Nordic Test Forum

invites to

TestForum 2025

A Nordic event for exchange of experience and know-how
within the field of production test of electronics.

Meet colleagues and experts, gain knowledge about trends
and best practices in the area, test of electronics.

Tuesday and Wednesday, December 2nd and 3rd, 2025

Comwell Borupgaard, Snekkersten, Denmark

TestForum 2025 December 2nd & 3rd Snekkersten, Denmark

Dear Test Professional,

For almost 25 years, TestForum has been a natural meeting point for those who wanted to delve deeper into the challenges of testing electronics, create better contacts through networking and, not least, utilize “best practices” in testing that we continuously see emerging.

Many of the methods used today in testing electronics are in principle the same as 25 years ago, but the development of electronic products, not least the increasing complexity and ever smaller physical dimensions, have changed the use of the methods in testing drastically and required refinement, better tools and more. So, testing electronics in 2025 is very different than in 2001, when TestForum started.

At the same time, the use of new methods, such as optical inspection and X-Ray inspection, is increasingly used and the solutions have grown in complexity in line with the development of electronics.

New methods are still being added. For example, there is a lot of focus today on the use of AI solutions to ensure even better testing and quality assurance. This is hardly the last development we will see in terms of new methods, but today we do not always know what may emerge in the coming years. Data is increasingly a decisive factor in achieving better quality.

All of this puts great pressure on employees and their ability to keep up. Here, TestForum fulfills an important mission, as it creates the opportunity for increased knowledge sharing, understanding of methods and solutions that help solve the new challenges.

TestForum 2025 is no exception. We have a wide range of solutions on the program, which are shared partly through presentations in the conference itself, in talks at the exhibition, and not least in the networking activity, which is absolutely crucial for you as a test professional to be at the very top of what is possible and makes sense - also in your own everyday life.

We hope that as a participant in TestForum 2025 you will experience the inspiration and joy that many before you have achieved through TestForum events, and that it will enable you to ensure even better quality assurance of the products that you and your company work with. Good luck with your participation in TestForum 2025. We are sure that you will not go home disappointed.

Yours sincerely

Knut Båtstoløkken

Knut Båtstoløkken
Chairman of *Nordic Test Forum*

Key Note Speaker **Kevin Schultz, Emerson's Test & Measurement Business**

'The Impact of AI on Test Engineering'

Kevin Schultz
Chief Technology Officer and General Manager
Technology Innovation Office
Emerson's Test and Measurement Business,
formerly NI

In the field of Test Engineering, the pressure to deliver higher quality, lower cost, and better-performing products continues to intensify in response to the fast-paced evolution of the technologies we test. Among the most transformative of these is artificial intelligence, which is advancing at a pace that is surpassing the historic trajectory of the PC era under Moore's Law.

Today's test engineers must adopt AI thoughtfully, ensuring it complements our expertise, strategically leverages our test data for deeper insights, and strengthens our processes to deliver the best outcomes for our customers.

Join Emerson Test and Measurement CTO Kevin Schultz for a forward-looking discussion on how AI is reshaping the test and measurement industry and how engineers can responsibly integrate AI to drive innovation while preserving the core values of quality, accountability, and rigor.

Executive Bio for Kevin Schultz

Kevin Schultz serves as chief technology officer and general manager of the Technology Innovation Office at Emerson's test and measurement business, formerly NI. In this role, he is responsible for driving long-term, sustainable differentiation through disruptive, customer-focused innovation and the development of foundational architectures and technologies.

Throughout his career, Schultz has partnered closely with business leaders to deliver differentiated technologies and products for customers. He joined NI in 1991 as a design engineer, contributing to the company's innovative architectures and products in data acquisition, embedded control, conditioned measurements, precision and RF technologies.

Prior to his current role, Schultz served as senior vice president over multiple research and development divisions, including platform, segmenting, RF and data acquisition and control. He is the inventor or co-inventor of 25 technical patents, representing his work driving strategic innovation, development and execution.

