

Unmatched throughput. No operator  
Eliminate the cost of test

# 3030

## In Line

MULTI-CORE MULTI-FUNCTION BOARD TESTER



True Parallel Test. +800% productivity

No operator cost

Fully customizable & upgradeable

Operatorless Test Cell Ready

Automatic test program generation

# Eliminate the cost of test. 8 Cores. True Parallel Test. No operator

**3030 S2 In Line** is the new **fully automatic bed-of-nails tester** expressly designed to **eliminate the cost of test**, providing unparalleled throughput **without requiring the operator** to load the PCB or execute the test. It can be **quickly integrated** into the production line, or used with standard **automatic board loader/unloader**. Modular and fully upgradeable, **3030 S2 IL** combines a **wide range of test capabilities** in a **unique integrated** high productivity cost-effective system.



## 8 Cores. True Parallel Test

**3030 S2 IL** can be equipped with up to **4 independent Cores**, each one with independent CPU, local memory and instrumentation, able to perform **True Parallel Test**. And that's not all: productivity can boost with additional **4 Cores OBP/FCT**, in order to execute **parallel ICT, OBP and FCT**.



## Maximum Productivity

**3030 S2 IL** productivity is about **8x standard systems**. **Multi-Core Architecture** allows to simultaneously test 4 boards/panels of boards. Not enough? **Multi-Stage** function double that throughput: 2 or more boards are tested on different test stages with different test techniques. Finally, new transportation module offers up to **80% handling time reduction** compared with manual system.



## Low cost of fixture

**3030 S2 IL** has been designed to include **all hardware on the system**, in order to minimize the cost and time of fixture's development. For example, the new **Centralized Discharger Unit** allows to perform **32x parallel capacitor discharge** without having to add extra hardware on the fixture. Moreover, fixture drilling and wiring file is **automatically generated** by Leonardo OS2.



## Operatorless

**3030 S2 IL** does **not need an operator** to load/unload the board and to execute the test. The system works **fully automatic** - integrated into production line or with standard loader/unloader - dramatically lowering the overall cost of test.



## Quad-Core Parallel On Board Programming

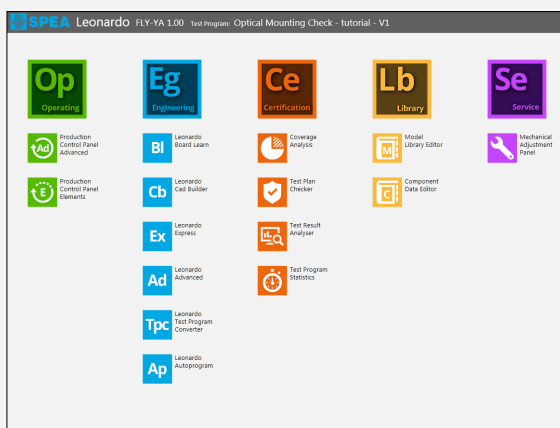
Quickly program on-board assembled electronic devices during, before or after the test with **3030 S2 IL**. The new OBP modules can **simultaneously program up to 256 components**, even different, providing unprecedented throughput and **erasing the cost** of manual programming stations.



## Fully upgradeable & customizable

**3030 S2 IL** can be factory equipped or **upgraded on field** with all kind of instrumentation useful 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. Finally **3030 S2 IL** can accommodate a wide range of **fixture receiver** models, also from third party (Genrad, Ingun, Zentel, Augat Pylon...).

# Leonardo OS2. Easy. Fast. Self-programming



- **No need for test engineer** or expert technician to develop and debug the test program
- Automatic test program generation in **minutes**
- **Fully automatic** debug & tuning
- **Minimized** application development costs: automatic generation of the file for fixture drilling and wiring
- Automatic **CAD data recognition & import**
- - **50% test program generation time** compared to previous generation
- Automatic execution of **Built in Self Test (BIST)** to perform functional test in remarkable reduced time
- **User-friendly** intuitive graphic interface

# The turnkey solution for high volume

- **Production-ready:** the system automatically generates the test program and is ready for production. No need for test engineer
- **Tester + automation** designed and manufactured directly by SPEA for the **best performance, full integration** and **cost optimization**
- **Manual + automatic + in line** board loading
- Fast time to market **customization**
- Unique integrated **Leonardo OS2** software interface
- **Unique** technical & commercial support

