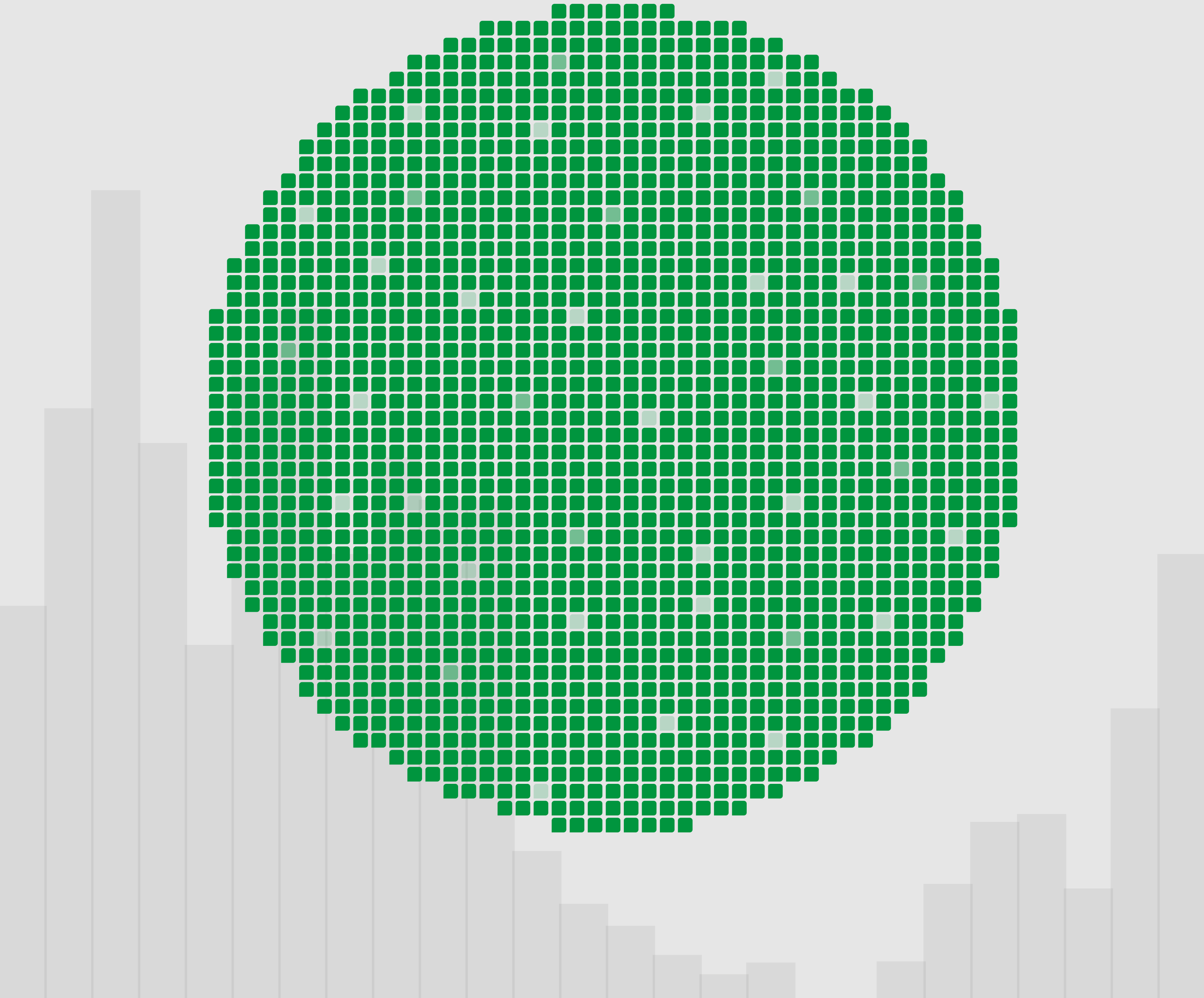
MICROTEST
breakthrough innovation

ATE
portfolio



WHY MICROTEST

Space saving

Microtest Hatina GP: zero footprint solution

90% space saving

Time-to-market

Kronos, **Microtest integrated SW for Automatic Test Program** to reduce the TTM

Power Consumption

Microtest Hatina GP: 3kW

70% energy saving

Total Cost of Ownership

40% Higher parallelism at lower cost

Microtest operates globally within the semiconductor ecosystem with 2 areas of expertise: **ATE (Automatic Test Equipment)** and **Advanced ASIC Services**

