

PLX Technology**PLX Technology Uses activePDF Solutions to Protect Confidential Data by Enabling On-the-fly Personalized Watermarking to Inhibit Unauthorized Document Distribution****Company**

PLX Technology

IndustrySemiconductor
Manufacturing & Distribution**■ Company Overview**

PLX Technology provides I/O interconnect devices, including PCI Express switches and bridges, USB controllers, PCI-to-PCI and PCI-X bridges, and I/O Accelerators. A leader in their industry, PLX Technology manufactures semiconductor chips for some of the largest technology companies throughout the world.

■ Business Challenge**Protect Confidential Documentation**

The semiconductor industry is highly competitive and, as an industry leader, PLX Technology has exercised vigilance in protecting their product technology against competitive attacks. This included restricting access to product documentation, which contained technical specifications and other intellectual property that could be leveraged by rival companies. As a safeguard measure, PLX Technology required all clients to register on the company's website and accept a legally-binding non-disclosure agreement (NDA) before gaining access to particular PDF versions of the product documentation, which contained a "Confidential" watermark to discourage unauthorized distribution. However, it came to light that some users were violating the terms of their NDA and distributing electronic or printed copies of the files to non-registered users, compromising the sensitive contents. The company needed a solution to help enforce the terms of their NDA, ensuring personal accountability among clients while preventing their proprietary information from falling into the wrong hands.

Create Personalized Watermarks

Although a digital-rights management system would provide the required accountability and security, PLX Technology needed a solution that would require minimal investment of time and resources while still addressing the immediate concern. Identifying individual client traceability as a primary goal, the developers determined that this could be accomplished quickly by simply assigning a unique identifier to each copy of the documentation downloaded by a registered user.

PLX Technology

- Manufacturer of semiconductor chips and a leading supplier of I/O interconnect devices.
- Location: Headquartered in Sunnyvale, California, USA, with additional offices in China, Taiwan, Japan, Korea and the United Kingdom.
- Founded: 1994

www.plxtech.com

Solutions

- Document and information security
- On-the-fly, personalized watermark creation

Product(s) Used

- activePDF Toolkit

To extend protection to both electronic and print copies of the documentation, the developers elected to continue using PDF watermarks, replacing the standard “confidential” label with the registered user’s name and company. This would allow unauthorized copies to easily be traced back to their original owners, deterring customers from circulating the files. Attaching the user’s personal information to the downloaded documents would also reinforce the individual sense of accountability among users, making them less likely to break their non-disclosure agreement by sharing the personalized documentation.

Robust, On-Demand PDF Customization

As the company’s original PDF software could only apply predefined watermarks, the development team at PLX Technology needed to find a new product that could enable custom, on-the-fly watermarking. With several hundred PDF catalogs and documents downloaded each month, many over 500 pages in length, the solution needed to be reliable under stress, ensuring that it would be able to handle the company website’s high bandwidth while still remaining invisible to the end user. It was also important to the developers that the new software be easy to integrate, reducing the time and resources required to implement the new procedure.

■ activePDF Solution

PLX Technology developers reviewed a number of products before selecting activePDF Toolkit. “We evaluated several options and activePDF won with both pricing and features,” recalled David Hurd, Director of Marketing Communications for PLX Technology, also citing ease of implementation as contributing to their decision to purchase. Shortly after obtaining the software, the development team was able to deploy an ingenious dynamic PDF watermarking solution to protect their intellectual property.

Similar to the original application, users register on the PLX Technology website by filling in and submitting an HTML form, which includes reading and agreeing to the company’s non-disclosure agreement. Once registered and approved by PLX Technology, users are able to download a number of PDF documents, including product catalogs and documentation. When the user selects a file for download, activePDF Toolkit is used on the backend to query the company’s proprietary database for the appropriate user name and company information. This personal information, along with the words “NDA Confidential,” is then stamped onto each page of the selected document and an owner password is applied to prevent copying or editing, delivering a customized read-only PDF to the user’s browser almost instantly.

“We evaluated several options and activePDF won with both pricing and features,” stated David Hurd, Director of Marketing Communications for PLX Technology.

“activePDF Toolkit has been a life-saver in this effort to protect our technology.”

This process ensures that the name and company are visible on both electronic and print copies of the PDF, discouraging users from sharing the document with unauthorized personnel and providing traceability in the event of a deliberate NDA violation.

■ Results

PLX Technology has used Toolkit to generate custom watermarks for every sensitive PDF available for download on their website. With the implementation of activePDF Toolkit, PLX Technology has:

- Increased protection for highly confidential information and reduced unauthorized document sharing
- Reduced the time and resources required to develop an on-the-fly personalized watermark generation solution
- Developed a mechanism for accountability and legal enforcement of NDA terms

PLX Technology is confident that their files are more protected from unauthorized distribution than ever before. "We needed to create a special deterrent for compliant NDA website users downloading our documentation to prevent them from sharing with non-NDA, non-compliant companies," says Hurd, "Users are far less likely to photocopy or share these documents now that their name is on top of each page." The new solution using Toolkit has satisfied all performance requirements, requiring little maintenance and allowing the development team to focus on other projects. "PLX Technology operates a large PDF-based, data book website catalog and needed a high-quality and reliable PDF security solution with leading functionality for our sensitive documentation," adds Hurd, "activePDF Toolkit has been a life-saver in this effort to protect our technology."