kDy Automation Solutions, Inc.

Custom solutions for process automation.
Serving research & development,
pilot production,
and industrial customers.

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Energy Star Test System

- System tests a range of computers for compliance with Energy Star standards for power consumption.
- Fully automated test checks power consumption at idle, standby, sleep, and loaded operating states.
- Fully automated reporting and creation of required documentation saves time and effort.
- Extended to test power, temperature, and noise thresholds at the component level.

Overview

A leading computer equipment manufacturer came to kDy with the goal of making EPA Energy Star compliance self-testing simpler and more convenient.

Problem: Complicated Standards, Time Consuming Test

Energy Star requirements vary greatly depending on the class and specifications of the computer in question. Some must meet power requirements at idle, some must meet them under load. Specifications change regularly, and detailed records are required to be maintained for every model.

Solution: Start-to-Finish Test Automation

kDy engineered a solution which allows for a hands-off Energy Star test from start to report. Scalable software architecture allows the software to be quickly adapted to future changes in the Energy Star specifications.
The software was then extended to include features for capturing engineering data to aid R&D. The final solution is a one-stop power, temperature, and noise monitoring test station for our customer's computers.

PXIe Embedded Controller

Using National Instrument's low cost, high value PXI chassis system and PXIe embedded controller created a very compact package. The dual core Intel processor packs plenty of power for a Windows XP based measurement system. The PXI chassis system is also extremely configurable, allowing for a highly customized multi function DAQ system.