

ASIC production testing services

- a one-stop test house in Europe for cost-effective test solutions

Overview

DELTA has over 30 years of extensive experience in semiconductor testing and provides all testing services required for ICs, from wafer test, through qualification testing, to the final production test of packaged devices.

DELTA's ASIC Test Centre was founded by industry pioneers in testing technology. The company's portfolio speaks to the experience of our team and our deep understanding of ASIC testing technology. Our team has demonstrated over 500 complete, fully functional and optimised test solutions since 1976.

Our mission is to provide best-in-class services with sharp focus on developing the most optimised solution in terms of quality and test time.

Gain competitiveness with a flexible test solution

With our 30 years of experience in developing intelligent and cost-effective test solutions, we help our customers address the competitive pressure in terms of profitability and time-to-market during the entire product life time.

DELTA helps you grow by adapting the test solution to your exact needs and the volumes of your product. DELTA can test prototypes manually and smaller volumes in single-site test set-up, meaning that one chip is tested at a time. For large volumes, a multi-site test set-up can be developed. In a multi-site test set-up several chips are tested in parallel to reduce test time and thus minimise test costs.

DELTA's cost-effective testing approach has been adopted by market leaders into a wide range of ASIC devices such as: Digital, wireless, RF, medical and more.

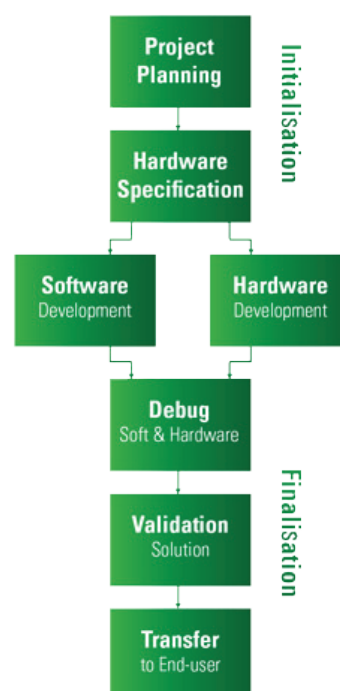
Development with focus on quality

DELTA's team is completely aware of your time-to-market challenge and therefore has developed formal procedures for test development projects over many years to assure clients of high quality and rigorous test solutions.

We manage the test solution development and debug activities by coordination with your project schedule to help you deliver tested components to your customer on-time. This ensures your product a faster time-to-market.

Testing equipment

DELTA has invested heavily in our semiconductor testing resources, and operates one of the largest commercially available microelectronics testing facilities in Europe. We have a variety of equipment to suit different applica-



tions, and thus have the ability to optimise the test solution to the application (in the most optimal way). See below for a list of our test equipment.



Among our major capital equipment investments are:

Component testers (ATE)

- Teradyne Catalyst Mixed Signal Testing for advanced ASICs/High Pin Count
- Teradyne Catalyst Mixed Signal Testing for advanced ASICs/High Pin Count
- Teradyne A585 Mixed Signal Testing for advanced ASICs
- Teradyne J750 VLSI Digital Testing for High Pin Count (320 pins)
- Verigy 83000C VLSI Digital Testing
- Verigy 93000 Single Density (608 pins) with Griffen RF option & mixed signal instruments
- Verigy 93000 Double Density with Postscale RF option & mixed signal instruments

Wafer probers

- TSK-90A upgraded to UF200 Hot chuck, 256k dice/wafer
- TSK-90A upgraded to UF200 Off-site ink,
- 256k dice/wafer
- TSK UF200 AL with Hot chuck, 100k dice/wafer
- TSK UF200 AL with Hot chuck, 100k dice/wafer
- TSK UF200 SA with Hot chuck, 100k dice/wafer
- TSK UF200 SA with Hot chuck, 100k dice/wafer
- A-PM-90A, 4, 6, and 8 inch wafer at 25 - 150°C
- TSK/ACCRETECH UF3000

DELTA

Venlighedsvej 4
2970 Hørsholm
Denmark
Tel. +45 72 19 40 00
asic@delta.dk
madebydelta.com

Component handlers

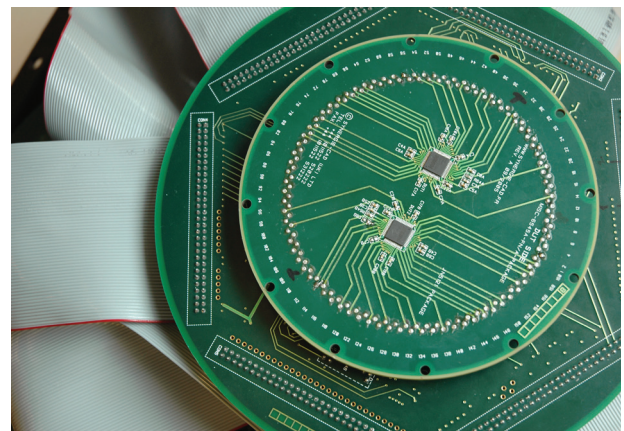
Different handlers can be used to optimise test throughput, supporting test rates to 1500 devices/hour. Some handlers support dual or quad site testing.

We handle DIL, PLCC, QFP, SO, BGA, TSOP, LCC, MLP, QFN and other package types:

- MultiTest MT9510 - Ambient pick & place handler
- MultiTest MT9510 - Ambient pick & place handler
- MultiTest MT9928 Tri-Temp Gravity handler
- MultiTest MT9928 Tri-Temp Gravity handler
- MultiTest MT8589H - Hot / Ambient Temp Gravity handler
- MultiTest MT8589HC - Tri-Temp gravity handler
- ASECO S200 - Tri-temp pick & place handler
- ASECO S200 - Ambient pick & place handler

Other test equipment

- Loranger Sentry 9H Dynamic burn-in chamber
- Hereaus VMS 03 Temperature cycling chamber
- Hirayama HAST Testing - Pressure cooker test



For further information please contact

Gert Jørgensen – gj@delta.dk

Sharon Akler – sak@delta.dk

Henrik Rasmussen – hra@delta.dk

Claus Meyer – cmr@delta.dk