs Alternate Techniques
- Types of Magnetic Angle Sensor (Hall, MR/GMR)
- Principles of Operation (Multi-pole Track, Arc-Tangent, SpinAxis)
- Accuracy / Resolution / Linearity / Lag
- Sensor Output Types (Digital, ABZ, PWM, UVW)
- Magnet Types, Magnetic Field shapes, Magnet Positioning Considerations
- Matching the right sensor to the Application
- BLDC Motor control demo using the MPS MagAlpha sensor

Afternoon Session:

Designing with Brushless DC Motor Drivers

The following topics will be covered

- BLDC Motor Types Overview
- Commutation schemes (Sensorless, Block, Sinusoidal, Field Orientated Control)
- BLDC Drive Methods
- Designing with BLDC gate drivers and fully integrated power stages
- Sensored Field Orientated Control – MP6570 FOC Engine with embedded magnetic angle sensor
- MP6570 demonstration

PLEASE REGISTER TILL 21. APRIL 2017 (FAX, TELEPHONE OR E-MAIL)

Last name, first Name

Company

e-mail

Phone number

Contact for information: Mr. Kinn · Tel.: +49(0)7452-6007-21 · Fax: +49(0)7452-6007-821 · e-mail: d.kinn@endrich.com

HEADQUARTERS

ENDRICH Bauelemente Vertriebs GmbH · P.O.Box 1251 · D-72192 Nagold
T +49 (0) 7452 6007-0 · F +49 (0) 7452 6007-70
endrich@endrich.com · www.endrich.com

SALES OFFICES IN EUROPE

France:

Paris: T +33/2 41 80 19 87 · france@endrich.com

Austria & Slovenia

Vienna: T +43/1 66 52 52 521 · austria@endrich.com

Hungary:

Budapest: T +361 / 2 97 41 91 · hungary@endrich.com

Bulgaria:

Sofia: T +359/2 874 30 49 · bulgaria@endrich.com

Romania:

Timisoara: T +40/356 11 41 88 · romania@endrich.com

Switzerland – Novitronic:

Zurich: T +41/44 306 91 91 · info@novitronic.ch

Spain:

Barcelona: T +34/93 217 31 44 · spain@endrich.com



Certified acc. to ISO 9001/14001