



# Nordic Test Forum

## Newsletter Summer 2004

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### Introduction

Welcome to the first Nordic Test Forum Newsletter. Firstly we would like to welcome you all back from hopefully a relaxing summer vacation.

The purpose of the newsletter is to keep our members and prospective members up to date with news and information about the NTF and also about forthcoming events. Important dates for your calendar are shown in the activities calendar. We hope to have a large number of attendees at our forthcoming events and at the Test Forum at the end of this year.

The new web server is now up and running. We still have some work to do, however we have made the leap forward in starting the new pages. Any ideas of additional information to put on our web pages are appreciated. Please send any proposals to Bjørn B. Larsen. The new web address is [nordicestforum.org](http://nordicestforum.org)

The executive committee is still seeking additional members in Denmark and Finland. Be a decision maker become a member !!!! Contact Knut Båtstøløkken or any of the local board members if you are interested in joining the Executive Committee. We value your input.

Meanwhile we all hope to see you at one of our events during the coming year. We firmly believe there are going to be a number of new challenges to face in the test industry in the coming years. One of particular interest is going to be the challenges on the test world upon introducing lead free solder. We hope we can work together to overcome the challenges.

The executive committee.

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### Activities Calendar.

1<sup>st</sup> September 2004 1-day ESS HALT/HASS seminar in Delta Labs, Hørsholm, Denmark.

22<sup>nd</sup> September 2004 ½ day seminar "News on PXI and other instruments for manufacturing test". At E04 exhibition in Oslo Norway. Program can be found from the NTF website.

30<sup>th</sup> November – 1<sup>st</sup> December NTF04. 2-day seminar covering various test topics at Vår Gård Stockholm.

February 2005 ½ day event at Elektronik/EP 2005 in Älvsjö

April 2005 ½ day event at Elkom05 in Helsinki.

Late 2005 NTF05 to be located in Norway

Late 2006 NTF 06 to be located in Finland

### Profile of Knut Båtstøløkken current chairman of the NTF.



Knut Båtstøløkken is Senior Test Development Engineer and Group Leader for the Test Development group in Kitron Development in Arendal. He has 20 years of experience working with test development. He joined Norsk Data in 1984, working with test development on functional and in-circuit automatic test equipment. Since 1989 he has been working in Kitron with test

development and promoting design for test and design for manufacturing issues to Kitrons customers. In 1998 he initiated the project "Manufacturing test for modern electronics production". This project ran from 1999 to 2000. Based on the activities from this project, Nordic Test Forum (NTF) was founded in 2001. Knut has been the chairman of NTF since the start. He is also a board member of "Den Norske Utleggerforning" (a Norwegian association of circuit board designers).

### Elected board Members.

At the NTF03 in Snekkersten the following board members were elected.

Knut Båtstøløkken Chairman [knut.baatstoloekken@kitron.com](mailto:knut.baatstoloekken@kitron.com)  
Stig-Gunnar Jensen [Stig.gunnar.jensen@no.flextronics.com](mailto:Stig.gunnar.jensen@no.flextronics.com)  
Mick Austin [mick@jtag.com](mailto:mick@jtag.com)  
Birger Schneider [bsc@microlex.dk](mailto:bsc@microlex.dk)  
Bengt Magnhagen [bengt.magnhagen@ing.hj.se](mailto:bengt.magnhagen@ing.hj.se)  
Ole H Flesaker [ole.flesaker@hibu.no](mailto:ole.flesaker@hibu.no)  
Bjørn B. Larsen [bjorn.b.larsen@iet.ntnu.no](mailto:bjorn.b.larsen@iet.ntnu.no)  
Gunnar Carlsson [gunnar.carlsson@ericsson.com](mailto:gunnar.carlsson@ericsson.com)

If there are any questions or items you wish to be added to the newsletter or have proposals for new topics at any events please contact your local NTF board representative.

