



# WAVECREST Production Systems

## SIA-3000P

# Production

### Complete timing and jitter analysis for semiconductor production

The **WAVECREST** SIA-3000P is the first signal integrity analysis solution specifically engineered for ATE systems and stand-alone production testing applications. It combines the advanced capabilities of our SIA-3000 laboratory solution with patented production software, enabling comprehensive testing — for random, deterministic and total jitter, rise time, fall time, eye mask, VOH, VOL and other waveform specifications — at production-level speeds. The SIA-3000P allows the lab and production floor to keep test methodologies aligned — so you can reduce development costs and time to market.

### Scalable, modular platform

The SIA-3000P is the only modular solution of its kind. It can be configured with up to 10 user-selectable, single-ended or differential, fully parallel channels for fast multi-site, multi-port testing. And it can be reconfigured at any time with 2 to 10 channel cards. Device manufacturers and test houses can select the exact number of channels for current requirements — then add channel cards to meet future production requirements. The SIA-3000P can also be upgraded to accommodate different data clock rates, and its unique architecture allows channel cards to be equipped with additional instrumentation in the future.

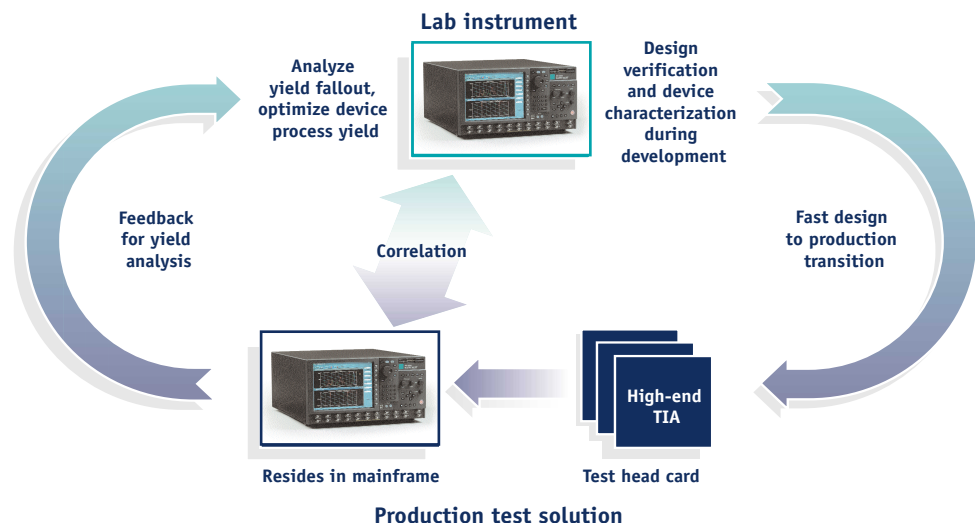
### Engineered for production testing

**WAVECREST** developed the SIA-3000P exclusively for the production environment. Each channel can measure data rates up to 4.5 Gb/s with 200 femtosecond resolution — up to 20 times faster than conventional test equipment. The SIA-3000P is compatible with all major ATE platforms, and can be configured to support a wide range of tests for low- and high-volume production applications. The **WAVECREST** Customer Solutions group also provides turnkey integration for your ATE platform, including custom ATE interface kits, portable configurations with a variety of test instrument options, and rack-and-stack configurations.

### Accelerate the design-to-production cycle

The SIA-3000P simplifies the process of preparing new devices for production. It performs all the same functions — using the same patented algorithms — as our lab test solutions. Test engineers and test managers can use identical software tools from the design/debug phase through device characterization and production — which dramatically reduces time spent on instrument and process correlation.

Use the SIA-3000P to close the loop from design to production to design — and substantially reduce time to market.



# SIA-3000P

## Significantly lower cost-of-test

The SIA-3000P tests devices faster — and with greater accuracy — than any instrument on the market today, so production managers can ensure signal integrity and still meet tight deadlines. It also reduces costs several ways, including multi-site, multi-port testing, which improves throughput dramatically. Production-worthy software shortens test times. Built-in calibration and NIST traceable standards reduce the risk of downtime. And the scalable architecture allows you to field upgrade an ATE system with jitter analysis capabilities, extending the ATE's life span and improving your return on investment.

## Production-worthy software

The SIA-3000P has two options for implementing production tests. Experienced programmers and test engineers can use the GPIB/HPIB industry-standard programming interface or a dedicated High-speed Ethernet and USB interface port, which maximize throughput. Production engineers can use the **WAVECREST** TestList™ option, an easy-to-use integrated environment for developing and error-checking tests. All tests can be stored in the SIA-3000P for repeated execution and instant recall, enabling very high-throughput production testing.

## Proven performance

**WAVECREST** measurement solutions are the reference standard for signal integrity analysis in the lab and in production. Our DTS-207X family of digital time systems is installed in more than 800 ATE systems worldwide. The SIA-3000P builds on this heritage of success, giving test managers an even faster way to ensure signal integrity. The SIA-3000P also features a DTS-207X compatible mode, so you can transition your production operation to the SIA-3000P seamlessly.



The SIA-3000P can be fully integrated into the production environment. Current applications include microprocessors, LAN, SONET, LVDS/TMDS, clocks, Fibre Channel, Gigabit Ethernet and many others.

- Full instrument calibration (internal, external and DC)
- NIST traceable instrument
- Built-in true production software with **WAVECREST** TestList
- Built-in **WAVECREST** patented application algorithms
- Fast GPIB standard interface
- Enhance your production environment with:
  - Basic measurements — rise/fall times, skew, frequency and jitter
  - Complex serial measurements — graphics, Fibre Channel and Gigabit Ethernet



**WAVECREST**  
A TECHNOLOGIES COMPANY

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