2
business units:
ATE, ASIC SERVICES

80
millions of
Group revenue

450
employees
worldwide

50+
patents

13
direct locations
in America, Asia,
Europe

1500+
ATE sold

25+
years of
experience

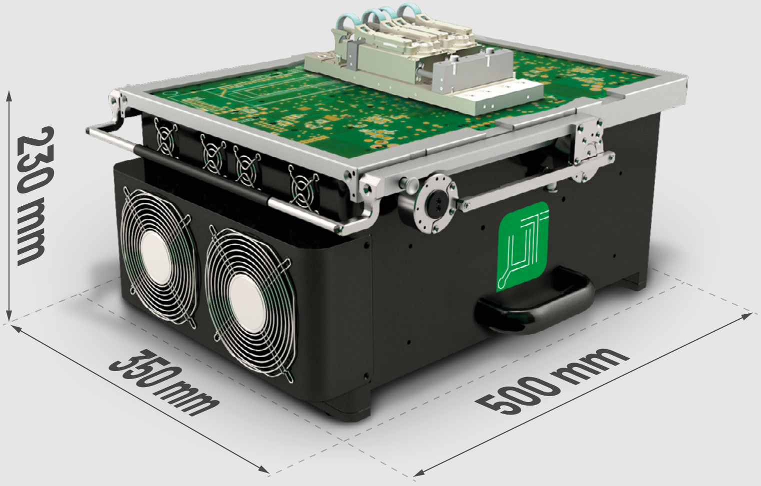
APPLICATION FIELDS

- AUTOMOTIVE
- MEDICAL
- CONSUMER
- SPACE
- DEFENSE
- MEMS
- POWER
- INDUSTRIAL

Mixed Signals

DMT

LOW-COST, MIXED SIGNAL, TEST DEVELOPMENT ATE SYSTEM



DMT system for a tailored testing solution. Small footprint due to high integration of hardware, ultra high-density tester. More resources than a standard big footprint tester in a limited space.

EMPOWERED BY:

Kronos

AI-enabled

Kronos is a Software Toolset, which generates better and faster Test Programs, through automatic translation of test descriptions to code

HIGHLIGHTS

- Lowest footprint on the market
- Automatic code generator (Kronos)
- Drastically reduces the time to market
- Validation of new ICs in few weeks
- Integrated oscilloscope for debug
- Up to 5 Slots with Flexible Configuration

90% space saving

KEY FEATURES

- **DC [IV quadrants Ground Referred] Sources Low Power:** up to 80 resources per slot [±110V, ±200mA]
- **DC [IV quadrants Ground Referred] Sources Medium Power:** up to 40 resources per slot [±110V, ±4A]
- **DC [IV quadrants Fully Floating] Sources High Power:** up to 8 resources per slot [±80V, ±10A]
- **Digital Channels:** up to 256 channels per slot [-1,25V to 6,75V output level, 50mA, active Load ±12mA, 64M Pattern Memory/ch, 32M DSIO Memory/ch, one PPMU per channel]
- **Time Measurement Unit & Differential Meter** [up to 32 mux4 per slot], **AWG & Digitizer** [up to 16 per slot]

Dimensions

Height: 230 mm
Width: 350 mm
Depth: 500 mm

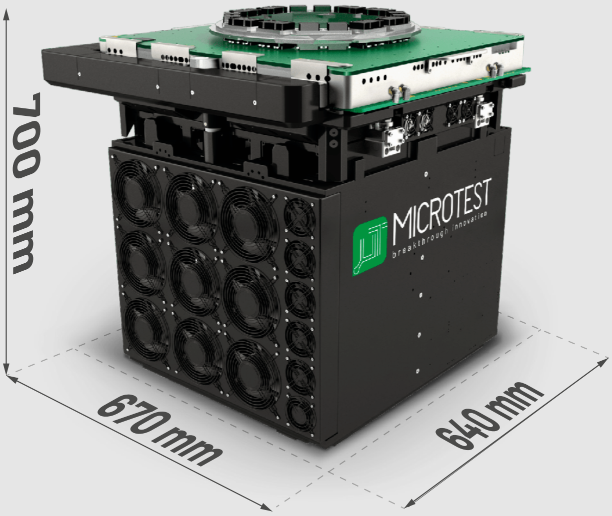
CLICK HERE TO DISCOVER MORE!

