

Analyst *ils* In-Line System

In-Circuit / Functional Test System

Test system designed for automated production lines

- SMEMA Compatible Conveyor
- Top and Bottom Probing Fixture System
- Available TestJet Technology, Boundary-Scan, and MultiWriter part programming
- Fully-integrated CheckSum test system software environment
- 2000 Test Point Capability
- Ergonomically friendly slide-in fixtures, straight-in and out, top and bottom lock-in for safety
- Rapid and smooth press actuation
- Operator safety enclosure
- Built-in SPC measurement tools; easily integrated into factory data system
- Optional dual-level operation for functional testing



The CheckSum Analyst *ils* is designed for testing through-hole and SMT circuit assemblies.

The System combines in-circuit testing, TestJet Technology, boundary scan plus part programming to test a single assembly or a panel of multiple assemblies. The optional power-up functional test capability is ideally suited for lower frequency analog assemblies with some digital content.

The Analyst *ils* can test the entire assembly and individual components. Using sophisticated measurement techniques such as DC or complex-impedance measurements in conjunction with multi-point guarding, this system provides the capability to find the majority of faults such as shorts, opens and wrong or incorrectly installed components. By finding the majority of faults while the board is in a safe unpowered mode, and with very specific fault diagnostic messages, faulty boards can be repaired quickly.

Optional dual-level probing allows for In-Circuit and Power-on functional testing in the same test fixture.



Fully Tested

In-Line System Operation

- Connect the system to a standard compressed air line and an AC outlet.
- Open the front doors. With the doors open, the system sensors will disable pneumatic operation for operator safety.
- Slide-in the fixture top and base then press the fixture top lock buttons. Fixture change-over takes only a few seconds.
- Close the doors and load the test program. The system is now ready to test the first assembly and the SMEMA "Ready" is set.
- The board loader will transfer an assembly to the system. The system automatically moves the assembly to the test position and lowers the press to make spring-probe contact to the board.
- After the test is complete, the press automatically moves up so the assembly can be transferred to next machine and the system displays the test results.
- The test results status signals, Pass / Fail, are provided along with the Board Available signal to the next machine.

Abbreviated Specifications

Pneumatic Fixture System Features

- There are two versions of the handler; standard and -43. The standard model accommodates boards up to 340mm by 254mm (13.4 inches wide and 10 inches deep). The -43 model accommodates boards up to 400mm by 300mm (15.7 inches wide and 11.8 inches deep).
- System footprint: 100cm W x 85cm D x 210cm H (38.75 inches x 32.75 inches x 82.7inches). Recommended front/back clearance of 92cm (36").

Typical System Resources

- 800 test points, up to 2000 maximum
- TestJet Technology*
- MultiWriter* option
- Boundary-Scan (Asset-Intertech, Corelis, Goepel, JTAG Technologies) options
- Functional Test and Digital I/O options
- Multiple power supply options

CheckSum LLC
6120 195th Street NE
Arlington, WA 98223
Tel: 1.877.CHECKSUM
Tel: +1 360.435.5510
Fax: +1 360.435.5535
www.checksum.com

System software

- Visual Programming Test Executive runs in Windows environment
- Comprehensive on-line help
- Extensive component ICT functions
- Power-on test functions
- Links to Visual Studio™ and LabWindows/CVI™
- Visual Test System Executive includes:
 - Statistical Process Control (SPC) Tools
 - Test Program Generation Tools
 - Test Program Validation Tools
 - Multi-Board Panel Support



Analyst, Analyst ems, CheckSum, and MultiWriter are trademarks of CheckSum LLC. Other product names are trademarks of their respective owners. Final appearance of the delivered product may vary from the photographs shown herein.

† Maximum number of test points depends on the fixture spring-probe force requirement.

* MultiWriter Technology is protected under U.S. Patent No. 7,802,021.

TestJet Technology is protected under U.S. patent numbers 5,124,660 and 5,254,953.

‡ Fixture kit top plate modification may be required.

©2014 CheckSum LLC. All rights reserved. Printed in the USA. 20140822