He holds Master of Science and Bachelor of Science degrees in electrical engineering from Texas A&M University and St. Cloud State University, respectively, and serves on the Dwight Look College of Engineering Advisory Council at Texas A&M University.

Nordic Test Forum in Brief

TestForum is an annual event run by *Nordic Test Forum (NTF)* every fall/early winter. *TestForum* typically has 4-5 thematic areas and cover a broad balance of test and inspection.

TestForum has its roots back the late eighties, where it originated as an event for the Norwegian electronics industry. However, from the late part of 2001 a group of people from Norway, Sweden and Denmark established the network community, *Nordic Test Forum*. Later on, this activity (including the *TestForum* event) was extended to include all Nordic countries and the Baltic States. The language of the official presentations is English. Content and focus of the TestForum varies over time, but always within topic areas in focus at a given point in time.

TestForum has its main emphasis on issues relevant to production managers, engineers and technicians working in the fields of production, test, inspection and validation of electronics. At TestForum events we offer technically relevant presentations on methodology, tools, modules/instruments and available technology. The interaction between users and suppliers within the focus areas is an important asset of TestForum, and this balance and interaction is pursued in presentations, panel discussions, networking, show cases at the attached exhibition and in the planning of the events.

TestForum Aims at:

- Creating and sustaining a relevant, balanced and coherent interaction between users as well as between users and suppliers of solutions for test, inspection, validation and production of electronics.
- Providing an up-to-date view on new methodologies and tools for relevant test, inspection, validation and production of electronics.
- Establishing a relevant and balanced view on equipment, systems, tools and software from tool vendors in the domain.

Target Audience of TestForum

Engineers and technicians, managers and planners within the fields of electronics production and test, inspection and validation. Includes also decision makers in organizations that procure equipment, tools and systems for production and test, inspection and validation of electronics.

Executive Committee of TestForum event and NTF organization

Knut Båtstoløkken, Kitron AS, Norway (Chairman)
Birger Schneider, CHAMAJ, Denmark (Treasurer)
Mika Pussinen, Nokia, Finland (Secretary)
Artur Jutman, Testonica Lab, Estonia
Erik Larsson, Lund University, Sweden
Harri Korhonen, Oitec OY, Finland
Lars Kongsted-Jensen, EP-TeQ A/S, Denmark
Mats Klarholm, Columbia Elektronik, Sweden
Mattias Ericsson, Questit, Sweden
Paulius Musteikis, UAB Kitron, Lithuania
Raimedas Sodaitis, EP-TeQ UAB, Lithuania
Thomas Goetz Keysight Technologies (associate member), Germany

Become a Member of Nordic Test Forum

If you are involved in production test, validation test, and inspection of electronics and your professional work is related to activities in the Nordic countries as a test professional, design engineer, manufacturer, supplier of solutions, consultant, etc., you may register as member of Nordic Test Forum (NTF) in order to benefit from:

- Exchange of know-how in testing
- Increased contact network in the Nordic countries
- Surveillance and information of international activities in the area of test and inspection
- Discounts at NTF seminars and TestForum events

Please register on the WEB page: http://www.NordicTestForum.org

TestForum 2025 Local Organizer

The local organizer is:

Birger Schneider
CHAMAJ Consult ApS
Skovgraensen 3
2960 Rungsted Kyst
Denamrk

Mobile: +45-4055 2100
E-mail: birger.schneider@chamaj.com

Technical Program of TestForum 2025

Nordic Test Forum (NTF) Annual Assembly, December 1st, 2025

The NTF organization holds an annual general assembly a day before the TestForum conference. This year it will be held on **December 1st at 20:00**. The agenda and motions will be dispatched to the members in a separate mailing.

