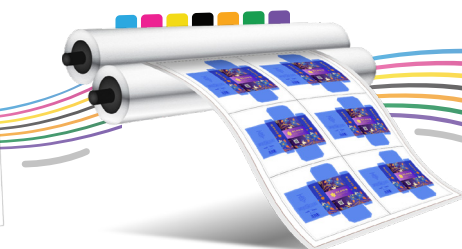# Adobe

CREATE

MANAGE

PRINT

Adobe PDF Print Engine

The rendering platform for the Adobe PDF print experience

| Advanced color capabilities | Performant and robust architecture | Industry-leading print quality | Dynamic workflow capabilities | Power to customize |

The Adobe PDF print experience begins when a job is designed in Adobe Creative Cloud, managed in Adobe Acrobat, and rendered for print by Adobe PDF Print Engine. This end-to-end Adobe workflow maximizes the potential of every press.

Adobe PDF Print Engine powers the rendering of PDF job content for commercial print production and is seamlessly integrated into prepress solutions from Adobe's global network of print technology partners.
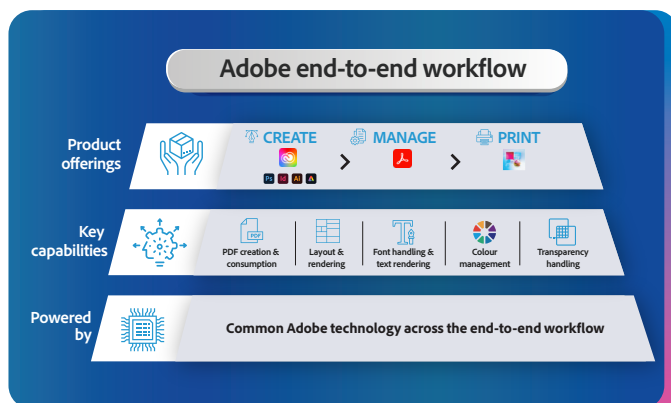
Adobe PDF Print Engine

As Adobe's flagship print raster image processor (RIP), PDF Print Engine converts graphics, text, and images into high-quality rasters that drive digital presses, wide-format printers, label printers, and plate setters. Embedded in prepress solutions from Adobe's global network of print technology partners, PDF Print Engine drives over 200,000 presses and proofers worldwide—including offset, gravure, flexographic, inkjet, electrostatic, and nanographic systems. Built on a performant and robust architecture, PDF Print Engine delivers advanced color capabilities, industry-leading print quality, dynamic workflow capabilities, and powerful customization options. As the fastest rendering technology in the industry, it scales effortlessly to drive any press at its rated speed—essential for high-complexity, high-volume jobs. Designed for the future of automated, high-performance print production, Adobe PDF Print Engine enables smarter workflows, faster output, and pixel-perfect fidelity from screen to substrate.

Designers continue to push creative boundaries with the latest features in Adobe Photoshop, Illustrator, InDesign, and Adobe Express. The PDF Print Engine is guaranteed to render them with full fidelity to the designer's intent on any surface and in any manufacturing cycle.

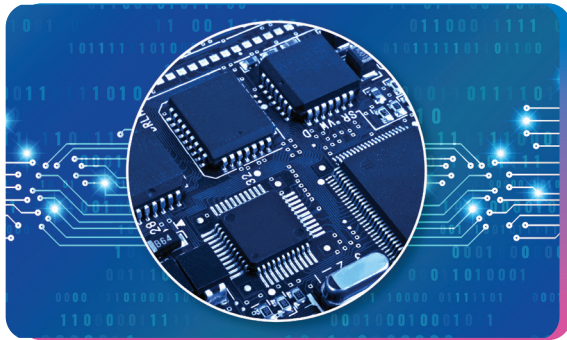# Reliability = Predictability + Consistency

Adobe end-to-end Workflow

Adobe PDF Print Engine renders PDF and image files created in any authoring application. Jobs designed in Adobe applications such as Photoshop, Illustrator, InDesign, and Express benefit from the same core Adobe technologies throughout the production lifecycle. This end-to-end integration ensures maximum reliability, visual consistency, and predictability from screen to print.

PDF Print Engine offers the highest levels of efficiency, precision reproduction, and vibrant, full-spectrum color, making it the most dependable foundation for high-quality print production.

Scalable high-performance **rendering**

Adobe PDF Print Engine harnesses the Mercury RIP Architecture—a parallel processing framework that dynamically manages multiple rendering instances across multi-core and multi-machine systems. Designed for scalability, Mercury enables PDF Print Engine to efficiently drive high-speed, high-volume digital presses—whether on a single press or across an entire press fleet.

