GenRad®

Onboard Programming Solutions

Key Features

- Programs ISP and Flash devices using the tester hardware
- Supports most popular PLD components
- Increased throughput and flexibility when used with GenRad's Deep Serial Memory (DSM) option
- Supports the ability to program board specific data into Flash devices
- Reduced inventory costs
- Reduced defects as a result of less handling
- Simplified manufacturing and ECO flow
- Increased product reliability and cost savings due to the elimination of sockets

Overview

Onboard programmable devices such as in-system programmable (ISP) logic and Flash devices provide printed circuit board manufacturers a unique opportunity to reduce manufacturing costs while improving product quality. By utilizing GenRad®'s Onboard Programming solutions on the GR TestStation™ family of production test systems, you can make this opportunity a reality.

Simplified Process

The traditional process for programming ISP and Flash devices can be inventory-intensive. This process requires that both programmed and unprogrammed devices are to be kept in inventory. Yet, it can also be labor intensive due to the extra steps of using a standalone programming solution.

However, by programming the devices as part of the in-circuit test process, only unprogrammed devices are kept in inventory, eliminating the need to store and track multiple part numbers. Unprogrammed, single-part number devices are kitted and assembled onto the PCB and programmed during test.

The optional Deep Serial Memory (DSM) allows for separation of programming data and the test program. This method increases throughput and reduces the size of the test program. Changes to the programmable data can be applied to the manufacturing line in real-

time. This effectively eliminates the time required to implement ECO changes. There is no longer the need to re-program or scrap thousands of pre-programmed devices because the contents are outdated.

Easy Program Preparation

GenRad's Onboard Programming solution supports ISP devices of the leading manufacturers and includes several of the most commonly used Flash memory devices.

AutoFLASH is an application that simplifies the creation of models for new Flash devices. AutoFLASH allows a user to develop a Flash model based on information typically available on the Flash data sheet. Additionally, AutoFLASH makes it easy to program board specific information into the Flash (serial numbers, etc). Both ASCII and binary data types are supported. AutoFLASH also supports SPARSE programming, allowing a user to significantly reduce programming times by avoiding needless programming of blank addresses. AutoFLASH further includes critical debugging tools to simplify the Flash debug process.

GenRad's Worldwide Network of Service and Support

A dedicated, worldwide network of customer service and support professionals support every GenRad product. With regional support and training centers located around the world, GenRad offers local support and continuous training for all its customers. A full spectrum of services and customer support programs extends beyond the expiration of your original warranty.

Support Devices/Families

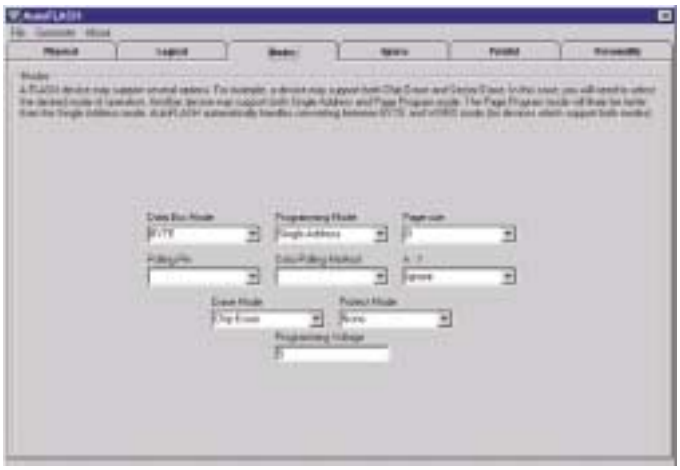
ISP Vendors supported: Altera®, Cypress™, Lattice®/Vantis®, Xilinx®.

Flash Vendors supported: AMD™, Atmel®, Catalyst™, Fujitsu®, Intel® and others

For More Information

For the latest list of supported devices / families please refer to our website: http://www.genrad.com/support/isp/default.htm

AutoFlash's comprehensive Debug menu assists in program verification



AutoFlash's easy to use model generation user interface

GenRad Background

GenRad, Inc. develops, manufactures, and markets testing and process control hardware and software for electronics systems manufacturing. GenRad, headquartered in Westford, Massachusetts, U.S.A., offers products and services through four focused operations: Process Solutions, Functional Solutions, Diagnostic Solutions, and Support and Services.

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