

Case Study

Semiconductor Plasma Asher: Modernizing A Legacy System With A Compact, Rugged Industrial Panel PC

Nile Technologies, a provider of Plasma Ashers for the Semiconductor industry, was looking to upgrade their legacy systems with a modern, robust, and compact Panel PC. The original systems they used were designed in the mid 1980's. Over the years many of the parts that went into this equipment became obsolete or were extremely hard to find. Therefore, the company started on an endeavor to eliminate the obsolescence, redesign, and update the systems to a modern control architecture to enhance performance of all aspects of the system.

A key focus for Nile Tech was to be able to provide an upgrade for existing customers. Many of those systems have been in use for well over 20 years and are still operational in a manufacturing environment. Many of their customers were experiencing an extremely high maintenance cost due the availability of parts and components that were failing from old age. Since cost is critical in their extremely competitive market, operational expense is particularly a significant concern.

“...DFI Tech stands out above any company that we have done business with, today or in the past...”

— Nile Technologies

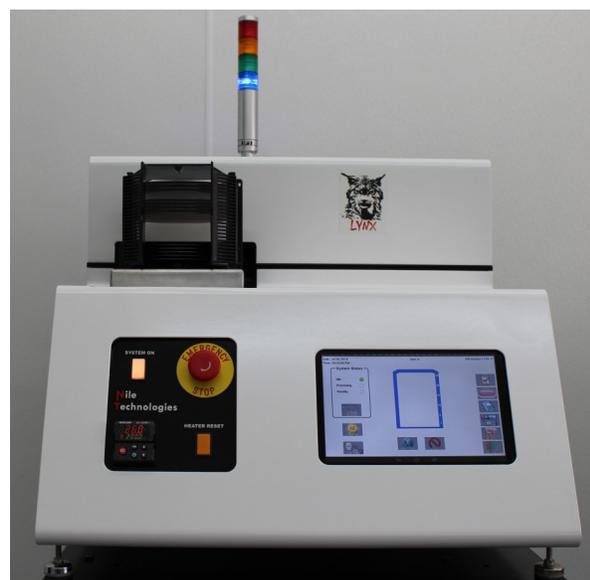


Figure 1: Nile Technologies' Semiconductor Plasma Asher

Starting the Redesign

Nile Tech had a clear vision how they wanted this project and the integration of the components to proceed. They chose Android as the operating system running behind the Graphics User Interface (GUI). The Android environment makes transitioning from one version of the Operating System (OS) to the next much easier compared to the classic Windows environment.

The customer required a rugged Industrial Panel PC that provided all the communication ports for the project as well as the computing power and a high resolution capacitive touch screen. Since Android is new in the Industrial System Control market, the customer was happy to find an all-in-one solution with DFI Tech.

The footprint of the Industrial Panel PC was extremely critical to Nile Tech as the available space in the system was small. The overall package needed to be able to fit within the system without having to perform a full redesign of the footprint. Fortunately, DFI Tech has multiple size options for the KS-series Industrial Panel PC and the proper size was available. The system series features IP65 protection, various processor options, multiple sizes, a capacitive touch screen and a rugged design.

DFI Tech's long life cycle support was also a key benefit for the customer. It was reassuring that the components would be supported for several years and Nile Tech's new redesign would not have obsolescence issues.



Figure 2: KS-series Industrial Panel PC with IP65 protection and rugged features

Additional Support

From the start, DFI Tech provided the customer with excellent support, from both a sales and technical perspective. Nile Tech management commented “It was refreshing to work with a company that informed us on what was going on and happily assisted us with any question. In our experience in today’s corporate world, DFI Tech stands out above any company that we have done business with, today or in the past. Their response and support to our needs goes above and beyond our experiences with other similar suppliers...you just know you are taken care of.”

The KS310 Industrial Panel PC chosen for the project was a new product line for DFI Tech. An evaluation unit was provided so that the customer could check out its performance and footprint. The Nile Tech team felt that DFI Tech’s solution exceeded all expectations and demonstrated excellent quality.

Do you have an embedded computing design problem that needs to be solved? Call DFI Tech now to speak to a sales engineer! Our experts will help you find the solution that best fits your application and your budget.

- **Small Form Factor Computer Systems**
- **All-In-One Panel PCs**
- **Fanless Computer Systems**
- **Rackmount Computer Systems**
- **Industrial Expansion Systems**
- **Motherboards, COM Express, SBCs, & More**



DFI Technologies
Main: 916-568-1234
1065 National Drive, Suite 1
Sacramento, CA 95834
www.dfitech.com

