



COMPACT NEXT> LINE

COMPACT DIGITAL NEXT>

The tester designated as **COMPACT DIGITAL NEXT> Test System (DTS)** is Seica response to the constant demand for testing integrated devices via vector-based techniques and dedicated protocols such as Boundary Scan, without excluding the need to combine the in-circuit test as well.

It is available in two versions: **COMPACT DIGITAL** and **COMPACT DIGITAL XL**

ATE RESOURCES – ICT AND FUNCTIONAL TESTING

Like any other **Seica** solution, the **COMPACT DIGITAL NEXT> SERIES** test system, uses the **VIP platform** (Viva Integrated Platform), whose main feature is the possibility to deliver the best integration of technology and easiness of use.

It is possible to combine the following test solutions: *ICT (In Circuit Test, Open/Short, R/L/C, Diodes, Transistors, FETs, regulators...), Functional testing, On-board programming, Boundary-Scan test, Digital test pattern.*

This is possible thanks to the cutting-edge measurement system (based on ACL proprietary module) and to the **VIVANEXT>** management software. The ACL module contains the measurement and stimuli internal instruments. The **DSP technology** integrates all of the testing capabilities while enabling the fully-automated test execution.

The communication to the Main PC via optical fiber cable minimizes sensitiveness to external disturbances. It optimizes the communication between the PC and system resources. The user can use an intuitive graphical software designated for compiling and running functional tests: **Quick Test**.



DIGITAL TESTING UP TO 25 MHZ

Beside the fact that the **ACL module** already features 4 digital channels on every TP, **Seica** has developed and improved its hardware for digital testing over time, reaching the performances and capabilities integrated in the F50 module. This is a 32 high-frequency digital channels board, which can reach up to 25 MHz pattern rate.

It includes:

- **Digital drivers and sensors** (with signal voltage programming up to 12V and a dedicated on-board 256Kb memory).
- **4 pulse generators** that can also operate in clock-free running mode (1 every 8 channels of the board) making it either synchronous or asynchronous with respect to the digital patterns.
- **4 independent frequency**, period or pulse meters and the resources for 2-line analog testing.
- **Boundary scan capability.**

THE “FLEXIBILITY” OF A TRULY OPEN and CUSTOMIZABLE TEST PLATFORM

The **VIVANEXT>** Environment allows the user to combine ICT and functional testing, for an improved process speed and fault coverage through a **Functional Graphic Environment** which guides the user through the steps of test program creation and execution. A dedicated environment NVL (Neutral **VIVANEXT>** Language) is available for **digital test development**, where it is possible to check, debug and execute programs.

- NVL allows an **easy integration** and direct use of standard Intel/Motorola (.bin, .mot, .hex) programming files in case of memory programming (e.g. I2C, SPI, JTAG protocol).
- A **graphical tool** featuring waveform acquisition capabilities via external probe or internal channel further facilitates repair in the event of digital functional testing. The open architecture of the **VIVANEXT>** software makes it compatible with other programming languages (e.g. Python, VBS) and third-party software modules (EXE. and .DLL).





VIVA NEXT is available in a 32 and 64 bit version with a new graphical interface and a guided environment for an easy and quick test program creation. It is fully integrated with NI-VISA drivers and with third-party test management software.



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Seica reserves the right to change the technical specifications without notice

LabView™/TestStand™ are
National Instruments software

VIVA>NEXT> SOFTWARE AND MES INTEGRATION OPTION

Like any other **Seica** solution, the **COMPACT DIGITAL NEXT>** test system, uses the **VIVA>NEXT>** platform, which provides two authentication methods managed through the Seica proprietary graphic editor **MY VIEW**:

1. the standard Windows authentication
2. the new '**VIVA User Authentication**' through which the customer can select the user with different privileges.

Since the customer manages the production and material flow through the **MES software**, the Seica **COMPACT DIGITAL NEXT>** can be connected to the customer MES (Manufacturing Execution System). Through its proprietary Adapter, Seica can integrate all customer MES platforms.

INDUSTRIAL MONITORING & INDUSTRY 4.0

The Information and technology needed to collect and analyze data, is key to the successful digitalization of the manufacturing process, which is at the heart of the **Industry 4.0** concept. Special attention needs to be given to energy savings and predictive monitoring of events. **Canavisia**, a **Seica Company**, introduces **ShoeBox**, a noninvasive control unit that allows to control energy consumption and to reduce costs and wastes through Monitoring of consumption, Data analysis, Intervention planning.

TECHNICAL TABLE

System Architecture	VIP Platform - Viva Next>
PC	internal to the system
Available Slots	28 (56 XL)
Analog channels scalability	Up to 1536 (Up to 3328 ⁽¹⁾ XL)
Hybrid channels scalability	Hybrid channel (1:1): up to 448
	Hybrid channel (1:8): up to 1024 (XL)
	Hybrid channel (1:1): up to 1024
	Hybrid channel (1:8): up to 2048 (XL)
Driver digital levels	Low output voltage: -3 V
	High output voltage: +12 V
Maximum pattern rate	25 MHz
Slew Rate	Adjustable from 600 V/μs to 800 V/μs
Power I/O integration	Yes
Output current	200 mA peak, 100 mA continuous
Availability of fixed power supply units for customization management	System-integrated
Power supply scalability User (programmable in Voltage and Current)	Up to 8 power supply units:
	AP5: 0-6 V / 0-6 A; 0-18 V / 0-2 A; 0-18 V / 0-2 A
	AP6: 0-6 V / 0-6 A; 0-30 V / 0-1.2 A; 0-30 V / 0-1.2 A
Scalability for functional test	Yes
On-Board Programming Capability	Yes
Boundary Scan test option	Yes, via internal resources or third-party hardware integration ⁽²⁾
Integration with third-party instrument	Yes, specific ergonomics conceived for integration in robotized lines ⁽²⁾
Fixture Receiver	Yes, vacuum or pneumatic
Vacuum Requirements	-20 in Hg (-0.66 Bar) to -28 in Hg (-0.94 Bar)
Compressed air	Not required
UPS	Yes
Ventilation system	Yes
Dimensions (Width x Depth x Length)	(600 x 1400 x 850) mm (1200 x 1520 x 850) mm (XL)
Power Supply	Power supply: 230 VAC -10% +15%, (16 A) 50-60 Hz single phase
Absorbed Power	Max 2.5 kW Max: 3.5 kW (XL)

¹ Receiver limited to 2048

² Exclusive if there is not enough space for 2048 channels