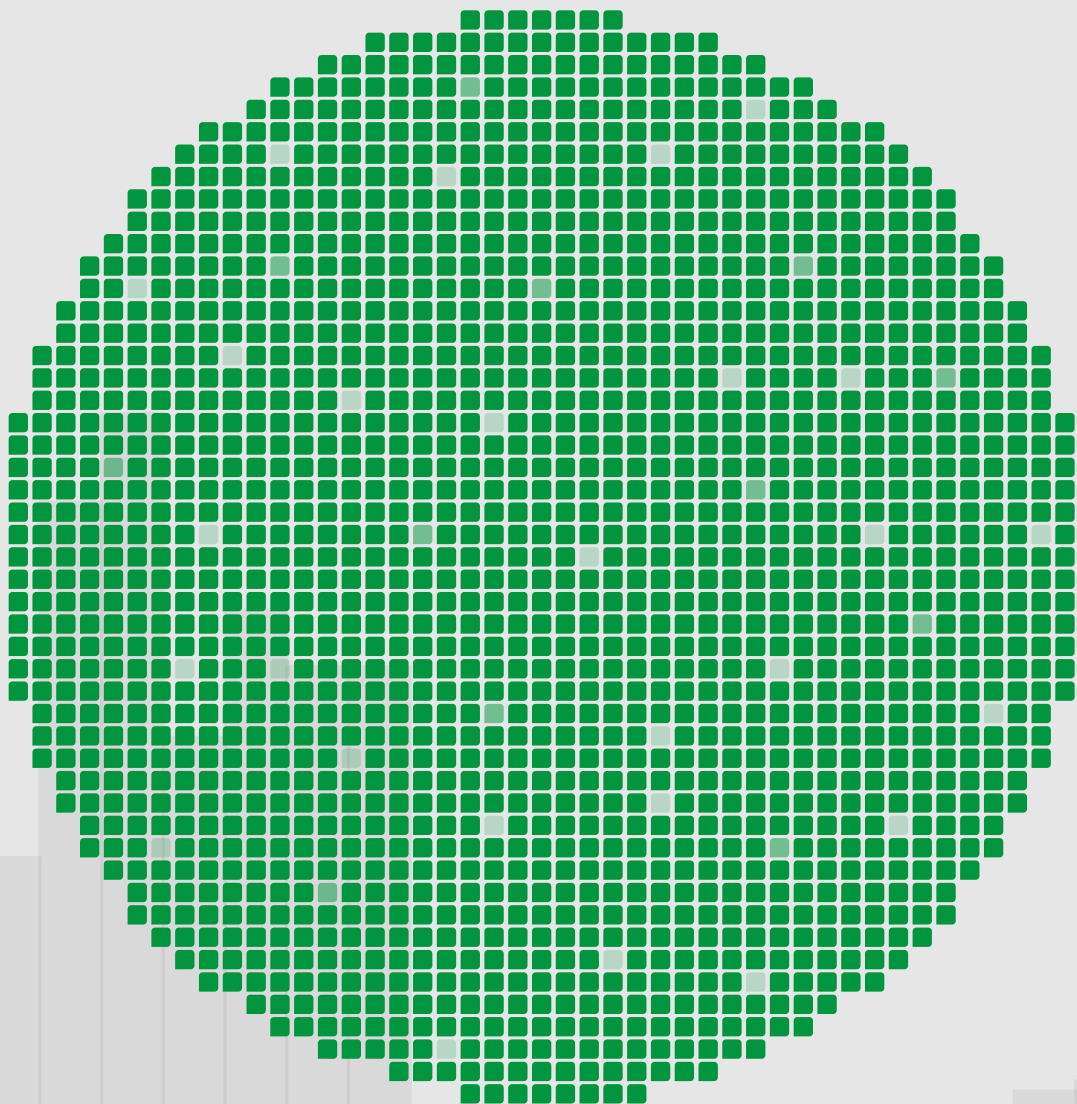


# ATE

## *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

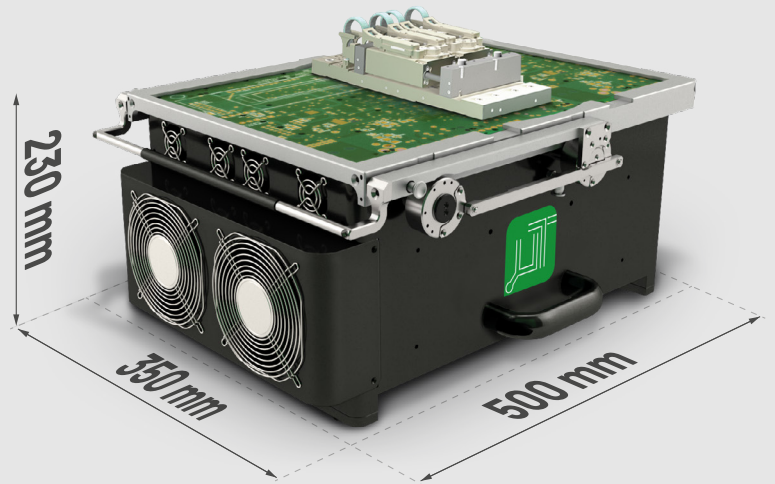
# DMT

## 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.

### 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



EMPOWERED BY:

**Kronos**  
AI-enabled

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



### KEY FEATURES

- DC [IV quadrants Ground Referred] Sources Low Power: up to 80 resources per slot [ $\pm 110V$ ,  $\pm 200mA$ ]
- DC [IV quadrants Ground Referred] Sources Medium Power: up to 40 resources per slot [ $\pm 110V$ ,  $\pm 4A$ ]
- DC [IV quadrants Fully Floating] Sources High Power: up to 8 resources per slot [ $\pm 80V$ ,  $\pm 10A$ ]
- Digital Channels: up to 256 channels per slot [-1,25V to 6,75V output level, 50mA, active Load  $\pm 12mA$ , 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!

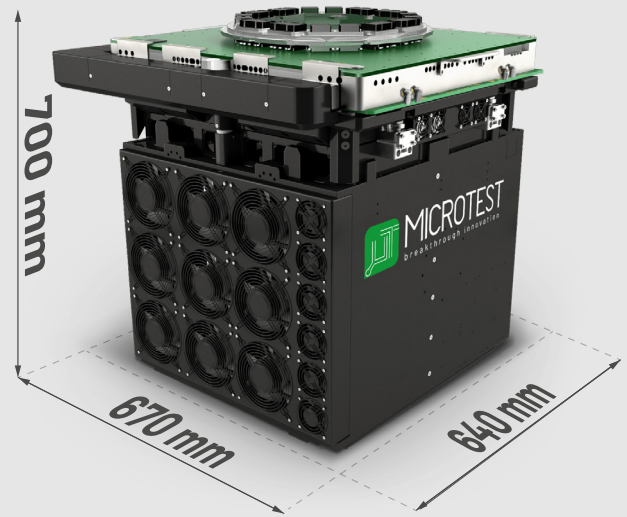


Mixed Signal

# 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.



### 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

EMPOWERED BY:



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



**70%**

energy saving

### KEY FEATURES

- DC [IV quadrants Ground Referred] Sources Low Power: up to 160 resources per slot [ $\pm 110V$ ,  $\pm 200mA$ ]
- DC [IV quadrants Ground Referred] Sources Medium Power: up to 80 resources per slot [ $\pm 110V$ ,  $\pm 4A$ ]
- DC [IV quadrants Fully Floating] Sources High Power: up to 16 resources per slot [ $\pm 80V$ ,  $\pm 10A$ ]
- Digital Channels: up to 256 channels per slot [-1,25V to 6,75V output level, 50mA, active Load  $\pm 12mA$ ]
- 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
- Inductive & Resistive Loads up to 64 x2

PPMU: up to 64

Pico Meters: up to 64 [20pA as accuracy]

#### Dimensions

Height: 700 mm

Width: 670 mm

Depth: 640 mm

CLICK HERE TO  
DISCOVER MORE!

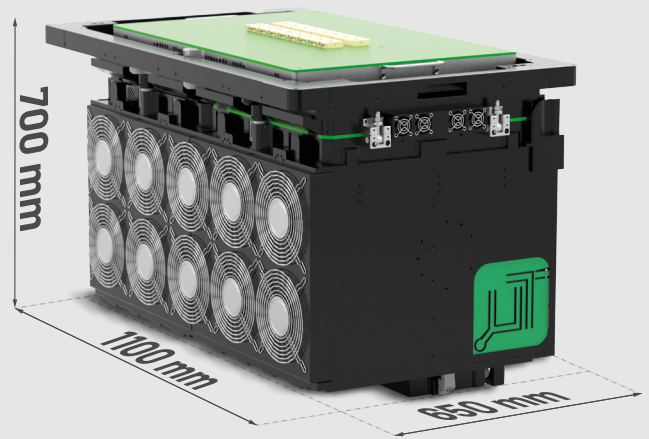


Mixed Signal

# HATINA GP XL

## THE GENERAL PURPOSE ATE FOR ASIC, PMIC AND SMART POWER

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



### 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)
- 20 Slots with flexible configuration

EMPOWERED BY:

**Kronos**  
AI-enabled

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



**70%**

energy  
saving

### KEY FEATURES

Same features of HATINA GP and other new features:

- 20 configurable slots
- Digital Channel LF II<sup>o</sup>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

#### Dimensions

Height: 700 mm

Width: 1100 mm

Depth: 650 mm

CLICK HERE TO  
DISCOVER MORE!