Mixed Signal

HATINA GP

THE GENERAL PURPOSE ATE FOR ASIC, PMIC AND SMART POWER

The HATINA GP is designed for testing complex Smart Power ICs and SoC. Recommended for high parallelism.



EMPOWERED BY:

Kronos
AI-enabled

Kronos is a Software Toolset, which generates better and faster Test Programs, through automatic translation of test descriptions to code

HIGHLIGHTS

- Suitable for wafer test and final test
- Multiplexer to increase productivity
- Low weight and dimensions
- Capable to test incredibly complex devices
- Revolutionary SW tools (Kronos)
- Up to 10 Slots with flexible configuration

70% energy saving

KEY FEATURES

- DC [IV quadrants Ground Referred] Sources Low Power: up to 160 resources per slot [±110V, ±200mA]
- DC [IV quadrants Ground Referred] Sources Medium Power: up to 80 resources per slot [±110V, ±4A]
- DC [IV quadrants Fully Floating] Sources High Power: up to 16 resources per slot [±80V, ±10A]
- Digital Channels: up to 256 channels per slot [-1,25V to 6,75V output level, 50mA, active Load ±12mA]
- Digital Channel LF II°Gen @200MHz up to 1024
- DPS HC [Digital Power Supply – High Current] 5.5V@10A up to 80
- DPS LC [Digital Power Supply – Low Current] 7V@1A up to 256
- Digital Channel HF @800MHz up to 256
- Time Measurement Unit & Differential Meter, AWG & Digitizer
- OPTION: -HV option
- Time Measurement Unit up to 64
  Floating Digital Driver up to 192
  LCR Meters: up to 64
  PPMU: up to 64
  Pico Meters: up to 64 [20pA as accuracy]
- Inductive & Resistive Loads up to 64 x2

Dimensions

Height: 700 mm
Width: 670 mm
Depth: 640 mm

CLICK HERE TO DISCOVER MORE!

Mixed Signal

HATINA WLBI

SOLUTION FOR WAFER LEVEL BURN-IN FOR POWER MOS

HIGHLIGHTS

- WLBI for power technologies – Si, SiC, GaN
- Compatible with 6-, 8- and 12-inch wafers
- Capable of full wafer burn in
- Cost Effective Solution for reliability and lifecycle testing
- Leverages standard wafer prober technology

1600 DUT in parallel

KEY FEATURES

- Parallelism: 160 sites to 1600 sites
- Voltage: up to 1.2KV per site
- Current: 2mA per site

Test setup:

- Functional Test
- HTGB
- HTRB

Dimensions

Height: 550 mm
Width: 560 mm
Depth: 560 mm

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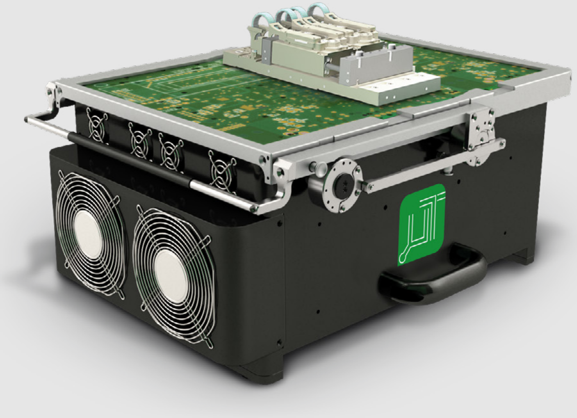
THE HATINA FAMILY

DMT

- 5 slots total
- 1/2 channels per instrument
- 100% compatible with HAT GP
- x2 site development system



5 slots

HATINA GP

- 10 slots total
- Fully populated instruments
- 100% compatible with DMT
- Multisite production system x8, x16, x32, x64

10 slots

VIP ULTRA

NEW-GEN, HIGH-THROUGHPUT ATE CONFIGURABLE FOR COMPLEX SMART POWER DEVICES, SIC, AND GAN POWER DISCRETE PRODUCTS

New-gen Automatic Test Equipment configurable for Si, SiC and GaN power products; high side and low side Driver ICs, IGBT, Power MOSFETs, Power ICs.

