RF Tests for Qualification and Production

The test of RF circuits is a particular challenge, the demands on the equipment used and the test program will be supplemented by additional requirements for signal routing, electromagnetic compatibility and signal integrity. In addition to the necessary equipment, above all, this is a vital demand: **experience**!

The employees of Hitest have performed many successful projects, qualification tests and production tests of frequencies from 100 MHz to 50 GHz. The spectrum of applications ranges from RF filters, high frequency transistors, frequency synthesizers to electronic and optoelectronic front-end circuits.

Our strength: to know what is possible

At the beginning of a project, we analyze test data and specification of the components to be tested. Here we define the sequence of each test step and the necessary equipment. It often happens that individual test steps are disproportionately expensive. In this case, we decide together with our customers, whether and how the test can be changed. The aim is to define a test with sufficient quality at optimal cost.

Possible measurements include:

- Bandwidth of amplifiers and filters
- noise figures of LNA or general purpose operational amplifiers
- S parameter measurements up to 50 GHz
- Time Domain Reflexiometry for investigation of transmission lines

Our Equipment

From an existing portfolio of high-quality measurement devices, we create a configuration appropriate for your task:

Automated RF Test Systems

- HP83000 F330t to 660 MHz frequency, 2 systems with up to 160 channels
- HP83000 F660i to 1.2 GHz signal frequency to 256 channels
- Agilent 93000 up to 500 MHz

High Frequency Measurement

- Network Analyzer up to 50 GHz
- Sampling Oscilloscopes up to 50 GHz
- Noise Figure Meter
- Pattern Generator/Error Detector up to 10 Gbps
- Spectrum Analyzer up to 26,5 GHz
- Microwave Transition Analyzer DC up to 40 GHz
- Microwave Frequency Counter up to 46 GHz
- Vector Signal Generator up to 5.4 GHz
- Vector Signal Analyzer (VSA) up to 2.6 GHz
- Modulation Analyzer up to 26,5 GHz

We are not satisfied with the existing

If the capabilities of existing measurement instruments are not sufficient to solve a task optimally, we supplement our automatic test systems by additional high-frequency measuring instruments.

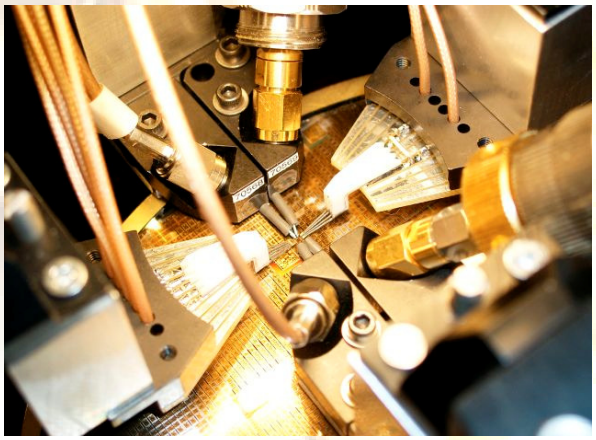
It will be controlled through the automatic test equipment.

Everything from one source

We offer our customers a wide range of services to create a complete RF test:

- Concept Development
- Test Program Development
- Test Hardware Development
  - DUT Boards
  - Test Socket
  - Probe Cards
  - Mechanical Setups
  - μController Systems
- Production of RF-Components
- Testing of Wafers and Packaged Components
  - Manual Qualification Tests
  - Fully Automatic or Manual Production Tests
  - Failure Analysis

A product example: Production Test of a 40 GHz amplifier



Picture of a setup for a fully automatic wafer test with frequencies up to 50 GHz.

On us you can rely

We work in accordance with the requirements of DIN EN ISO 9001:2008. Our quality is documented, and the results are available even after 10 years.

Put your trust in us

Our employees have many years of experience in the implementation of demanding projects at national and international level.

We guarantee reliable, traceable and documented measurements at the highest level of quality.

How you can reach us

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