

High throughput & full coverage.
Minimize the cost of test

3030

Multimode

MULTI-CORE MULTI-FUNCTION BOARD TESTER



-75% test cost with True Parallel Test

Multifunction. Any test with one tester

Fully customizable & upgradeable

Parallel On Board Programming

Ultra-fast automatic
application development

Minimize the cost of test.

Get full coverage with just one equipment

3030 S2 Multimode is the new **multi-function fully upgradeable and customizable bed-of-nails tester**, expressly designed to **minimize the cost of test**. Modular and fully configurable with a wide range of instrumentation and receivers, **3030 S2 M** provides 4x throughput and **saves 75% of test cost** compared with standard test solutions. **3030 S2 M** combines and optimizes a **wide range of test capabilities**, guaranteeing **100% coverage in a unique integrated** high productivity cost-effective system.



75% test cost saving

With True Parallel **Multi-Core Architecture** the cost of test is up to 75% reduced. Just one system, one operator, one fixture and one PC to test **4 PCBs at the same time**.



True Parallel Test

3030 S2 M 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**.



Low cost of fixture

3030 S2 M 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.



Fully upgradeable & customizable

3030 S2 M 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 programmable AC/DC generators, Active Loads, Power Matrix, programmable Power Supplies etc.) as well as third party instruments to increase test capabilities and productivity. Finally **3030 S2 M** can accommodate a wide range of **fixture receiver** models, also from third party (Genrad, Ingun, Zentel, Augat Pylon...).



Quad-Core Parallel On Board Programming

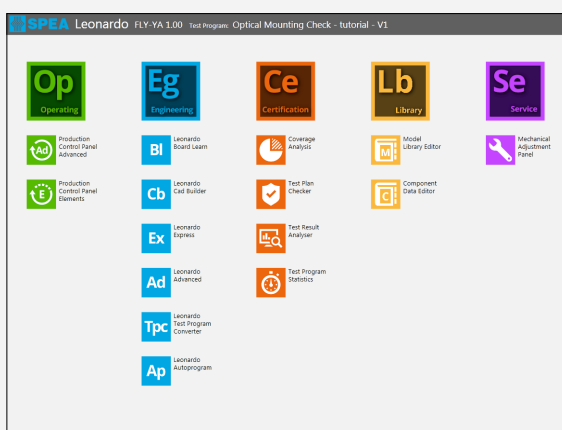
Easily program on-board assembled electronic devices during, before or after the test with **3030 S2 M**. The new OBP modules can **simultaneously program up to 256 components**, even different, providing unprecedented throughput and **erasing the cost** of manual programming stations.



Forget field return

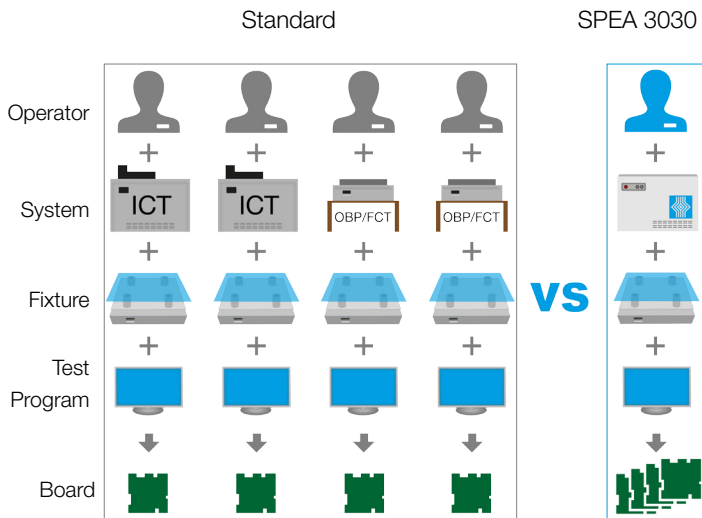
3030 S2 M has been designed to help electronics manufacturers boost their **product quality**. By executing various test techniques with its high-performance instrumentation and stimuli, **3030 S2 M** can **reliably find faults** undetectable by standard ICT tester.

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 **1/2 hour**
- **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

True Parallel Multi Core -75% overall test cost

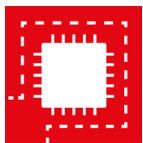


Compared to standard test stations, SPEA Multi-Core solution is much more **cost-effective**:

- 1 equipment, 1 fixture and 1 PC
- 1 multifunction test program
- huge space reduction
- 3x operators' cost spare
- 3x handling operations avoided
- reduced downtime risk
- unique spare-parts management
- single worldwide customer support
- 1 training

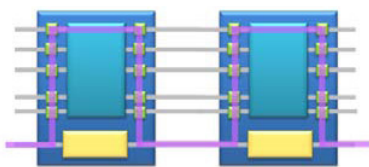
Parallel Test Capabilities

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



Test inaccessible devices

Integrating the most popular **Boundary Scan** tools, **3030 S2 M** can automatically test PCBs with non-accessible test points, such as BGAs.



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



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. You can quickly **move your production** from one system to another, depending on the production needs. Moreover, to **minimize application costs**, also **3030 S2 M** 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.



Designed to last

State-of-art mechanics. Cable-less connections. 16-bit instrumentation. 8-wire measurements.

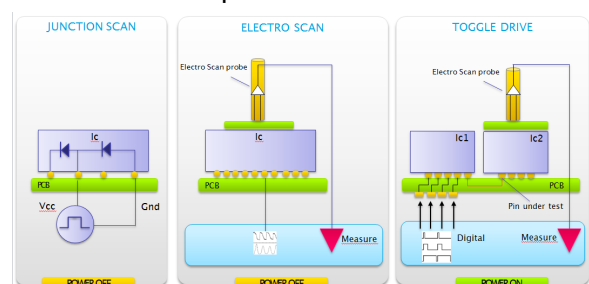
Everything has been designed to guarantee a reliable test at the lowest cost - even after **years of intensive use** - with an always **up-to-date equipment**. An example: the test program is resident in the tester CPU S2 and runs **independently from PC timing**. You can change/update the PC at any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

1:1

Cost-effective Per-Pin Architecture





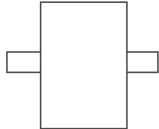







Each **3030 S2 M** channel is **configurable by test program**. Every nail can be used to perform any kind of test. This instrument/receiver **1:1 ratio** guarantees several benefits: faster test generation, easy ECO management, full flexibility.

Open Pin Scan



3 vector-less test techniques detect **open pins** and other process defects in easy and fast way

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 Multimode - 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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Manual Loading Receiver

Actuation	Vacuum Pneumatic Manual
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Drawer Loading Receiver

Actuation	Motorized
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Interface

Connectors	Yes
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)	1270x970x740 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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