

FOR ALL TYPES OF PCB PRODUCTION



MTS 30





- > Up to 1,152 pins
- > Small footprint 19 inch portable rack

**SPARROW** 

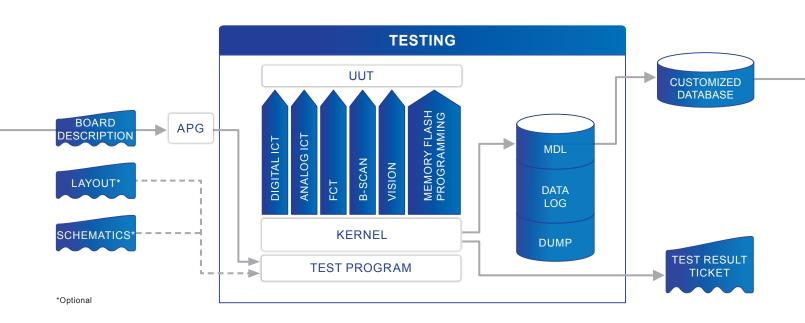
- > Highly flexible test system
- > Simple integration into in-line systems and / or 19 inch racks
- > Fast access interface (FAI) for easy maintenance
- > Analog and digital in-circuit test (low voltage technology), functional test, end-of-line test, Boundary Scan
- > Available as Lambda Edition for real parallel testing



The Sparrow provides the highest level of flexibility and test capability in a small footprint.











**Electronic Board System & Electronic Manufacturing Software** 

## SPARROW HARDWARE BASE SYSTEM

#### 19" Rack

483 mm width x 178 mm height x 570 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

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

Up to 250 mA

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 1152 channels in steps of 128

## Hybrid digital driver/sensors

Up to	1152	in	steps	of	64/128
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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.

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