

4x parallel test. Ultra-fast handling. No operator.
Minimize the cost of test

3030IL

INLINE

MULTI-CORE MULTI-FUNCTION BOARD TESTER



4x throughput with 4-Core Architecture

No operator cost

Ultra-fast handling in 3 sec.

5000+ tests/sec

Automatic test program generation

Parallel programming of
different-type ICs

High volumes. High quality. Low cost of test

3030IL is the **fully automatic bed-of-nails tester** expressly designed to **minimize the cost of test**, providing unparalleled throughput **without requiring the operator** to load the PCB or perform the test. It can be **quickly integrated** into SMEMA production lines, or used with standard **automatic board loader/unloader**. Modular and fully upgradable, **3030IL** combines a **wide range of test capabilities** in a **unique integrated** high productivity cost-effective system.



4 Test Cores. True Parallel Test

3030IL can be equipped with up to **4 independent test cores** - each one with independent CPU, local memory and instrumentation - able to **test in parallel up to 4 boards/panels of boards**. Compared to standard ICT testers, **3030IL** throughput is up to **400% higher**, thus minimizing the cost of test.



Ultra-fast handling

3030IL is equipped with a re-designed handling module, which **halves the handling time** compared to the previous generation. Just **3 seconds** are enough for handling a medium-size PCBA, including board loading, presser down, presser up and board unloading.



Fixture & Test Program compatible with 3030 manual tester

3030IL is **fully compatible** with 3030 manual systems. You can **migrate production from in-line to manual tester** and vice versa, without changing fixture and test program. You can also **make the system available** for other applications during debug and board repair operations, increasing the system usage.



Maximum Productivity with Multi-Stage

With the **Multi-Stage** option, **3030IL** delivers different test techniques concurrently (e.g.: In-Circuit + Functional, In-Circuit + Flashing, etc.), **optimizing the tests** among the two stages and further **reducing the time and costs**.



Operatorless

3030IL does **not need an operator** to load/unload the board and to perform the test. The system works **fully automatic** - integrated into SMEMA production line or with standard loader/unloader - increasing **throughput** and dramatically **lowering the cost** of test.



Ultra-fast test speed

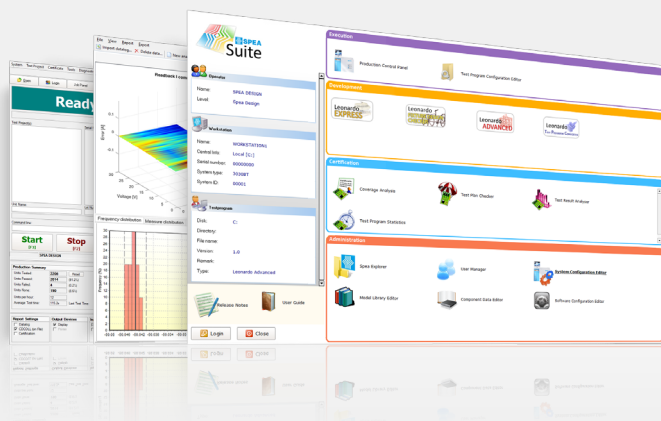
Compared to standard ATE, **3030IL** test speed is **significantly higher**. **Dedicated CPU** on each Core guarantees no delay between instrumentation and PC. **High-performance relays** provide fast switching time. **Instruments architecture** minimizes instruments setup time during test. The possibility to execute **different measurements simultaneously**, with a single test Core, further reduces the test time.



Controlled contacting with motorized receiver

Tester and receiver are fully integrated, both designed by SPEA to provide a reliable cost-effective turnkey test equipment. Board contacting is safe and precise: with the **motorized receiver** it is possible to **program the presser speed** according to the UUT characteristics. The descent is always **planar**, and it is also possible to program **different contacting quotes**, so to **execute different tests on different areas** of the UUT. Direct **able-less connection** between system instrumentation and fixture guarantees **signal integrity**. Finally, there is **no need for compressed air**: **3030IL** can be easily moved.

Leonardo OS. Easy. Fast. Self-programming



- Automatic test program generation in **minutes**
- **Automatic** debug & tuning
- Automatic **test report generation**
- Automatic generation of the **file for fixture drilling and wiring**
- Automatic **CAD data recognition & import**
- Automatic execution of **Built-In Self-Test (BIST)** to perform functional test in a remarkably reduced time
- Automatic management of ECO: no need to re-generate and re-debug the entire test program at BOM change
- **User-friendly** intuitive graphical interface

The turnkey solution for high volumes

- **Production-ready:** the system automatically generates the test program and is ready for production. No need for test engineers
- **Tester + automation** designed and manufactured directly by SPEA for the **best performance, full integration and cost optimization**
- **Automatic + manual** board loading modes
- Engineering support for **product customization**
- Unique integrated **Leonardo OS** software interface
- **Unique** technical & commercial support

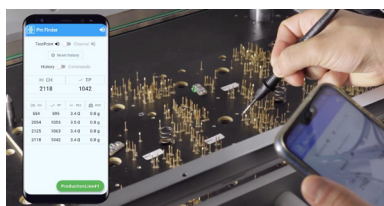
Parallel Test Capabilities

- Smart In-Circuit Test
- Power-On Test
- Functional Test
- Multi-Device Flashing via On-Board Programming
- LED Color & Intensity Test
- Boundary Scan
- Parametric Test
- Digital Test
- Open Pin Scan
- Built-In Self-Test (BIST)

Easy checks with Pin Finder app

The Pin Finder mobile app, available for smartphones and tablets, displays the **diagnostic information** read from the fixture's pogo pins and the tester's channels.

