

## Vacuum Interface Tester



# SIGMA

MTS 300

- > Up to 1,152 pins
- > Small footprint – 19 inch portable rack
- > Highly flexible test system
- > Simple integration into in-line systems and / or 19 inch racks
- > Fast access interface (FAI) for easy maintenance
- > Analog and digital in-circuit test (low voltage technology), functional test, end-of-line test, Boundary Scan
- > Available as Lambda edition for real parallel testing



be multifunctional

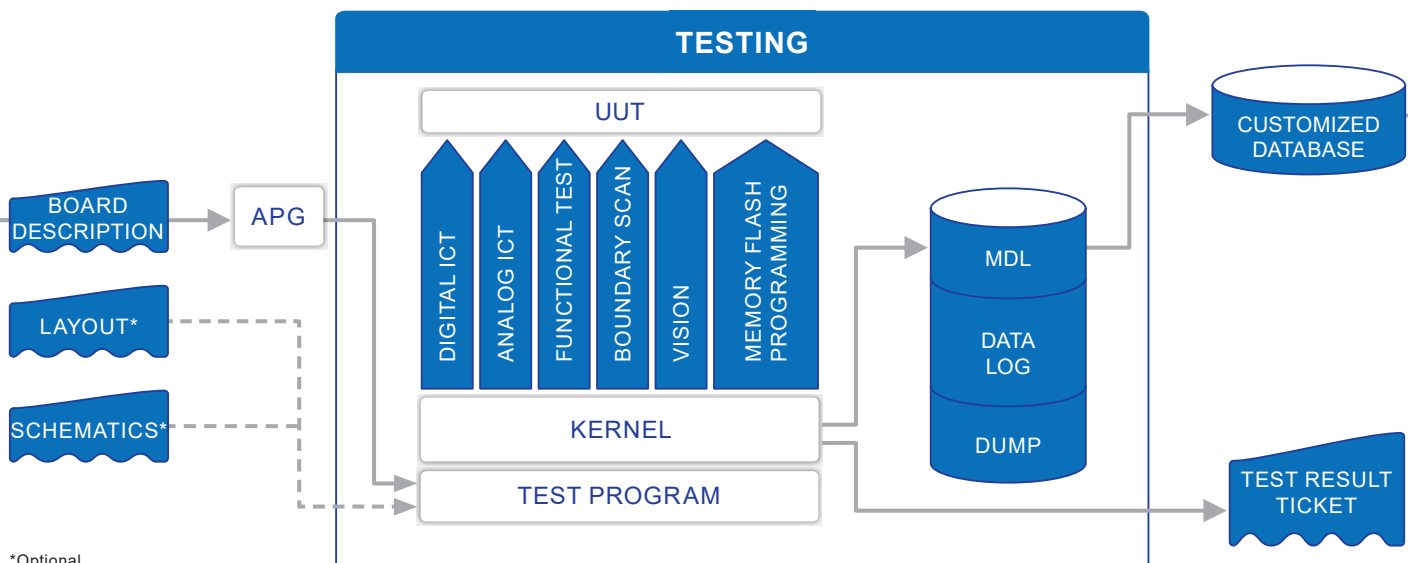
The Sigma is multifunctional: it offers plenty of space for modules and functions, with little space required.

## Test System Software



**CITE**

COMPUTER INTEGRATED  
TEST ENVIRONMENT



\*Optional



## Sigma Hardware Base System

### Footprint

930 mm width x 830 mm height x 900 mm depth

### Controller

Industrial standard PC

### AMU Module (ICT measurements)

#### Quadrature measurement bridge

Guard ratio 1:1000

3 voltage sources (AC/DC) 0 - 100 V

Voltage frequency DC to 100 kHz

Current Up to 250 mA

#### Measurement

Voltage (AC/DC) up to 100 V

Current (AC/DC) up to 100 mA

Resistors 0.1 Ohm - 100 MOhm

Capacitors 1 pF to 100 mF

Inductors 10 µH to 10 H

Kelvin measurement

Diode and zener forward and backward direction up to 100 V

Transistor, optocoupler etc. active test

## Analog or Hybrid System

Up to 3,456 channels in steps of 128

### MUX Module (Analog ICT)

6-Bus Matrix for 128 pins each

### Hybrider digitaler Treiber/Sensor

Up to 3,456 in steps of 64/128

Input/output +5 V/±10 V in 20 mV resolution

Max. current ±500 mA (backdriving) or 50 mA for static D/S operation

Speed Up to 10 MHz pattern rate

Tristate-capable /Automatic driver-monitoring/Logic levels programmable per pin

## Hardware Options

### UPC Module (Programmable power supplies)

Short-circuit monitoring via software and hardware

Software-controlled on/off switching

Separate force and sense lines

Thermal shutdown

UPC02-09 9 V / 10 A

UPC02-25 24 V / 5 A

UPC02-45 45 V / 3.5 A

### MTC Module (Frequency/time measurement card)

Up to 100 MHz

### MSM Module (DC/AC source and measurement card)

Additional precise U/I signal sources (floating)

Additional precise U/I measurement (floating)

### FailSim Module (Verification of test program quality)

Simulates defective component to improve actual error detection

### External Modules

For example IEEE, PXI, USB, RS232, CAN, LIN and much more

## Test System Software (included)

### Program development

Automatic Program Generator (APG) generates test programs using the board description (manual or automatical generation).

Library for analog and digital IC's.

Functional test enhancements using Menu Aided Programming (MAP).

Test program code language based on Visual Basic (VB) 6, VB .NET and/or table based GenFast.

Translation of test programs from common test systems and all MTS test systems.

Recording test results (failing data and/or complete measurement results) to use for repair and traceability.

### Program debugging

Powerful debugging using table based GenFast (mainly for analog ICT) and/or all functionality provided by Visual Basic 6 and VB .NET.

Single step mode execution available.

Debug window for displaying measurement results.

Possibility to make changes to all command parameters and directly seeing their impact.

Layout viewer, schematics viewer (optional), highlighting failing component to support debug work.

### Selftest

Checks the hardware of test system and localizes faulty modules (diagnosis down to relay-level).

### QCAM (test stability report)

Reports the stability and quality of a test program. Makes debugging easy and efficient.

## Software Options

### C-LINK Software (Design to Manufacturing)

Automatic generation of fixture-data, net lists, parts lists, layout data etc.

### QMAN Software (Paperless Repair)

Paperless repair, statistics, quality data management, fault catalogue.

### Boundary Scan

Boundary Scan software integration: development, execution and diagnostics.

## Company

Since 1980 Digitaltest is a strong partner of the electronics industry and has years of experience in development, implementation and support of automated test equipment (ATE) for electronic printed circuit boards. The complete product portfolio of the global company includes hardware technology, software to automate the production and evaluate the production process with its quality management software.

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