## TestForum 2004 – a two-day event in Sweden

This year, TestForum will take place in Saltsjöbaden, close to Stockholm at November 30 to December 1. The main topics will be:

- Economics of Testing
- Functional Test
- Structural Test

The keynote speeches will be:

- Economics of Testing by Michael Wahl, University of Siegen
- Test of Lead Free Boards by Bernard Sutton, Teradyne

Some presentations have already been solicited, but new submissions are very welcome by September 30 at the latest.



The venue is Hotel Vår Gård ([www.vargard.se](http://www.vargard.se)), located 30 minutes from Stockholm centre by public transportation. Rooms are available at the conference hotel if booked well in advance. Booking is handled through registration for the event.

More information will soon be available at the NTF web site  
Contact: Gunnar Carlsson at Ericsson AB, Stockholm  
([gunnar.carlsson@ericsson.com](mailto:gunnar.carlsson@ericsson.com)).

## TestForum 2003

December 2 - 3, 2003, at Comwell Borupgaard, Snekkersten



TestForum is an annual event that Nordic Test Forum (NTF) runs every fall/early winter. NTF also runs 2 to 3 themed events during a year, these events are focused addressing basically only one topic area, each in the area of test and inspection of electronics. whereas TestForum

typically has 3-themed areas and cover the broader balance of test and inspection as well. This year the number of attendees was around 50 and although the majority came from the Nordic countries there were also participants and speakers from Germany, Great Britain, France, The Netherlands and USA.

Keynote speaker Stig Öresjö (Agilent Technologies, USA) presented "Test strategies yesterday, today and tomorrow".

More invited speakers where Michael J. Smith (Teradyne Assembly Test Division, USA) presenting "The effects of Business and Technology on Image Inspection" and Göran Wetter (IVF, Industrial R&D Corp., Sweden) presented "Real-time microfocus X-ray - a tool for quality control and failure analysis of electronics". Gunnar Carlsson (Ericsson, Sweden) had to stay in bed, but had prepared the presentation "System Test and Boundary Scan".

The three themed sessions were

1. Boundary Scan - System test
2. Functional test and fixtures.
3. AOI/AXI inspection

The panel session was "Does AOI/AXI remove the need for ICT and functional test?"

The answer was NO! All techniques are needed, however it is product dependent, what technique to use.

Detailed overview of the Forum can be found from the NTF website.

September 20th to 21st the great Nordic Conference on Printed Circuit Board Quality "MQS Nordic Days" will be held at the same venue. This conference will address issues such as lead-free manufacturing, micro-vias, IPC standards and more.

The e04 event will run September 21st – 23rd.

## NTF mini seminar during e04.

Nordic Test Forum will host a mini seminar during the e04 exhibition in Lillestrøm, Norway in September. The seminar will take place September 22nd.

PXI (PCI eXtension for Instrumentation) has been around for some years now. The number of instruments for this standard is increasing and the price/performance ratio is improving.

We have invited speakers from some of the major suppliers of electronic test instruments who will present their PXI products or alternatives to using PXI instruments.

### Program:

08:30 Registration and coffee

09:00 Introduction

09:05 National Instruments

09:35 LeCroy / Metric

10:05 Aeroflex / Instrutek

10:35 Coffee

11:00 Gage, PXIT, Tabor / Nortelc

11:30 Rhode & Schwarz

12:00 Agilent / 4Test

12:30 Close

*Knut Båstoløkken, NTF / Kitron*

*NN, National Instruments*

*NN, LeCroy*

*Jens Arne Larsen, Instrutek*

*Svein Hermansen, Nortelco*

*Ove Ladegård, Rhode & Schwarz*

*Jonny Langmyren, 4Test*

*Knut Båstoløkken, NTF / Kitron*

For more information on the NTFmini seminar see [http://www.nordicestforum.org/events/e04\\_ntf.htm](http://www.nordicestforum.org/events/e04_ntf.htm)

or <http://www.e04.no/index.php?side=77&did=17&ref=75>

For more information regarding the MQS Nordic days see <http://www.mqsnetwork.org/>

or [www.e04.no/index.php?side=77&did=20&ref=75](http://www.e04.no/index.php?side=77&did=20&ref=75)