HIGHLIGHTS

- Lowest TCO for power products
- Double throughput
- Minimum footprint

The definitive platform for the entire range of power applications

- Wafers testing
- Power Discrete
- Power Modules
- Smart Power devices
- High side and low side Driver ICs

CONFIGURATIONS:

VIP Ultra STD 80V

- 250A (48 sites)

VIP Ultra HV 1.7kV

- 250A (32 sites)

VIP Ultra HV 4kV

- 250A (16 sites)

KEY FEATURES

- DCS sources [4 quadrants Ground Referred]: up to 48 resources [±80V, ±4A]
- DC Programmable Load Sink/Source: up to 48 resources [up to ±250A]
- Digital Channels: 320 resources [0V to 5,5V output level, 50mA, DSIO Memory/ch, one PPMU per channel]
- Time Measurement Unit: up to 48
- Differential Voltage Meters: up to 48
- Floating Digital Driver: up to 192
- LCR Meters: up to 48
- PPMU: 64
- Pico Meters: up to 48 [20pA as accuracy]
- Inductive & Resistive Loads

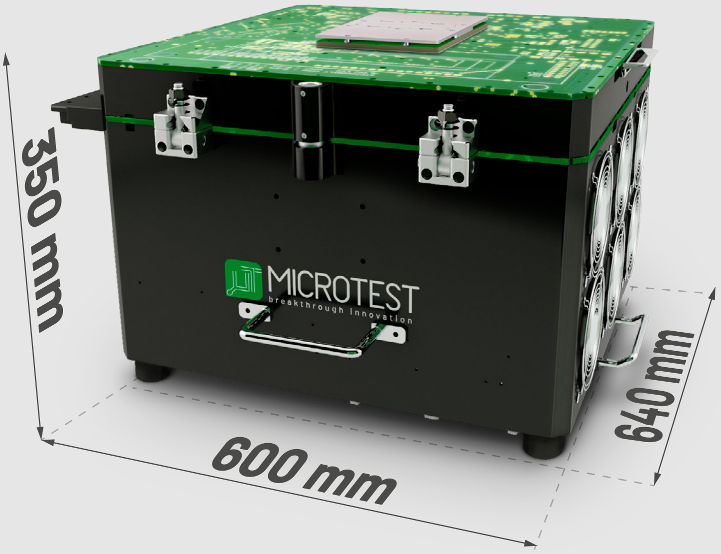
Dimensions

Height: 647 mm
Width: 702 mm
Depth: 638 mm

CLICK HERE TO DISCOVER MORE!

VIP EXTENDED

ATE CONFIGURABLE FOR SI, SIC AND GAN POWER PRODUCTS



Automatic Test Equipment configurable for Si, SiC and GaN power products; High side and low side Driver ICs, IGBT, Power MOSFETs, Power ICs.

HIGHLIGHTS

- High UPH for wafer sort and strip test
- 48 x site parallel test for Rg, Cg and UiS
- Lowest COT for power products

KEY FEATURES

- DC [4 quadrants Ground Referred] Sources Medium Power: up to 64 resources [±110V, ±4A]
- DC Programmable Sink/Source Current: up to 64 resources [up to ±250A]
- Digital Channels: up to 320 channels [-1,25V to 6,75V output level, 50mA, active Load ±12mA, 64M Pattern Memory/ch, 32M DSIO Memory/ch, one PPMU per channel]
- Time Measurement Unit up to 64
- Floating Digital Driver up to 192
- LCR Meters: up to 64
- PPMU: up to 64
- Pico Meters: up to 64 [20pA as accuracy]
- Inductive & Resistive Loads up to 64 x2

Dimensions

Height: 350 mm
Width: 600 mm
Depth: 640 mm

CLICK HERE TO
DISCOVER MORE!