Tuesday, December 2nd, 2025

Time	Titles	Speakers or additional info
08:15-08:30	Registration	
08:30-08:40	Welcome / Introduction	Knut Båtstoløkken
08:40-09:40	**KeyNote Session**	*Chairman: Knut Båtstoløkken*
08:40-09:40	The impact of AI on Test Engineering	Kevin Schultz, CTO, Emerson Test and Measurement (NI)
09:40-10:20	**Exhibitor Forum: short presentations**	*Chairman: Artur Jutman*
10:20-11:00	Coffee Break / Exhibition	
11:00-12:30	**Session 1: Reliability / Test software / Structural test 1**	*Chairman: Lars Kongsted-Jensen*
11:00-11:30	1.1 Hidden hardware and software layers silently destroying your cost of test and reliability of the test system.	Mher Minasyan, Engineering Manager, Semiconductor and Electronics Business Unit, Emerson Test and Measurement (NI)
11:30-12:00	1.2 Ensuring Compliance and Traceability: Leveraging LabVIEW & TestStand in Regulated Industries	Anders Rohde, CIM.AS
12:00-12:30	1.3 ICT Digital Twin by NVIDIA Omniverse, AI for Programming & Tuning. AXI for EV Power Inverter.	Anthony Wang, TRI Test Research Europe GmbH
12:30-13:30	Lunch	
13:30-15:00	**Session 2: Structural test 2**	*Chairman: Paulius Musteikis*
13:30-14:00	2.1 Optical Inspection as a Key to Quality: The Role of SPI, AOI, and AXI in Modern Electronics Manufacturing	Andreas Türk, Goepel electronic
14:00-14:30	2.2 Modern Legacy Replacement: Scalable High-Channel Test Without Mechanical Constraints	Andrea Romano, SEICA
14:30-15:00	2.3 Flying Probe Test from Standard to High-performing Test	Lothar Diez, SPEA
15:00-15:40	Coffee Break / Exhibition	
15:40-17:10	**Session 3: JTAG based test 1**	*Chairman: Raimedas Sodaitis*
15:40-16:10	3.1 Introduction to Accelerated PCBA Testing and Programming	Bob Storey, XJTAG
16:10-16:40	3.2 From Lab to Production - deployment of JTAG/Boundary Scan projects in heterogeneous ATE environments	Jan Heiber, Göpel electronic
16:40-17:10	3.3 Do you manage your assets?	Jack Bering, CN Rood
17:10-17:40	Fruit & Refreshments / Exhibition	
17:40-19:00	**Panel debate:**	*Panel moderator: Birger Schneider*
	Will AI change test of electronics? - and if so, how?	
19:30	Gala Dinner	

Wednesday, December 3rd, 2025

Time	Titles	Speakers or additional info
08:30-10:00	**Session 4: Best practices in manufacturing test / Test data analysis**	*Chairman: Erik Larsson*
08:30-09:00	4.1 Test & Quality requirements by IPC Standards	Poul Juul, Hytek
09:00-09:30	4.2 New test engineering software technologies for PCBA	Christophe Lotz, Aster Technologies
09:30-10:00	4.3 Beyond the Test: Visualizing End-to-End Unit flows in Manufacturing	Natanya Sukkot, Virinco
10:00-10:45	Coffee Break / Exhibition	
10:45-12:15	**Session 5: Functional test 1**	*Chairman: Mattias Ericsson*
10:45-11:15	5.1 No-code programming for affordable in-circuit function test	Fredrik McKibben, Elprint
11:15-11:45	5.2 Keysight EOL FCT Systems	Hock-Yew Yeap, Keysight Technologies Germany GmbH
11:45-12:15	5.3 Testing Power and Energy Systems for the Green Transition	Mickey Madsen, Altoo
12:15-13:30	Lunch	
13:30-15:00	**Session 6: Functional test 2 / JTAG based test 2: IJTAG**	*Chairman: Mats Klarholm*
13:30-14:00	6.1 Reduce testing complexity for multi-facet test objects	Daniel Rhodin, E-Sharp AB
14:00-14:30	6.2 Progressive Test Automation	Jean-Luc Blouet, IPTE
14:30-15:00	6.3 Securing IEEE 1687 IJTAG	Erik Larsson / Joel Åhlund, Lund University / Advenica
15:00-15:15	Closing Session: TestForum concluding remarks	*Knut Båtstoløkken, Kitron*

Exhibition

As usual, a mini exhibition will take place in frames of TestForum event where vendors are welcome to present their tools and methodologies related to production test.

