



SEMINAR INVITATION

Power Design Excellence:
Components,
EMC & Thermal Management

Partner:



WÜRTH ELEKTRONIK MORE THAN YOU EXPECT

INVITATION TO POWER DESIGN EXCELLENCE: COMPONENTS, EMC & THERMAL MANAGEMENT

Together with Monolithic Power Systems (MPS), a leading international semiconductor company, Würth Elektronik cordially invites you to this joint seminar tour.

Design power supplies that are more efficient, EMC-compliant and thermally robust. In this joint session, our field application engineers and the engineers from MPS bring both perspectives to the same converter — the active silicon and the passive components — covering design fundamentals, inductor and capacitor selection, EMC-aware design, and thermal management.

Main topics:

- Power supply design fundamentals and component selection
- Informed choice and selection of inductors and capacitors
- Power supply design from an EMC perspective
- Thermal management

Seminar dates & locations:

Date	Location	Country
27 October 2026	Nieuwgoed Seminarie Centrum, Zwijnaarde	Belgium
29 October 2026	Hotel Park Inn, Leuven	Belgium
3 November 2026	Würth Elektronik, Son	The Netherlands
5 November 2026	Hotel Van der Valk, Zwolle	The Netherlands

Choose your date and secure your seat — free to attend, lunch included, seats are limited.

Register via www.we-online.com/seminar-registration

Cancellation:

Should you be unable to attend after registration, please cancel free of charge via:

Belgium: nathalie.vanherck@we-online.com

The Netherlands: naomi.yip@we-online.com

Cancel up to one week before the event at no cost. Cancellations received later, or no-shows without cancellation, will be charged €27.50.

We look forward to seeing you there.

With kind regards

Würth Elektronik eiSos GmbH & Co. KG & Monolithic Power Systems

AGENDA FOR THE SEMINAR POWER DESIGN

EXCELLENCE: COMPONENTS, EMC & THERMAL

MANAGEMENT

08.30 Arrival | Registration | Coffee

09.00 Welcome

09.15 - 10.30 Power supply design fundamentals and component selection (MPS)

There are many decisions to make when designing a power supply. This session will take you through the initial design decisions when selecting the value of the inductor and input and output capacitors. It will then look at the trade-offs in the design, the impact of these component choices and a review of the losses within the circuit, before finally looking at types of control topology and their influence on the transient response.

10.30 - 11.00 Break

11.00 - 12.15 Selecting inductors and capacitors (Würth Elektronik)

Choosing the right inductors and capacitors is essential for optimizing the performance and reliability of power supply designs. Power inductor selection involves understanding key parameters such as rated current, saturation current, DC resistance, percolation effect and core materials, because not all inductors are alike. Accurate modeling of inductors helps in predicting their behavior under various operating conditions. Similarly, selecting capacitors requires consideration of factors like capacitance value, voltage rating, and aging effects. Using tools like REDEXPERT, designers can make informed choices, balancing performance, cost, and reliability. Smart component selection enhances the efficiency, stability, and longevity of the power supply.

12.15 - 13.30 Lunch

13.30 - 14.45 Power supply design from an EMC perspective (MPS)

This presentation will look at the sources of noise within a power supply and identify common mistakes found in PCB design that cause poor EMC performance. We will then look at good layout techniques to minimize EMC, tips for further improvement, and the advantages achieved when using spread spectrum clocking.

14.45 - 15.15 Break

15.15 - 16.30 Thermal management (Würth Elektronik)

This presentation will cover PCB layout optimization for maximum heat dissipation, focusing on design strategies and best practices. It explores tools for identifying thermal issues early in the design stage and techniques to enhance conduction, convection and radiation efficiency. Additionally, it provides insights into ensuring optimal heat transfer from PCB to heatsink. Attendees will gain practical knowledge to improve thermal performance in their designs. Finally, we will look at the supporting documentation required for thermal management compliance.

16.30 Q&A and closing the day