SEMINAR INVITATION

24.06.2025, Liège Belgium

In collaboration with:

WÜRTH ELEKTRONIK MORE THAN YOU EXPECT

INVITATION TO THE FREE SEMINAR ON 24.06.2025 IN LIÈGE

Würth Elektronik invites you to the free Seminar on 24.06.2025 in Liège.

The seminar was designed by engineers and technicians and is aimed at people who are interested in practice-oriented content, to get support in the development of error-free electronics and devices.

Main topics:

- From design to certification, BEA challenges and approach
- Unleashing the power of a low impedance (return) path
- EMI debugging – designing your ideal filter
- Power Converters - EMI Sources Modeling
- How to comply with EMC Directive

Seminar location:
Université Liège
Allée de la Découverte 10
4000 Liège

Tuesday, 24.06.2025 from 9 am to 15:30 pm

Are you interested in participating? Please register until 19.06.2025. Participation is free of charge and lunch is included. You can register here: www.we-online.com/seminar-registration

If you are unable to attend after registration, cancel free of charge via Nathalie.vanherck@we-online.com. This is possible up to 1 week before the start of the event. We charge €27,50 for late cancellations or absence.

We are convinced that we can offer you an interesting seminar and are looking forward to your participation.

With kind regards
Würth Elektronik

AGENDA FOR THE FREE SEMINAR

9:00:	Registration with breakfast
9:25:	Welcome and introduction
9:30:	From design to certification, BEA challenges and approach (Gilles Ghysens) In this presentation, we will discuss the challenges and best practices for ensuring EMC compliance in products covered by various European regulations, including the EMC Directive, RED, and Machinery Directive. We will focus on selecting the appropriate standards based on the product's application, implemented technologies, and intended operating environments. Next, we will outline the approach used at BEA to develop compliant products, from initial design to final certification.
10:30:	Break
11:00:	Unleashing the power of a low impedance (return) path (Tristen Boeckx) The concept of creating a low impedance (return) path plays a crucial role in enhancing EMC performance. A low impedance path serves as a vital foundation for improving EMC performance. During this seminar, we will explore the key principles and strategies for designing and implementing an effective low impedance (return) path
12:15:	Lunch
13:00:	EMI debugging – designing your ideal filter (Raf Vleugels) The primary focus of my session is about explaining the differences between common mode noise and differential mode noise and why it is so important to identify which one is dominant. While shielding can offer a good solution for radiated emissions or immunity, time constraints limit a detailed exploration of this secondary measure. I will explain the effects of introducing filter components like an L (inductor) or a C (capacitor) into both high and low impedance systems. In the case of common mode, a more in-depth examination of the material properties of Common Mode Chokes (CMCs) is conducted, exploring their combination with (Y) capacitors. The discussion also zooms in on the differential mode filter, taking into account aspects such as the leakage inductance of common mode chokes and the utilization of filter inductors.
14:00:	Power Converters - EMI Sources Modeling (Fabrice Frebel) This seminar explores various coupling modes, starting with a basic model and progressing to a practical case involving a switching cell.

14:30:	**How to comply with EMC Directive (Véronique Beauvois)** **This presentation will complement the first one from BEA. Drawing from our experience as an EMC laboratory working with various manufacturers, we will clarify the distinction between the EMC Directive and harmonized standards. Even if they comply with harmonized standards, manufacturers must remain vigilant in applying the essential requirements.**
15:30:	**Free tour of EMC measurement rooms (optional)** **(agenda may be subject of changes)**