

# Teradyne TestStation™ Systems

## In-Circuit & Functional Production Test Platform

### Achieve Greater Productivity

Today's PCBA manufacturers make difficult decisions to adjust to rapidly changing production requirements that include volume, mix and test complexity. It is a challenge to deliver ever-higher productivity and greater coverage using yesterday's manufacturing test systems.

Teradyne's new TestStation production test systems deliver two to four times the units-per-hour of conventional legacy test systems and eliminates the need for additional device programming and functional test stages in the production line.

TestStation systems are available in multiple form factors to address pincount, automation and test complexity needs. All TestStation models in the platform family share common features and options.

### TESTSTATION



### FEATURES

- 8-wire analog in-circuit measurement system for extreme accuracy
- SafeTest digital subsystem reacts to backdrive conditions in real time
- Scalable system configurations span high complexity, volume & mix
- Built-in support for device programming and functional test
- Accommodates high pincounts with a single fixture
- Choice of pure-pin, multiplexed and analog-only channel card options
- Common programming, fixturing & debug
- Supports Framescan & Powered Framescan techniques for non-contact structural test
- "Copy-exact" test results worldwide

### BENEFITS

- Reduce operator, fixture & energy costs by a total of 50-75%
- Program hundreds of ICs in the time of a single device
- Reduce your required factory floor space by half
- Achieve two to four times the units per hour with a single TestStation

### Capable

TestStation systems deliver full in-circuit structural defect detection with the highest fault coverage for all active and passive devices. TestStation supports comprehensive test of boundary Scan devices, digital and hybrid ICs, and memory and power components. Panel test and variant management features simplify test of multiple board revisions and multi-site models are ideal for high volume applications.

### Flexible

Add built-in full-panel parallel programming of dozens of memory devices in a single time unit, without fixture impact or 3rd party programmer costs. Add mixed signal test, A/D and functional pre-screen of powered up board operation using the existing fixture and test setup. Add full power-up functional I/O test using integrated PXI instruments and Labview/Labwindows programming without requiring a separate test bed.

### Scalable

Manage mix, complexity and board size from a few dozen test points to several thousand in one system. Add a second parallel test site to double system hourly productivity with no incremental fixtures, staff or system footprint growth.

All TestStation family members share common software, programming, user interface and system training to preserve your prior investments in production test.

# TestStation System Family

Teradyne's TestStation platform models cover the full range of test point requirements, instrument performance and expansion headroom. A single TestStation system can duplicate the output of two to four conventional systems - eliminating multiple operators, fixtures, systems and floorspace requirements.

Every family member accommodates the range of TestStation test options for channel cards, In-circuit options, boundary scan, device programming and functional test. Systems in production are easily expanded by adding incremental modular instrumentation and software options.

All systems feature common programming, fixturing, and system architecture to simplify support and training. All are backed by the test industry's most capable applications, training and field support team - anywhere in the world.

## TestStation



### MODEL OVERVIEW

Teradyne's flagship TestStation system is optimized for complex-highly integrated boards and features award-winning SafeTest technology. TestStation is scalable from 256 to 3,840 pins. This system is compatible with legacy GR228x test system fixtures and programs for an easy upgrade migration path.

## TestStation LH



Teradyne's TestStation LH is an economical yet fully scalable system for both low and high pin count applications. Packaged in a compact footprint, TestStation LH is scalable from 256 to 4,096 pins.

## TestStation LX



Teradyne's TestStation LX systems are the highest capacity, most flexible in-circuit test solution. TestStation LX can accommodate up to 15,360 hybrid test pins and includes numerous standard features for sophisticated and heavily integrated PCBs. The TestStation LX can support large, complex test fixtures up to 800 pounds (362 Kg).

## TestStation Multi-Site Inline



TestStation Multi-Site test systems expand test capacity and productivity in the industry's smallest footprint. These multi-site systems are specifically engineered to meet the high throughput and yield requirements of high volume manufacturers. TestStation Multi-Site systems are configurable up to 2,560 pins per site.

TestStation Multi-Site Inline test systems are engineered for straightforward integration into standard or custom automated handling equipment. The TestStation Automated Inline Handler is a seamless integration option for true, no-touch high-speed parallel test.

## TestStation Multi-Site Offline



TestStation Multi-Site Offline test systems have a 40% smaller system footprint compared to conventional test systems. These systems can be configured as concurrent parallel test sites or two independent systems to run asynchronously. Easily add external robotic automation to reduce manual operator costs.



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