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Texas Instruments
ASIC Group

Documentation group saves $1 million annually by publishing materials on the Web using Adobe Acrobat, Adobe PDF, and Adobe FrameMaker

ABOUT THE CUSTOMER
- Global semiconductor company
- Headquarters: Dallas, Texas
- Employees: More than 38,000 worldwide

BENEFITS SUMMARY
- By eliminating the need to print or store manuals, Texas Instruments saves $1 million a year publishing documentation online in Adobe PDF and HTML.
- Using Adobe Acrobat and Adobe FrameMaker, Texas Instruments can produce four times as many document releases without adding any staff.
- The Web Capture feature in Acrobat 4.0 has cut the time to produce Adobe PDF files and check links from several weeks to just a couple of days.
- Texas Instruments' customers can print a range of pages in an Adobe PDF file with a single print command. Printing from HTML would need to be done one page at a time.
- The annotation features in Acrobat 4.0 allow writers in different countries to exchange electronic review copies, shaving two weeks off the document review cycle.

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The unsung heroes of today's faster product introductions might well be documentation departments. They're tasked to document more products, with more frequent releases—often without more budget. Many documentation departments are meeting the challenge with advanced tools for document creation and distribution, as epitomized by the Texas Instruments (TI) application-specific integrated circuit (ASIC) product group. "With Adobe Acrobat, Adobe Portable Document Format (PDF), and Adobe FrameMaker, we've streamlined our document authoring and review processes, moved from print to Web-based document distribution, and are producing four times as many document releases with the same size staff," says Kathlyn Auten, ASIC product information manager.

TI is a global semiconductor company and the world's leading designer and supplier of digital signal processing and analog technologies. In the ASIC division, a team of ten writers in Texas and four in India creates the highly technical data books, user manuals, and product sheets that consumer electronics manufacturers and telecommunications companies need to integrate ASICs into their own systems. With the help of Adobe tools for authoring, review, and publication, the small group can generate more than 15,000 pages of documents every two months. They produced more than 34,000 pages for a release last September.
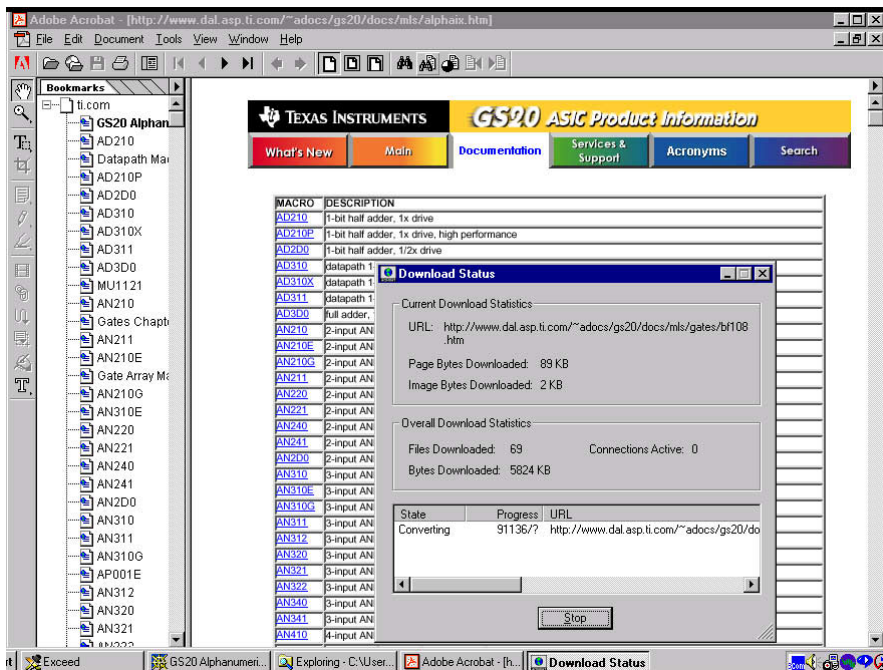
ONE MILLION DOLLAR SAVINGS

Adobe FrameMaker, Quadralay WebWorks, Adobe Acrobat, and Adobe PDF have dramatically reduced the time and costs associated with producing TI's data books, which present technical information such as operating conditions and electrical characteristics. Previously, TI used a program to extract data from its design database and then generate Interleaf output that was designed for print publication. It took more than three months to finish the book after the program was run, one month for printing, and another three to convert the files to HTML for Web publication. "By the time

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—Kathlyn Auten
ASIC Product Information Manager

Using the Web Capture feature in Acrobat, TI instantly converts HTML pages to Adobe PDF files. The resulting Adobe PDF files include all active hypertext links as well as bookmarks to enhance navigation. Customers can print a page, a range of pages, or an entire section of an Adobe PDF file with one print command.

we'd receive materials from the printer, they'd be out of date," says Ann Balaban, program manager. Paper copy documentation not only took too long to produce but it was also inconvenient for users. They had difficulty locating the book that contained a specific question, much less the answer to the question.

Paper copy data books are now passé for the TI ASIC documentation group. Instead, the group publishes its data books (and other documentation) on the corporate intranet, extranet, and on customer sites in Adobe PDF and HTML. "By eliminating the need to print or store manuals, going online will save us about $1 million a year," says Auten.

WEB CAPTURE

To speed creation of data books and reduce costs, TI wrote a program that extracts information from an engineering design database and converts it directly into HTML files. The

Web Capture feature in Acrobat 4.0 is then used to instantly convert the HTML files into Adobe PDF files, with all the hypertext links intact. "Adobe PDF is much better suited for printing than HTML, for two reasons," says Balaban. "First, the file and its images look exactly like the original on any computer and any printer. Second, customers can print a page, a range of pages, or an entire section of an Adobe PDF file with one print command. With HTML, printing 1,000 pages means choosing the Print command 1,000 times."

"The Web Capture feature in Acrobat 4.0 has helped us cut the time to produce Adobe PDF files and check links from several weeks to just a couple of days," says Balaban.

STREAMLINED ELECTRONIC REVIEW

The data books are generated automatically, without the benefit of an authoring program. For its other documentation, TI uses Adobe

FrameMaker software, taking advantage of the Save as PDF command to convert the FrameMaker files to Adobe PDF files. The company posts review copies as Adobe PDF files on the corporate intranet and then requests feedback from a worldwide review team. The reviewers use the highlighting, strike though, and underlining features in Acrobat 4.0 to make comments. "By facilitating electronic review, Adobe PDF and the annotation features in Acrobat 4.0 save two weeks of shipping time between the U.S. and India," says Auten.

WORKING SMARTER

"To increase the number of releases and not increase our staff size, we've had to find much smarter ways to do things," says Balaban. "By publishing on the Web, we've positioned ourselves to respond immediately to documentation problems. We've had a lot of favorable feedback from customers and our Customer Design Centers. Before, when we produced hard copy books, people never sent in changes because by the time they were implemented, it was time for the next version. Now people know that we can respond quickly. As a result of Adobe Acrobat and Adobe PDF files, our documentation is more accurate, more timely, searchable, and less expensive to produce."

TOOL KIT

Software
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Adobe Photoshop®
Adobe Illustrator®
Adobe ImageReady™
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Hardware
Pentium® PCs with 64 to 128 MB of RAM, 10-GB hard disk

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