By probing the pins and checking the data on the app, you are able to **quickly verify the connections** and measure the resistive value of the test points.



Analyze & optimize your process

QSoft is the **control software** developed by SPEA to **monitor, analyze and optimize** the production process.

- Integrated **data collection** from manual and automatic station
- Real time **production monitoring and analysis**
- Immediate **report generation**
- **Repair** station automator



The benefits of a multi-function tester

SAVE MONEY. Why buy several pieces of equipment when you just need one? By using **3030IL**, **multiple test techniques** are executed within a unique system. Compared to multiple test stations, the **benefits are huge:** no operator, a single test program, reduced industrial space, faster training and lower operational costs.

SAVE TIME. The required test time is greatly reduced by **3030IL**. First of all, you **avoid expensive useless handling** operations. With just one board loading/unloading the tester performs different tests in a **optimized way**, in order to avoid redundancy and over-test of your product, thus allowing you to **save precious time**. And what about programming multiple equipment? With **3030IL** and Leonardo OS you just need half an hour to generate your **multi-function test program**.

SAVE FIELD RETURN. **3030IL** has been designed to help electronics manufacturers increase their **product quality**. By executing various test techniques with the same tester used for In-Circuit, all risks related to handling operations subsequent to In-Circuit test are avoided. At the end of the tests, the product is **ready to be delivered** to the final customer.



Multi-device parallel flashing

3030IL can be equipped with one or more **4-Core flashing modules**, able to program in parallel different-type components. They enable to program specific functions, as well as to load the system software on the ICs during the test, so to **cut flashing time and cost**.



High-speed parametric ICT

3030IL's high-speed ICT parametric test is able to measure each single component value in a very short time. Advantages: **programming time reduction** (the test is automatically generated), **test time reduction** (microseconds of ICT vs. milliseconds of FCT), **repairing time reduction** (automatic fault device identification).



Fully upgradable & customizable













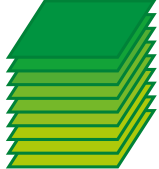

3030IL can be factory equipped or **upgraded on field** with all kind of instrumentation needed to satisfy the test requirements. It is possible to integrate **power instrumentation** (as AC/DC generators, Active Loads, Power Matrix, etc.) as well as third party instruments to increase test capabilities and productivity.



PC-independent architecture

With **3030IL** PC-independent architecture the test program is resident in the tester CPU and the **test speed is determined by the system CPU**. Antivirus and other applications running on the PC do not affect the test speed. Moreover, you can change/update the PC at any moment, **without having to re-debug the test program**.

3030 - Product Range

Model	3030BT	3030R	3030C	3030CE	3030M	3030IL	3030T
							
	3030BT Bench Top 19" modular tester	3030R Rack Zero footprint embedded tester	3030C Compact Small footprint multifunction tester	3030CE Compact Extended Multifunction inline-compatible tester	3030M Multimode High scalability multifunction tester	3030IL Inline Highest throughput, lowest cost of test	3030T Tower Modular & customizable functional tester
Cores	1	1	Up to 2	Up to 2	Up to 4	Up to 4	1
Ch	512	Up to 2048	Up to 2048	Up to 2048	Up to 4096	Up to 4096	Up to 768
Throughput							

3030IL - Specifications

Main Specs

Test Core	
Number of cores	Up to 4
Configuration - Cores x Channels	4x768 - 2x2048 - 2x768 - 1x4096 - 1x2048 - 1x1024
Analog channels - Characteristics	100V, 1A
Digital channels - Quantity	Up to 2048
Digital channels - Characteristics	0.5÷14V ±300mA
Instruments on Interface	
Parallel Test	Yes
In-Line Loading Receiver	
Actuation	Motorized
Interface	
Zif Version	Yes
Environment Requirements	
Transport temperature range	-25°C ÷ +55°C
Environmental temperature range	15°C ÷ 32°C
Measurement temperature range	15°C ÷ 32°C
Humidity	≥20% ÷ ≤70%
System Specification	
Body main dimensions (L x W x H)	900 x 970 x 1737mm

Measurement Capability

Resistance	
Range	1mΩ ÷ 16Ω
Inductance	
Range	1μH ÷ 1H
Capacitance	
Range	0.5pF ÷ 1F
Test Type	
Electrical test	
ICT (In-Circuit Test)	Yes
High Power Functional Test	Yes
Open Pin Scan	Yes
Power-On Test	Yes
Functional Test	Yes
Flashing via On-Board Programming	Yes
Open / Short	Yes
Boundary Scan	Yes
Other test	
LED Color & Intensity Test	Optional



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