## Parallel Test Capabilities

- In Circuit Test
- Power On Test
- Functional Test
- On Board Programming
- Short Test
- Optical & LED Test
- Boundary Scan
- Parametric Test
- Open Pin Scan
- BIST

## Multi-Core Flexible Test Cell



Combine the productivity of **3030 S2 In Line** & the probing capabilities of **4050 S2** flying probe tester. Eliminate the cost of test with the **Multi-Core Flexible Operatorless Test Cell**.

## 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 multi-function tester

**SAVE MONEY** Why buy multiple equipment when you just need one? By using **3030 S2 IL**, **multiple test technique** are executed within a unique system. Compared to multiple test stations, **benefits are huge:** no operator, a single test program, reduced industrial space, faster training and lower operational costs.

**SAVE TIME** Time results greatly reduced by **3030 S2 IL**. First of all, you avoid expensive **useless handling** operations. With just one board load/unload the tester executes different tests in a **optimized way**, in order to avoid redundancy and over-test of your product, thus allowing you **saving precious time**. And what about programming multiple equipment? With **3030 S2 IL** and Leonardo OS2 you just need 1/2 hour to generate your **multi-function test program**.

**SAVE FIELD RETURN** **3030 S2 IL** has been designed to help electronics manufacturers to boost 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 test the product is **ready** to be delivered to the final customer.



## Fixture & Test Program migration

**SPEA Common Architecture** allows Leonardo OS2 Test Programs to work with all SPEA board tester systems, 3030 and even Flying Probe. In this way you can quickly **move your production** from one system to another, depending on the production needs. Moreover, to **minimize application costs**, also **3030 S2 IL** fixture is **fully compatible** with 3030 manual systems, and vice-versa. And that's not all: you can **keep using fixtures** of old third party bed-of-nails systems and let Leonardo OS2 **automatically convert** the test program.



## Forget field returns





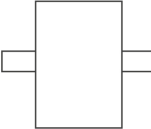







**3030 S2 IL** has been designed to help electronics manufacturers boost their **product quality**. By executing **over 5000 tests/sec** and a complete range of test techniques with its high-performance instrumentation and stimuli, **3030 S2 IL** can **reliably find faults** undetectable by standard ICT tester.



## Designed to last

State-of-art mechanics. Cable-less connections. 16-bit instrumentation. 8-wire measurements. Everything has been designed to guarantee a reliable test at the lowest cost - even after **years of intensive use** - with an always **up-to-date equipment**. An example: the test program is resident in the tester CPU S2 and runs **independently from PC timing**. You can change/update the PC at any moment, without having to re-debug the test program.

# 3030 S2 - Product Range

Model	 3030 Bench Top Bench Top 19" modular tester	 3030 Rack Zero Footprint embedded tester	 3030 Compact Small footprint multifunction tester	 3030 Multimode High throughput multifunction tester	 3030 In Line Lowest cost of test in-line tester	 3030 Tower Modular & customizable functional tester
Channels	512	1536	2048	4096	4096	768
Productivity						

## 3030 S2 In Line - Specifications

### MAIN CHARACTERISTICS

#### Test Core

Configuration - Core x Channels	4x768 - 2x1536 - 1x3072 2x2048 - 1x4096 2x768 - 1x1536 1x1024 1x2048 1x4096
Analog channels - Characteristics	100V, 1A
Digital channels - Quantity	up to 2048
Digital channels - Characteristics	0.5÷14V ±300mA

#### Instruments on Interface

Parallel Test	Yes
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#### In-Line Loading Receiver

Actuation	Motorized
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#### Interface

Zif Version	Yes
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#### 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)	900x970x1737 mm
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### MEASURE CAPABILITY

#### Resistance

Range	1mΩ ÷ 1GΩ
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#### Inductance

Range	1μH ÷ 1H
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#### Capacitance

Range	0.5pF ÷ 1F
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### 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
On Board Programming	Yes
Open / Short	Yes
Boundary Scan	Yes

#### Other test

LED Color Test	Optional
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