Setting a New Standard for Performance, Flexibility and Low Cost

Tough competition, soaring costs, faster design cycles, and rising design complexity are forcing a revolution in test methodologies. Products that increase productivity while lowering cost are in great demand.

Enter the Credence ASL 1000 with the integrated Wavecrest SIA solution; a groundbreaking, single-platform ATE that sets new standards for flexibility, cost-effectiveness and user-friendliness, that reduces time-consuming test program generation. Now, you don’t have to be the expert on signal integrity analysis and system integration; Credence and Wavecrest do these for you.

Providing the Complete Solution

The Credence ASL 1000 linear and mixed-signal IC test system and a Wavecrest SIA solution with a 1 GHz bandwidth direct interface for characterization, pre-production and full production, provide comprehensive diagnostics, easy to use compliance tools and analysis of both timing and voltage measurements. The Wavecrest SIA adds a full-featured time interval analyzer and sampling oscilloscope to the ASL 1000 test system. This complete solution ensures accuracy and repeatability of test results, reducing test times and enabling you to get your devices to market faster.

Making Test Program Development Easy

The Wavecrest GigaView™ Graphical Characterization Suite provides over 33 tools for quick characterization that correlate to design. No additional lines of software coding need to be written. Wavecrest also provides a full Production Application Programming Interface (PAPI) library to make test program development quick and simple. Full documentation and training classes are available to bring you up to speed fast.

Jitter Analysis

Rely on the industry correlated Wavecrest GigaView software suite with patented Tailfit™ for complete jitter measurements and separation into Total Jitter (TJ), Random Jitter (RJ), Deterministic Jitter (DJ) and Periodic Jitter (PJ). These measurements are made using Wavecrest’s patented measuring techniques and high-speed algorithms to guarantee correlation from characterization to production for IEEE and ANSI standards.

With the Credence ASL 1000 ATE system and the Wavecrest SIA Family of Signal Integrity Analysis solutions, you can test virtually every signal integrity, timing and voltage requirement for these applications:

- **Clocks/PLL**
  - Advanced PLL Analysis
  - Skew Timing
  - Advanced Jitter Analysis
  - Bus Analysis
  - Cycle to Cycle

- **Graphics**
  - LVDS, TMDS, DVI

- **SERDES**
  - Serial ATA @ 1.5
  - Gigabit Ethernet @ 1.25Gb/s
Comprehensive Signal Integrity Analysis

Specifications
SIA 3100T:
(SRT 3000 3GHz TIA available on special order)

- Data Rate: 1.7 Gb/s data and 6 GHz Clock/PLL
- Sampling Oscilloscope: 6 GHz Bandwidth, Overshoot/undershoot
- Input Channels: 2 differential with 10 optional

Measurement Types
Full "Time" Period, PW, Tr/Tf, Freq, Jitter, Cycle-to-Cycle, Duty Cycle, Output Skew, Parallel Bus Tset/Thold

Advanced Jitter TJ, DJ, ISI, DDJ, RJ, TJ and PJ, FFT of Power Spectral Density, Bathtub curves of BER

Credence will provide full support of the ASL 1000 Solution including the Wavecrest SIA integration

Sample PAPI Libraries Support
ASL 1000 Test Programs
Example: Jitter Separation

WAVECREST
Be certain of the signal you send.

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