

HIGH PERFORMANCE

## FOR HIGH VOLUME, LOW MIX PCB PRODUCTION



# OMEGA MTS 888

- > Up to 7,040 pins
- > Ergonomic handling
- Saves time to market: the fixture build can start while test program is being generated
- > Analog and digital in-circuit test (low voltage technology), functional test, end-of-line test, Boundary Scan
- > 1:1 non multiplexed pin architecture
- > Available as Lambda Edition for real parallel testing



The Omega is our high performance tester, with the highest test pin count.











Electronic Board System & Electronic Manufacturing Software

#### **OMEGA HARDWARE BASE SYSTEM**

Footprint		
1500 mm width x 860 - 1060 mm adjustable height x 750 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 7040 channels in steps of 128	
Hybrid digital driver/sensors	
Up to 7040 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		
Varification of test program guality		

# External modules

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

### **CITE TEST SYSTEM SOFTWARE (INCLUDED)**

#### Program development

S

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

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.

#### Digitaltest Inc.

187 Contractors Street, Livermore CA 94551, USA +1 (925) 603 8650 Phone E-Mail dt-sales@digitaltest.net