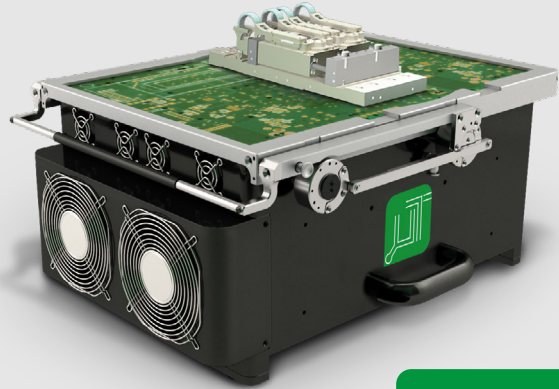


# THE HATINA FAMILY

## A SCALABLE SOLUTION, THANKS TO INTERCHANGEABLE RESOURCES

### DMT

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



5 slots

### HATINA GP

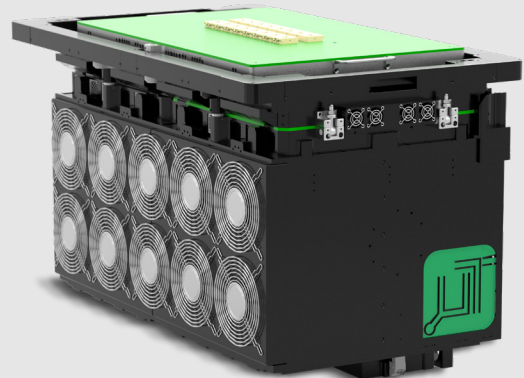
- 10 slots total
- Fully populated instruments
- 100% compatible with DMT
- Multisite production system x8, x16, x32, x64



10 slots

### HATINA GP XL

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

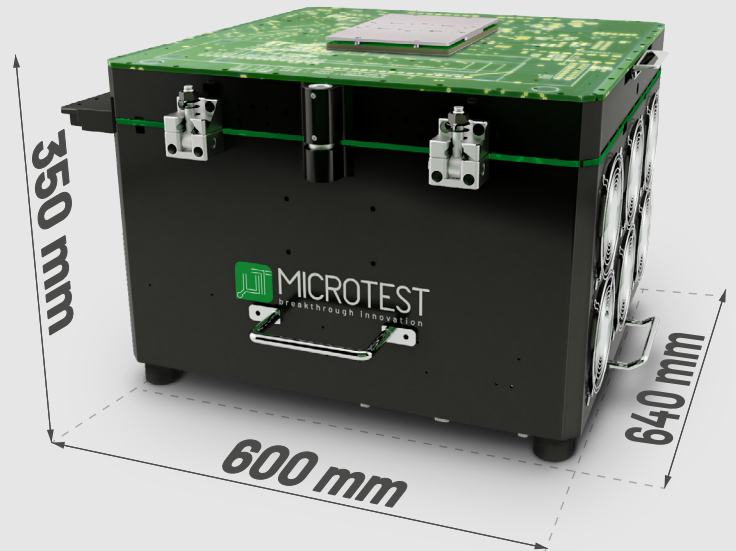


20 slots

# VIP EXTENDED

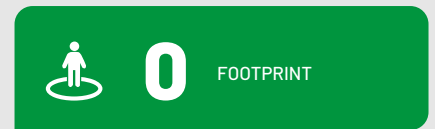
## ATE CONFIGURABLE FOR Si, SiC AND GaN POWER PRODUCTS

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



### HIGHLIGHTS

- 1.7KV@20A 48 sites
- 4KV@20A 16 sites
- High UPH for wafer sort and strip test
- 48 x site parallel test for Rg, Cg and UiS
- Lowest COT for power products

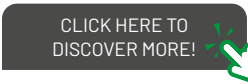


### KEY FEATURES

- DC [IV quadrants Ground Referred] Sources Medium Power: up to 64 resources [ $\pm 110V$ ,  $\pm 4A$ ]
- DC Programmable Sink/Source Current: up to 64 resources [up to  $\pm 250A$ ]
- Digital Channels: up to 320 channels [-1,25V to 6,75V output level, 50mA, active Load  $\pm 12mA$ , 64M Pattern Memory/ch, 32M DSIO Memory/ch, one PPMU per channel]
- Time Measurement Unit up to 64  
Floating Digital Driver up to 192                      PPMU: up to 64  
LCR Meters: up to 64                                      Pico Meters: up to 64 [20pA as accuracy]
- Inductive & Resistive Loads up to 64 x2
- OPTION: -HV option up to 1700V

**Dimensions**

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



High Pin Count/ Medium Complexity ICs

# HATINA 4S

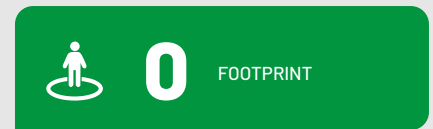
## VERY COMPACT SOLUTION FOR MEMS DEVICES TESTING

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



### 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

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# 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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# Microtest integrated SW for Automatic Test Program

Kronos is a **Software Toolset**, which generates better and faster Test Programs, through automatic translation of natural language 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

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**



**ASIC/ASSP/IP Design**