High Pin Count/ Medium Complexity ICs

HATINA 4S

VERY COMPACT SOLUTION FOR MEMS DEVICES TESTING

Flexible, low cost ATE, for very high parallel, low complexity markets like MEMS, open/shorts and consumer logic.

HIGHLIGHTS

- High pin count V/I and DPS
- High pin count digital
- Integrated mux for extreme flexibility
- 0-footprint, Low Cost per site
- Easy automation integration

0 FOOTPRINT

KEY FEATURES

- 2 DCS_1A (force and sense) sources multiplexed in 256 different positions per module
- 12 Digital Channels multiplexed in 256 different positions per module
- 20 direct digital channels per module

Dimensions

Height: 538 mm
Width: 360 mm
Depth: 330 mm

CLICK HERE TO DISCOVER MORE!

Burn In & HTOL Solution

OVENLESS BURN-IN

DUT HEATER INDEPENDENT CONTROL FOR VERY LOW POWER CONSUMPTION

The Microtest Ovenless Burn-In is a powerful and innovative solution for Burn-in, that allows the maximum flexibility to match your needs.

HIGHLIGHTS

- The only ovenless Burn-In solution on the market
- A much greener solution compared to traditional ovens
- Noticeable ESG impact when implemented – power, footprint, cooling
- Faster thermal ramp up and cool down, with better per - DUT temperature control
- Fully automated, SECS GEM and factory 4.0 compliant

45% annual energy savings improvement

40% footprint reduction

KEY FEATURES

Microtest Burn-In equipment includes:

- BIS (Burn-In System)
- RACK
- BID (24 slot inside the RACK) each capable of housing up to 120 devices.

Each batch can accommodate up to 120 devices * 24 slots, significantly optimizing the process time.

BID models with 80 and 60 slots are also available.

Microtest's clients optimize their production by using multiple racks in their 'Smart Factory' setup. While one rack is in the BIS, operators efficiently prepare the next, ensuring the BIS operates continuously without downtime.

Dimensions

Height: 2000 mm
Width: 1200 mm
Depth: 1300 mm

CLICK HERE TO DISCOVER MORE!

Handler

CELSIUS EVO

HANDLER WITH HIGH THROUGHPUT IN A COMPACT SPACE

Celsius EVO is a characterization pick and place handler with highly dynamic temperature control system that can bring and keep temperature of the DUT up to 150°C and down to -45°C during tests.

HIGHLIGHTS

- Incredibly faster still maintaining a small footprint
- Innovative heater technology for higher temperatures
- Automatic visual inspection and positioning correction
- Highly dynamic temperature control system during tests (up to 150° C and down to -45°C)
- No need to condition the entire workspace
- Time and energy saving solution and reduced need of conditioned air

KEY FEATURES

- DUT dimension (Customizable also for chipboards) min.: 2x2mm max.: 30x30mm
- Temperature control: 3T handler: -45°C/+150°C ±3°C
- Input / Output: 3 automatic conveyors with 20 trays max for each (1 input + 2 output) & 4 manual trays
- Consumption Compressed Air: l/min 200 @ 8 bar