Exhibitors can make arrangements with NTF about exhibition space. If nothing special has been agreed, a table of about 60x120 cm^2, a 230 V power connection as well as space for posters or similar material will be provided. Every exhibitor will be given 4-5-minute slot in the program for a brief introduction.

TestForum registration and hotel booking

The **Conference Fee** includes participation in **TestForum**, food and refreshments from Tuesday morning to Wednesday afternoon as well as forum proceedings on a USB memory stick. Hotel rooms, if needed for staying overnight, must be purchased separately. TestForum conference fees are as follows:

• NTF member	EUR 685
• A non-member	EUR 785
• A student (with valid student ID)	EUR 360
• Exhibitor, booth rental & 1 participant	EUR 1.225

Registration for TestForum 2025 can be done using the following link.

https://testforum.nemtilmeld.dk/6/

Alternatively, you may contact the TestForum secretariat at

Att.: Jytte Schneider
Tel.: +45- 2579 1120
E-Mail: jytte.schneider@nordictestforum.org

The seminar fee will be invoiced directly to the organization, from which the participant comes. In the event of cancellation after the final registration date, or in the event of failure to show up, the entire fee is still due. On request, another person from the same organization can participate instead.

Hotel Booking

If you need a hotel room during TestForum 2025, we recommend for your convenience that you book a room at the conference center, **"Comwell Borupgaard"**.

Hotel rooms at Comwell Borupgaard are guaranteed available up until 30 days before the conference. After that date, you will need to call the hotel and ask if rooms are still available and can be booked.

Up until November 2, 2025, hotel rooms are booked as follows:

1. Click on www.comwell.com/en
2. Select "**Start booking**"
3. Under hotel select "**Borupgaard Snekkersten**"
4. Press "**+ Add booking code**" (important that you enter booking code, before you chose dates)
5. Enter the code: **BC-PZMG-NY3U**
6. Pres **"Confirm"**
7. Now check dates for "check out". If you want to leave on Wednesday December 3, choose **"3" for departure day,**  , if you stay until Thursday December 4, choose **"4"**.

8. Press "**Select**" (right bottom)
9. Then go back to the menu field I in the left side and press **"Search"** Options for rooms will appear.
10. The reservation can now be completed.

Room rate for a single person is **1.350 DKK/night** (**approx. 181 EUR/night**) including breakfast.

Booking rooms at the conference hotel is **not** mandatory for participation in the seminar.

Conference hotel address:

