



FOR HIGH VOLUME, LOW MIX PCB PRODUCTION



SIGMA

MTS 300



- > Up to 3,456 pins
- > Vacuum interface also available in cable
- > Short measurement paths
- > Analog and digital in-circuit test (low voltage technology), functional test, end-of-line test, Boundary Scan
- > 1:1 non multiplexed pin architecture
- > Emulation of existing fixtures and test programs
- > Available as Lambda Edition for real parallel testing

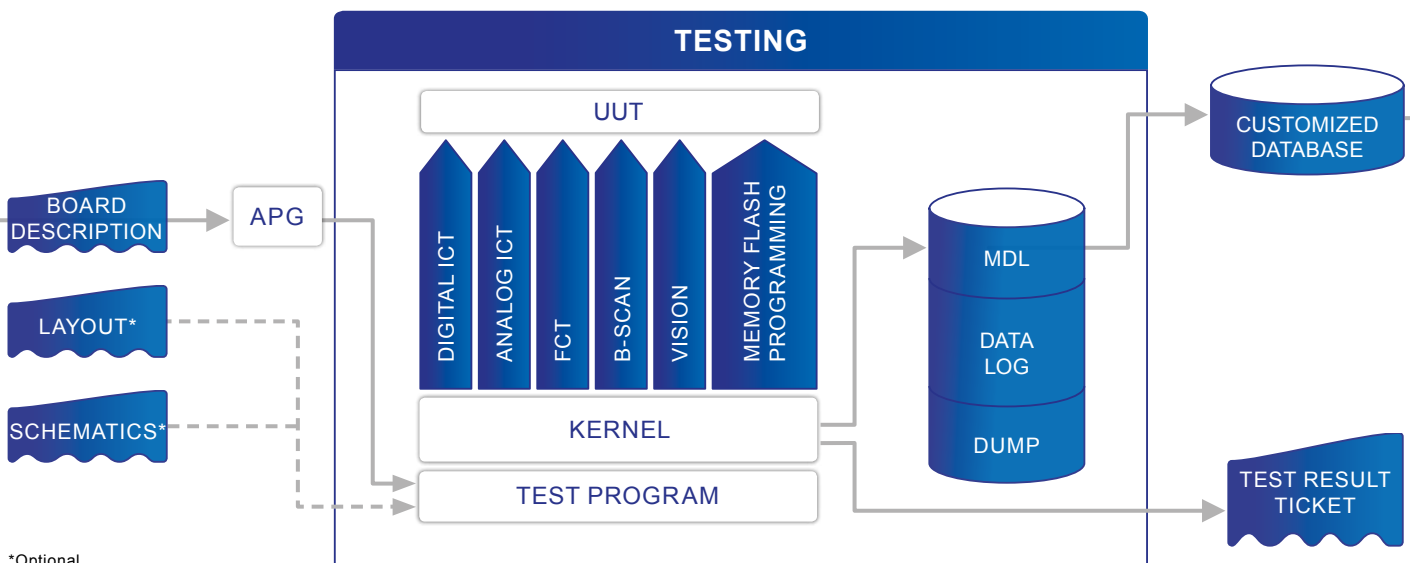


The Sigma is an extremely powerful system with a high throughput. With up to 1,000 measurements per second, it is one of the fastest test systems on the market.



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

ICT measurements (AMU)

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

6-wire reed relay matrix (MUX)

ANALOG OR HYBRID SYSTEM

Analog ICT

Up to 3456 channels in steps of 128

Hybrid digital driver/sensors

Up to 3456 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

Programmable power supplies (UPC)

Voltage resolution 2.2 mV

Accuracy 20 mV

Current limit resolution 2.5 mA

Accuracy ±50 mA

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

UPC02-24 24 V / 5 A

UPC02-45 45 V / 3.5 A

Frequency/time measurement card (MTC)

Up to 100 MHz

DC/AC source and measurement card (MSM)

Additional precise U/I signal sources (floating)

Additional precise U/I measurement (floating)

FailSim

Verification of test program quality

External modules

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

CITE 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 Design to Manufacturing Software

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

QMAN Quality Management Software

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

Boundary Scan

Boundary Scan software integration: development, execution and diagnostics.

LabView and TestStand

Link to National Instruments LabView or TestStand available.

Company

Digitaltest is a strong partner of the electronics industry and has more than 35 years of experience in development, implementation and support of automated test equipment (ATE) for 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.

Digitaltest GmbH

Lorenzstraße 3
76297 Stutensee /// Germany
Phone +49 7244 9640-0
E-mail info@digitaltest.de

