

# HYPERION PARAMETRIC TEST SHELL

Chroma created Hyperion to be a tool that leverages and solves the many challenges faced by test engineers in their daily work lives that we and others experience.

The Hyperion Test Shell is derived from decades of experience working as parametric testing professionals in the semiconductor industry. We asked the question: How can we design a better test shell for ourselves and for our customers?

The answer includes easy to use interfaces, a plug-in architecture for customization, advanced algorithm libraries based on standards, and broad support of commonly used test instruments and probers combined with the ability to use the same test plans, test algorithms and output formatting for test cells based on Keysight and Keithley using TEL, EG, Accretech, MPI and other probers.

Hyperion simplifies your parametric test operation reducing time and problems with training, operation, debugging and analysis. At the same time providing a common platform helps to leverage upgrades and focus on the business and engineering objectives of test.

## **Unification of Test Cells**

Hyperion is an instrument and prober agnostic that uses a common set of general test plans, algorithms, and test parameters that run on all supported test cell hardware.

So if you have a 4062UX test cell on a TEL P8, B1500A test cell on an EG prober and Keithley on an MPI, all can run using interchangeable test plans, test algorithms and test data output formats to reduce test development effort.

The support of many instruments gives an upgrade path that is incremental and affordable based on your budgets and time frames.

Hyperion providers a single platform that is easy to learn and allows you to focus on what matters: conducting tests and obtaining data to make decisions quickly.



Popular MS Visual Studio C++ IDE

Powerful "Plug-In" Architecture

User Friendly GUI & Off-Line SPICE model

Write-Once Algorithm

Easy to Use & Learn

Chroma in-house 8" Test Wafter (TSMC 0.18um)



## WRITE-ONCE ALGORITHMS

Hyperion test algorithms are universal and written in a C++. If you've written C algorithms on other platforms, you can already write them on Hyperion.

Algorithm input and output parameters are entirely defined self-contained within the code without the need to define other files or even use the Test Shell. We provide GUI-based starting point as well.

Algorithm definition includes both scalar and vector parameters which are automatically handled by output formatting plug-ins.



## SUPPORTED INSTRUMENTS

SUPPORTED PROBERS

**Tokyo Electron** 

ElectroGlas

Accretech MPI

HP/Agilent/Keysight	4062C/UX, 4142B, 4085A/B, E5260
	B1500A/B, E5250A
Keithlev/Tektronix	2400/2410, 2600, 707A/B

EG 4080/4090

Sentio Family

TEL P8, 8XL, P12, Precio

UF200/300, UF2000/3000

# CHROMA ALGORITHM LIBRARIES

Parametric Test Library	Id vs. Vgs - Vt (GmMax), Id vs. Vds, Igss Bv diode
	RdsOn, Bvdss/Bvdsx, R2t,R4t, R4t_Sweep Ic vs. Vce, Vceo, Vebo, Vces, Ileak (MIMCAP)
	Gummel Vbc = 0 and Vce = K
Reliability Test Library	Vramp, Vtddb, HCI, BTI slow, BTI fast Constant I EM, Isothermal EM, SWEAT EM, Tcr

All algorithms are based on JEDEC, ISO and other standards where available.

# COMPUTER CONFIGURATION REQUIREMENT

Intel i7 Processor, 2016 or Newer, 16GB RAM, 500GB or more Hard Disk, 1920 x 1080 Monitor, Microsoft Windows 10 National Instrument GPIB - Either USB-to-GPIB or PCIe GPIB

Note: A complete and supported PC can be purchased with Hyperion to minimize any issue with hardware.

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