Comwell Borupgaard
Nørrevej 80 (Noerrevej 80)
3070 Snekkersten
Denmark

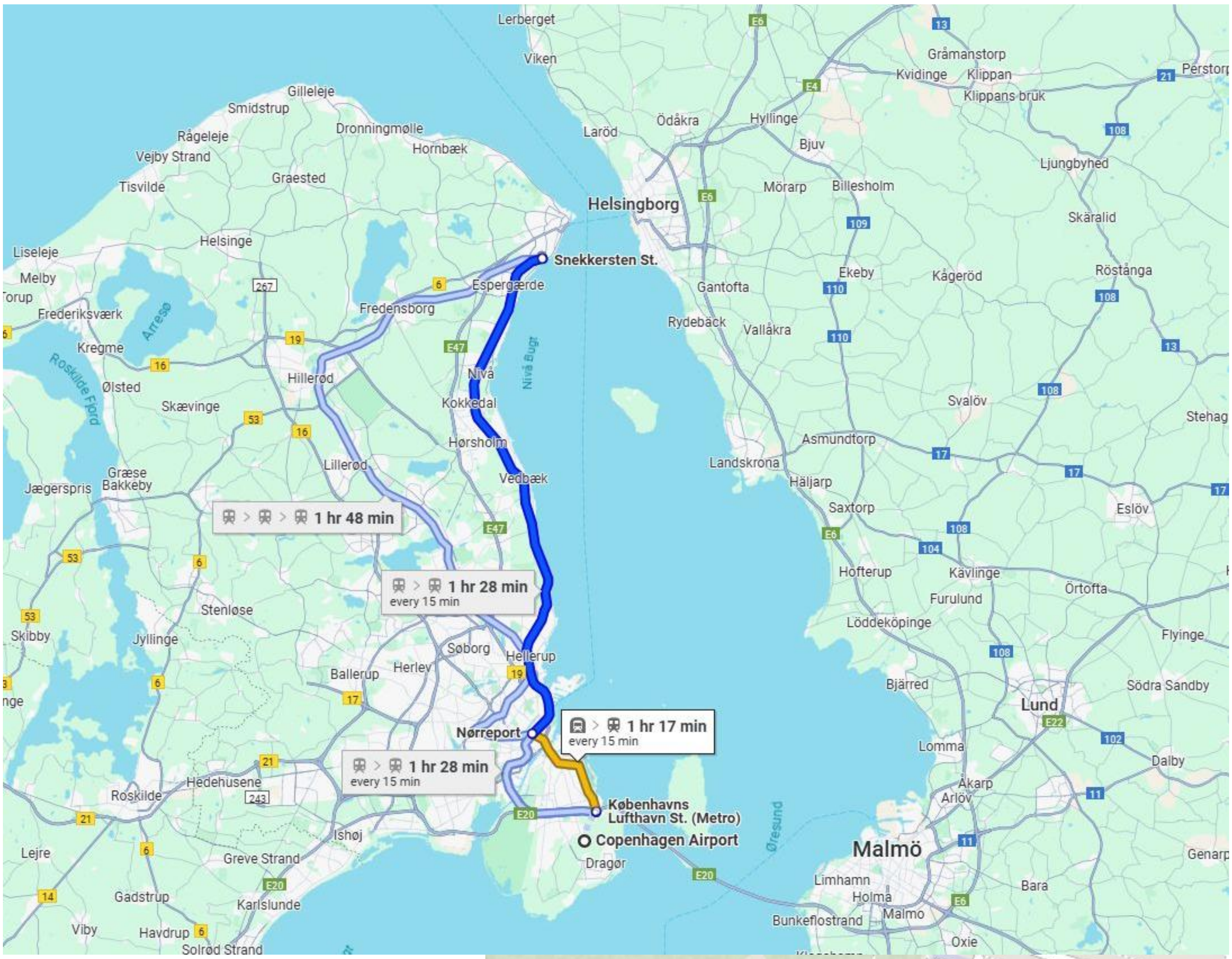
Tel.: +45-4838 0333

Getting to the conference hotel

Snekkersten is located North of **Copenhagen**, just a few kilometers South of **Helsingør (Elsinore).** From **Copenhagen Airport** it takes **1 hr 17 min** to get to Snekkersten. If you take **Metro** to **Copenhagen Central Station** and train from there, or 1 hr 28 min if you take train all the way. **Trains leave every 15 minutes from Copnehagen to Snekkersten.**

Comwell Borupgaard is located next to the **train station in Snekkersten**. You just need to walk a few hundred meters from the train to the conference center.

If you come by ferry from **Helsingborg** to **Helsingør**, take the coast road South to Snekkersten, if you come by car, or the train from **Helsingør (Elsinore)** to **Snekkersten** train station.



The top map shows the travel options by train from Copenhagen Airport to the TestForum Conference hotel **“Comwell Borupgaard”** in Snekkersten.

The map below shows the directions and distance from Snekkersten train station to the conference hotel.