ATS-9
Automated Test System
from Texas Instruments
The ATS*-960 Test System is designed to lower your testing costs substantially. It tests analog, digital and hybrid electronic assemblies at high speeds, and its simplicity of operation reduces the need for extensive operator training. It is easily programmed and extremely versatile, capable of performing static, functional and dynamic testing as well as analog and digital fault isolation.

Up to four test stations
Modular construction allows each ATS-960 system to accommodate up to four test stations. All may be operated simultaneously with each station performing a different type of test on components or PC boards. For example, one station can perform fault isolation on digital PC boards while a second performs go/no-go tests on analog assemblies while a third is used for program debugging or editing and a fourth is performing incoming inspection of integrated circuits.

Each station may contain its own keyboard, operator controls, status indicators, visual display, optional fault isolation probe assembly and provisions for external test circuitry. Also, the desired operational mode—normal test sequence under program control, recycle one or more tests, manual advance one test at a time, etc.—can be selected by the operator.

Operator instructions concerning calibration procedures for the unit under test can be automatically displayed as shown below.

Because of its modularity, ease of operation, and versatility in accepting a wide variety of test instruments, the ATS-960 system eliminates the need for a multiplicity of special test equipment. Virtually all of the PC board, component and module testing requirements of your manufacturing quality assurance, service and engineering departments can be satisfied by this one system.

Easy-to-write English language programs
All test programs for the ATS-960 system are written in ATLAS, an industry standard English language which has been thoroughly proven and universally accepted. This language is automatically converted to machine language by an on-line language processor—skill in computer programming is not required.

This easy-to-use ATLAS language enables you to merely write a new program when adding new products rather than adding new test equipment (see example above). New test programs can be written and tested while the ATS-960 system is processing production circuits.

Since all program editing and debugging is done on-line in the ATLAS language, the programmer can quickly and simply change, add or delete instructions or test sequences by means of the test station keyboard.

Economical testing
Manufacturers who must test many kinds of PC board assemblies where design changes are frequent will gain the greatest economic benefit from the ATS-960 system. While it is particularly cost-effective for small quantity production—10 to 200 boards of a kind per production lot—it also has proven highly effective for quantities in the thousands.
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Rapid fault isolation

Isolation of faults to individual devices or components represents a major portion of the total cost in manufacturing electronic equipment. The ATS-960 system substantially reduces PC board and module troubleshooting times by its automatic fault isolation capability. This capability is provided using digital fault isolation probes complemented by optional computer-generated test patterns and diagnostics.

Digital fault isolation using computer-generated diagnostics—Computer-generated diagnostics provide high-speed fault isolation for high-volume production.

Digital fault isolation using universal program – The TI-developed universal digital fault isolation program is cost-effective for both low volume and high volume production. The need for special fault isolation programming is eliminated by an automatic learning mode in the ATS-960. The system uses a multi-pin IC probe together with a universal fault isolation subroutine to pinpoint faults to individual ICs. This method also solves the problem of isolating faults in embedded logic.

Customer training
Programmer and operator training is furnished at TI, Houston, Texas, with each ATS-960 system at no extra charge. Training at the purchaser's site is available optionally.

Field service
ATS-960 systems are serviced by TI's own worldwide factory service organization. Both contract maintenance and maintenance-as-required are offered.

Warranty
System warranty covers parts for a period of 12 months from date of delivery and labor for a period of 90 days.

Sales and Service Offices of Texas Instruments are located throughout the United States, Canada and in major countries overseas. Contact the Digital Systems Division, Texas Instruments Incorporated, P.O. Box 1444, Houston, Texas 77001. Or call (713) 494-5115, Ext. 2558 or 2194, for the location of the office nearest you or for more information on the ATS-960.

Texas Instruments reserves the right to make changes at any time in order to improve design and supply the best product possible.