Dimensions

Height:2000 mm
Width: 2100 mm
Depth: 1600 mm

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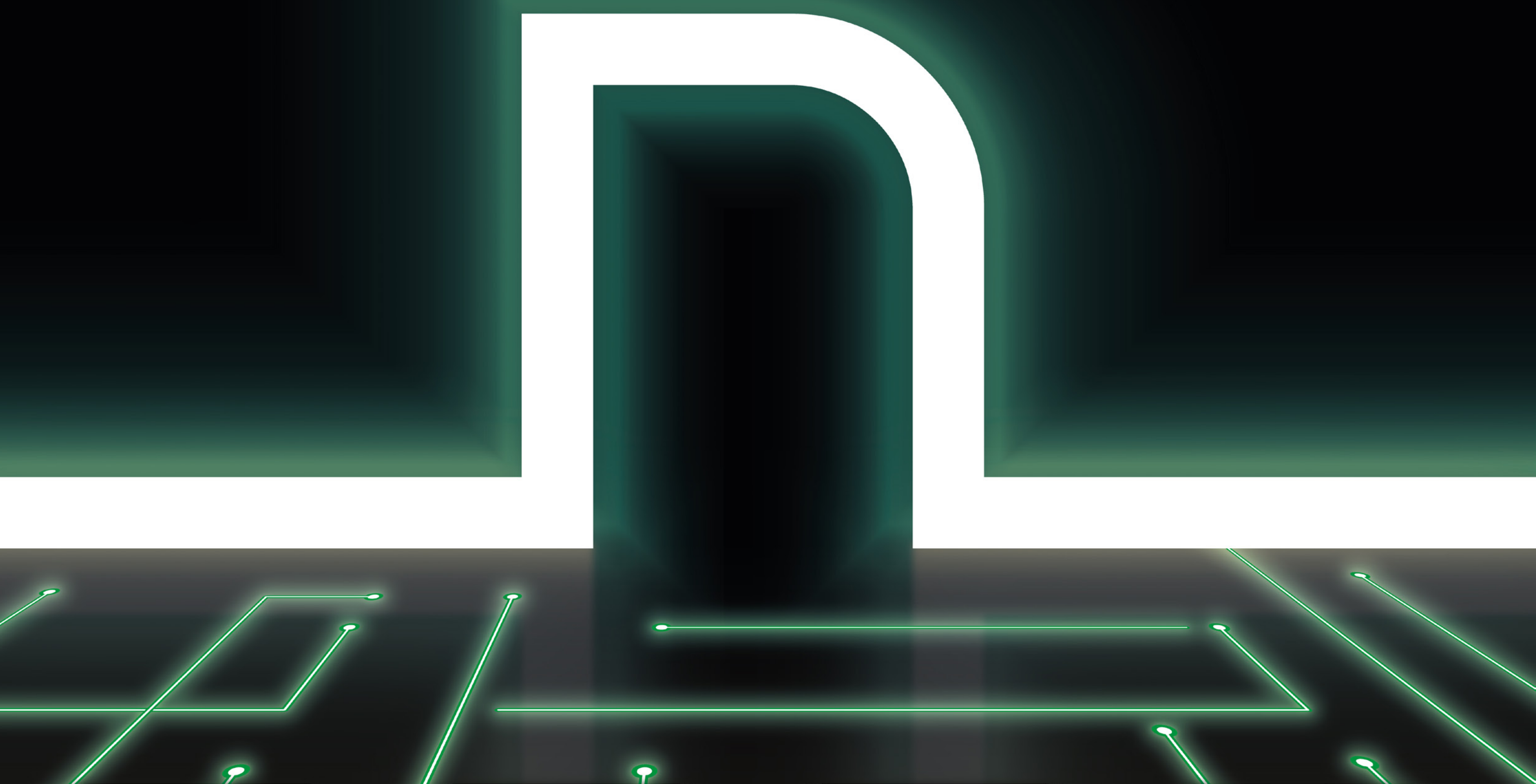
Kronos
AI-enabled

Microtest integrated SW for Automatic Test Program

Kronos is a **Software Toolset**, which generates better and faster Test Programs, through automatic translation of test descriptions to code.



Why choose Kronos?

- Efficiency in time to market with faster test program generation
- Data qualification through documented test setups
- Ease of test program revisioning and updating
- Guaranteed test program synchrony with production environments through back annotation

Kronos relies on these features:

- Automatic test program generation
- Automatic pinmap generation
- Dynamic test program flow
- Test setup validation
- Automatic pinout generation from the datasheet
- Analog & digital simulation import
- Automatic resources assignment

Kronos is a supportive tool addressed to:

- Design engineering
- Product engineering
- Test engineering

Kronos supports your organization in these stages:

- Design for Testing (DFT)
- Debug & Optimization
- Documentation
- Factory standardization

MICROTEST
breakthrough innovation

The Microtest Group operates in the semiconductor ecosystem, providing best-in-class Test Services, ATE, and ASIC design for the automotive, industrial, power, sensor and healthcare markets.

Leveraging 25 years of advanced performance, high parallelism, and pioneering automation, Microtest is the ideal company to optimize business operations and reduce testing costs.

Automatic Test Equipment Design & Manufacturing

Test House & Qualification Services

010 001 0111 ASIC/ASSP/IP Design