It's especially beneficial for demanding applications like packaging, industrial print, personalized marketing, and transactional statements. Mercury-certified systems optimize the use of available resources and maximize hardware efficiency by load-balancing jobs and pages across available RIP instances, ensuring that no resources sit idle while jobs are waiting to be rendered. With Mercury RIP Architecture, PDF Print Engine delivers the performance and throughput required for the most demanding variable data printing workflows—today and into the future.

Delivering the latest Adobe innovations to the print industry

"With more than 2 million Fiery DFEs shipped to date, we know what it takes to get the best performance and image quality. That is why we are committed to working with Adobe to leverage continuous improvement in performance and output quality in Adobe PDF Print Engine."

John Henze
VP, Sales and Marketing

Leading Print OEMs trust Adobe PDF Print Engine

AGFA	ArtCom	BOBST	CALDERA	Canon PRODUCTION PRINTING	CGS ORIS
ColorGATE INNOVATIVE SOLUTIONS COMMITTED TO COLOR	DALIM SOFTWARE	Datalogics	ECO3	EPSON EXCEED YOUR VISION	esko
fiery	FUJIFILM Value from Innovation	FUJIFILM	GIS GLOBAL INKJET SYSTEMS A NANODIMENSION DIVISION	gmg color	HEIDELBERG
hp	KODAK	KONICA MINOLTA	Kornit Digital	Landa DIGITAL PRINTING	MainTop
ONYX	RICOH imagine. change.	SCREEN	IMAGING TECHNOLOGY	XEIKON	xerox

Core strengths of Adobe PDF Print Engine

Advanced color capabilities

State-of-the-art color management and powerful color controls. Manage process and Expanded Color Gamut (ECG) inksets. Maximize color range and visual impact by utilizing full potential of available inks.

Performant and robust architecture

Engineered for speed, scalability, and reliability. Take full advantage of available system resources to render complex graphics and jobs at record speed.
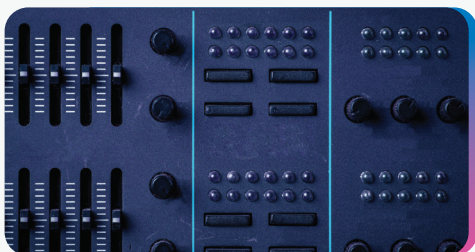
Industry-leading print quality

Proprietary processing technologies for superior reproduction of every element type: text, graphics, images, and smooth shades, either stand-alone or in combination.

Dynamic workflow capabilities

Flexibility to support specialized job and device requirements. Execute prepress & postpress operations inside the RIP, reducing the need for interactive prepress steps and specialized skill sets.
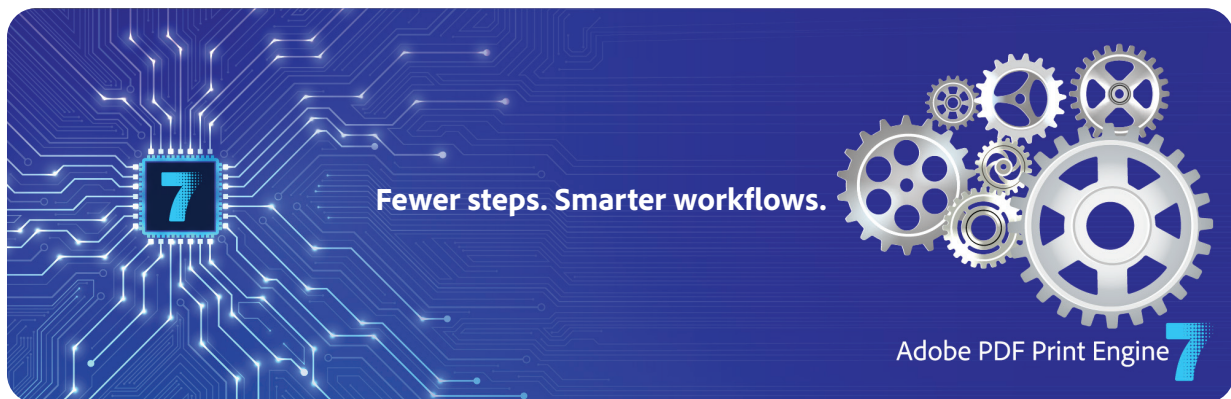
Power to customize

Customizable integration points for adding proprietary value. Differentiate solutions to build products that stand out.

