

- ***High Modularity***

- ***Full Flexibility***

- ***Total Test Coverage***

*One step ahead  
on future devices.*



**ART200+**  
UNIVERSAL TESTING PLATFORM

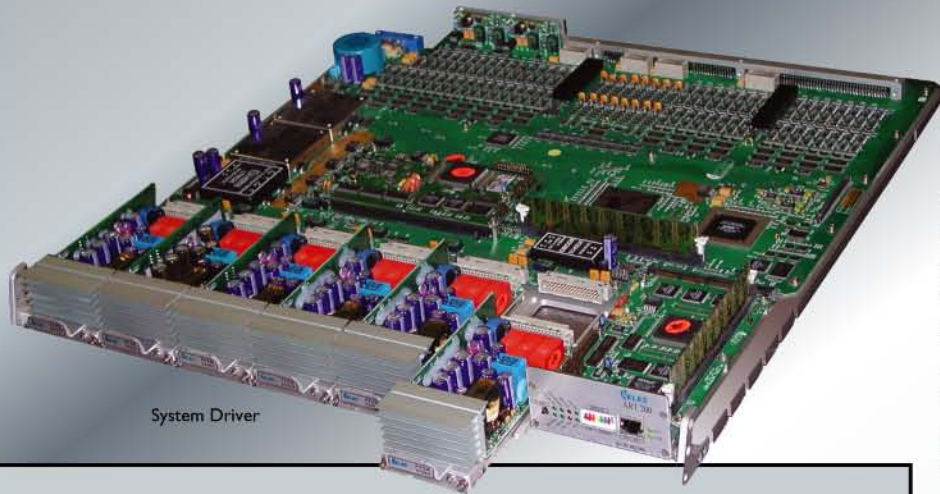
RELIABILITY AND TESTING PLATFORM

## Competitive advantages

With the aim to enable IC makers to gain real competitive advantages in terms of cost saving, time-to-market reduction and design & production process improvement, ELES has introduced ART200, a powerful, universally applicable reliability and testing platform.

To further increase device coverage and system flexibility, ELES has recently upgraded the ART200 driver with new interchangeable power modules allowing an effective supply management for every IC testing requirement. This results in an increased modularity which enhances the overall system capability and performance:

- wider device coverage, including hi-power DUTs
- higher capacity combined with system efficiency and optimum performance to allow IC makers to carry out low-cost, massively parallel tests from design to volume at both wafer and package level. This results in a common environment for design validation, new products and process qualification, reliability tests in manufacturing and final tests on each device family
- extreme system flexibility to guarantee an easy portability of test patterns and functions as well as the consistency of test data results throughout the development & production process
- easy integration of the burn-in cell in an automated manufacturing process (plant automation & handling, automatic device sorting, full integration with EWS data, result data centralization with real-time statistical analysis, remote area monitoring) to grant a higher production flow efficiency
- continuous, software-based environmental monitoring, which logs all the significant related events in order to guarantee risk-free operation.



## ART200 Reliability and Testing Platform

- Installed on 12, 2x12, 2x24 slot ovens (25..150°C) or climatic chambers (-40..150°C), suitable for design validation, qualification, massively parallel testing, TDBI and quality control
- Desktop test program development station available

### Technical specifications

- Extremely wide device coverage
  - Digital logic
  - Microcontrollers and SoC
  - Analog and mixed signal
  - Memory
  - Embedded memory
  - MCM
- Tester per slot architecture
- Up to 256 devices per slot, up to 12,288 DUTs per system
- NEW** ● **Modular I/O section with upgradable capability from basic to full**
- Full I/O version features
  - 288 I/O per slot
  - Digital stimulus minimum step 40nSec (vector time)
  - 8 clock channels up to 40 MHz
  - Vih range: 0.8V ... 6.5V 50mV precision
  - Vil < 0.3mV
  - 200mA continuous output current on 16 ch (2A peak), 100mA (1A peak) on remaining ones
  - High voltage on 144 ch. (third level)
- NEW** ● **6 independent fully programmable power supply slots to be equipped with 4 different PS types:**
  - -20V ... +20 V, up to 12.5 A or 60W
  - -100V ... +100 V, up to 6 A or 60W
  - 0.8V ... 3.6V, up to 22.5A over the whole range
  - 9.6V ... 52V, up to 3A over the whole range
- 6 voltage reference generators per slot (-12.6 / +12.6V) with current measurement
- NEW** ● **Max current per board: 105A**
- NEW** ● **Max power per board: 540W**
- 0.8V devices compliant
- ATPG and ALPG approaches
- Extremely fast test data download
- All DFT methodologies supported (JTAG, Scan-Chain, BIST ...)
- Vectorial Stimulus and Monitor
  - 50 nsec vector time (25 nsec edge placement)
  - Formatting on 16 channels (NRZ, RTZ, RTO, SBC, user-defined)
  - Up to 64M vectors on 64 channels
  - up to 256 devices 8 monitored lines
  - pattern reload during test
- Analog function generator and monitoring
  - 4 channel synchronized analog function generator
  - static analog monitor in the 0 .. Vih range
- Memory test and characterization functions
- Flexible test program capability with temperature synchronization
- Detailed failure information and parametric measurements
- Complex binning rules
- STDF data export
- Easy-to-use graphic user interface
- Complete development tool set for test flow programming



Todi - ITALY

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