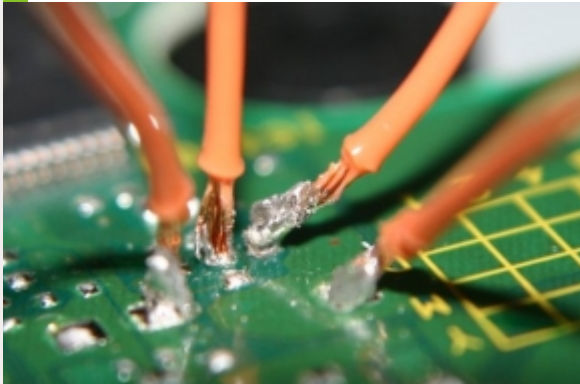


TESTJIG



SITUATION

Automated testing of hardware and software for home automation product. Following are the features provided by home automation product.

Automation: Controlling appliances from home and over Internet. With in home, user can use RF remote and touch screen to control appliances. Appliances can also be controlled via interactive voice response.

Security: Smart card or PIN base access, surveillance cameras, intrusion detection, alarm generation, inform via phone calls.

Safety: Emergency buttons/pendants, infant monitoring. In case of emergencies inform via phone calls.

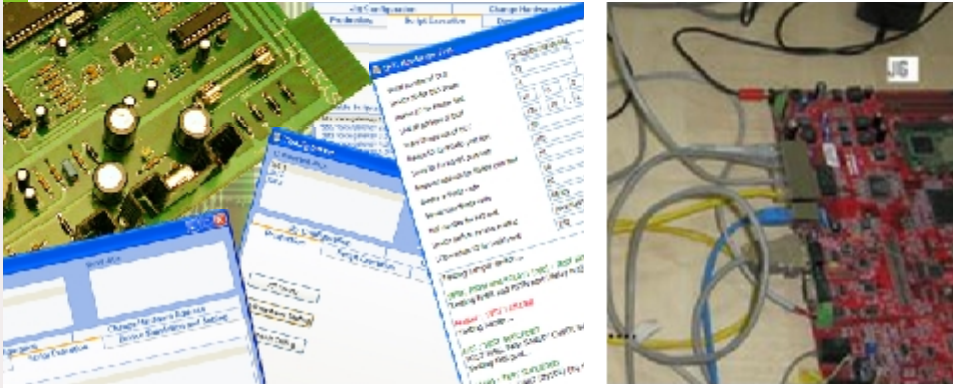
EXPECTED FEATURES

- » Automated testing of hardware at production time, which includes verification of all hardware interfaces.
- » Monitor speed of data transfer through different interfaces.
- » Functional, regression and stress testing of different features.
- » Monitor time required in execution of different features.
- » Reports mentioning all the test results.



Aftek[®]

TESTJIG



SOLUTION

Aftek's TestJig helps in reducing overall time and cost in testing of hardware and software for home automation product.

Hardware testing

TestJig is used for testing of hardware boards with different interfaces just at a button click. Bulk data is transferred over various interfaces to verify data transfer speed of each interface. Reports for test results of individual board is generated. A master report showing results of entire batch of boards being tested is generated, from which the go-no-go boards can be easily identified for further actions.

Following interfaces and devices are tested through TestJig.

- » RS485 ports
- » Telecom ports
- » Ethernet ports
- » USB host
- » USB device
- » Compact flash
- » Hard disk
- » Keypad
- » GPIO

Software testing

User interface provided with TestJig can be used to test multiple features of the product simultaneously. Regression testing and stress testing of various features is done using Perl scripts. Exact time required for execution of various features is calculated. Reports containing all the test details are generated for further analysis. Memory statistics of controlling board is also recorded for checking memory leaks in program.

BENEFITS TO THE CLIENT

- » Provides accurate, reliable and faster testing tool that reduces product development time.
- » Simultaneous testing of multiple boards is possible, which reduces verification time.
- » Exact data transfer speed through different interfaces is known.
- » Confidence in product deployment as proper stress testing and regression testing is done.
- » Detailed execution time for a feature will be known in advance.
- » Memory leaks if any will be known.