To learn more, visit https://www.adobe.com/products/pdfprintengine/highlights.html

What's new in **Adobe PDF Print Engine**?

Fewer steps. Smarter workflows.

Adobe PDF Print Engine **7**

Adobe PDF Print Engine 7 accelerates productivity and automation by embedding prepress and postpress intelligence inside the RIP. By executing key functions directly in the rendering pipeline, it reduces interactive prepress touchpoints and dependence on specialized skill sets—enabling more automation and faster throughput. The result: greater efficiency and faster production across the prepress pipeline. These capabilities accelerate high-volume custom printing, web-to-print submissions, direct-to-garment jobs, and a wide range of industrial and packaging workflows.

in-RIP multicolor transparency blending

in-RIP merging of variable product data

in-RIP rendering of Adobe Photoshop and Illustrator job files

in-RIP bleed generation

in-RIP cutline expansion

in-RIP white mask generation for printing on metallic substrates

New performance and scalability enhancements

Product Specifications

Every market segment

- Packaging and label printing
- Textile and garment printing
- Industrial printing and embellishing
- Graphic arts and commercial printing
- Digital production printing
- Large format printing
- Variable data printing
- Proofing

Every job type

- Connected packaging
- Manufacturing – Direct to Object
- Apparel - Direct to Garment (DTG) and Direct to Film (DTF)
- Consumer packaged goods
- Signage & display
- Security printing
- Photobooks
- Customer correspondence/Direct mail
- Brochures
- Books and publications
- Graphically rich content from any authoring application
- CAD, GIS maps, architectural blueprints

Solutions

- Hardware DFE (Digital Front End)
- Software RIP
- Prepress workflow system
- Raster preview
- Proofing
- Industrial printing

Input file types

- Adobe Photoshop and Illustrator file formats (PSD, AI)
- PDF, PDF 2.0, PDF/X-6, PDF/VT-3
- PostScript (via Adobe PDF Converter SDK)
- TIFF and other image formats
- Job ticketing via JDF

Parallel processing

- Mercury RIP architecture branding and certification
- Dynamic distributed RIP models for the latest high-end multi-core, multi-blade, networked cluster, RIP farm, and multi-press systems
- Tile parallel processing for large format jobs
- Maximum use of concurrency across interpretation and rendering

System requirements

- Intel i5/i7/Xeon or higher
- Mac M1 or higher
- AMD Ryzen 3 PRO or higher
- RAM: 1 GB minimum, 2 GB+ recommended for each PDF Print Engine instance
- Hard disk required

Operating systems (64-bit only)

- Windows 11 Enterprise
- Windows Server 2022
- Ubuntu 22 LTS
- Mac OS 15

Maximise your Return on Investment

With a legacy spanning over four decades, Adobe has consistently led the way in Print and PDF technology, establishing a track record of partner success. Our commitment to delivering world-class customer service and support remains unwavering. Adobe partners closely with you, ensuring you continue delighting your customers. Trust us for a partnership that maximizes your return on investment, combining innovation, experience, and dedicated support.

Open & flexible licensing model

Choose a licensing model (unit-based royalty, fixed fee, subscription, or any other option) that fits your operational and financial preferences.

Highly customizable and platform-agnostic technology

Highly customizable technology designed for fast & easy porting across any platform, architecture, and operating system.

Trusted market leader

Adobe PDF Print Engine is built into prepress solutions from the industry's top vendors. It offers reliable, consistent print reproduction for every-job type – the best guarantee of customer satisfaction and success

Easy onboarding

Intuitive product interface and full engineering support to enable rapid deployment.

One Adobe workflow

Adobe owns the end-to-end content lifecycle – Create in Creative Cloud, Manage/Preview in Acrobat, Print using Adobe PDF Print Engine.

World-class support

Partner with our world-class engineers, who provide support through workshops, training, technical teleconferences, regular engineering interactions, and more.

Continued commitment, continued innovation

Fully committed to advancing our print technology with continued R&D investment and executive sponsorship. We are here to help you optimize your costs and grow your business.

Tandem account management

Two dedicated Technical Account Managers - one close to you and another to the Adobe Engineering team.

Decades of consulting experience

Deep domain knowledge and experienced team with vast know-how and expertise.
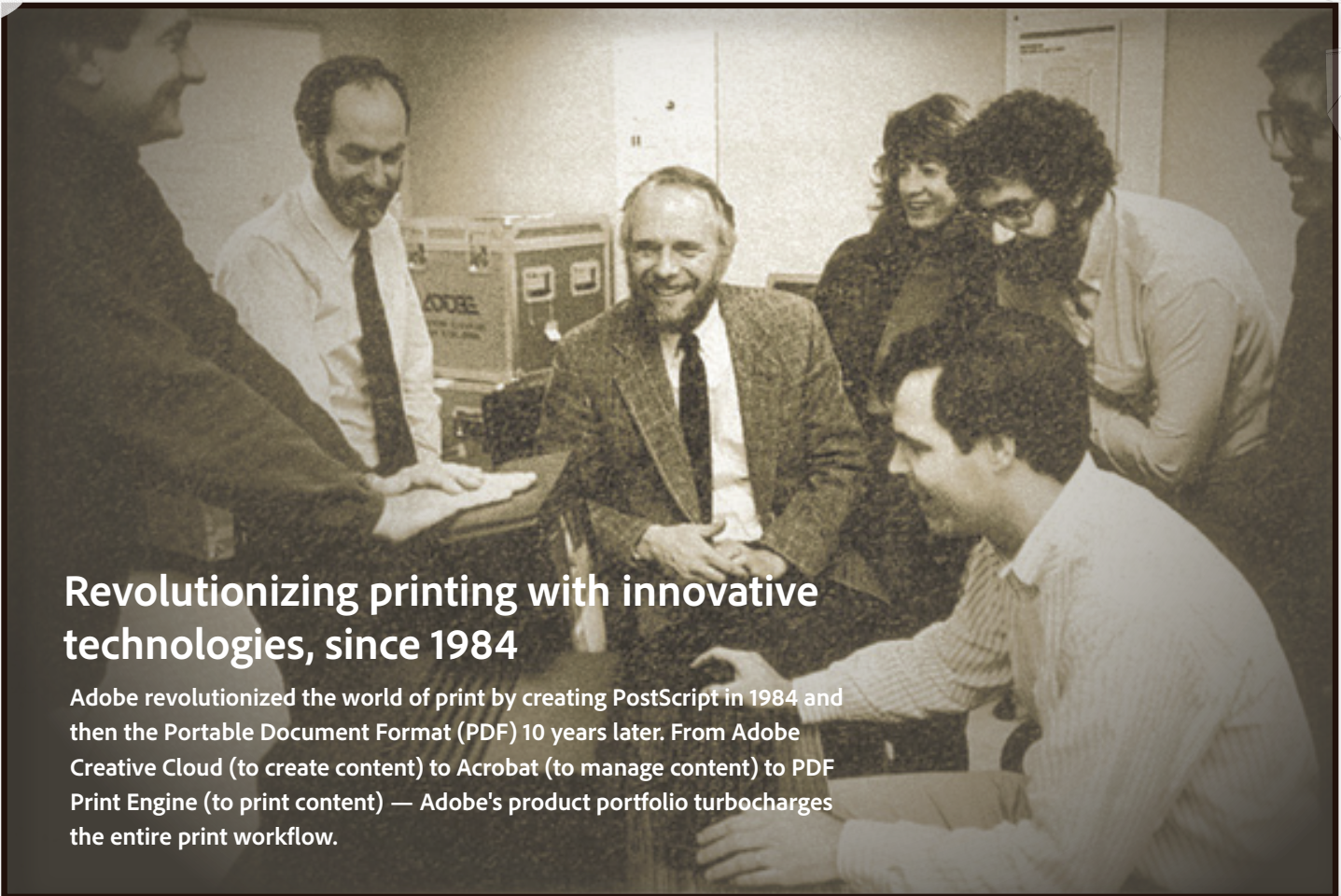
Build once and deploy for a range of devices

With a one-time development effort, you can tailor Adobe PDF Print Engine for your entire range of devices.

Co-marketing for market expansion

Work with Adobe to amplify your industry outreach, market expansion, and product launch efforts. Leverage the Adobe brand in your MarCom, webpages, hardware, application UI, and more.

Revolutionizing printing with innovative technologies, since 1984

Adobe revolutionized the world of print by creating PostScript in 1984 and then the Portable Document Format (PDF) 10 years later. From Adobe Creative Cloud (to create content) to Acrobat (to manage content) to PDF Print Engine (to print content) — Adobe's product portfolio turbocharges the entire print workflow.

Become an Adobe Partner

Does your company manufacture printing equipment, or develop DFE software for rasterizing PDF files? If so, please write to us at pdfprintengine@adobe.com

or visit www.adobe.com/go/appe