Solution Brief

intel

Distinct AI Takes the Effort Out of Professional Vector Graphics

Distinct AI Vector FX empowers creative professionals by transforming basic inputs into high-quality finished vector graphics. Local generative AI (GenAI) inference optimized for the Intel AI PC and accelerated with OpenVINO[™] toolkit provides high performance and customizability, to create production-ready artwork with extraordinary workflow efficiency.

About Distinct Al

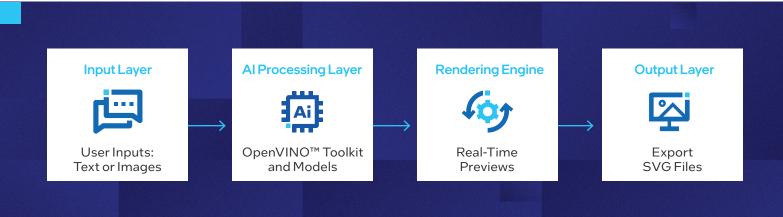
Distinct AI provides AI-enabled tools and plugins that enhance imaginative productivity for designers, digital artists and photographers using leading creative software. The company's generative AI (GenAI) capabilities automatically create scalable vector graphics in a platform optimized for the Intel AI PC. Slider controls easily adjust levels of detail, smoothness and overall complexity to match and augment the user's creative vision. While vector graphics are a fundamental ingredient for design, branding and marketing initiatives, developing them has traditionally been resource-intensive. Graphic designers face timeline and budget pressures that can impact the creative process and become a bottleneck to projects as a whole. Ongoing evolution of vector design tools continues to improve efficiencies; with GenAI, a revolution is afoot. As GenAI inference shifts from the public cloud to local machines, teams have new paths to production that address familiar challenges:

- Accelerate the idea-to-creation pipeline for intricate vector graphics, with automated genius.
- Improve data protection and latency by avoiding data transmission over public networks.
- Avoid recurring costs from ongoing subscription fees and usage-based charges.

Real-time local efficiency with Distinct AI Vector FX

Distinct AI Vector FX automates the creation of intricate, professional-quality graphics while retaining operator control over the results. From simple inputs, the software delivers finished results, with intuitive user control over visual details and appearance. Local GenAI inference optimized for the Intel AI PC and accelerated with OpenVINO[™] toolkit provides real-time feedback and graphical output, for an outstanding creator experience.

Vector FX workflows begin at the input layer, with user inputs of text prompts or sample images, controlled by a high-detail toggle and slider controls for customization. The AI processing layer is powered by a stable diffusion model, fine-tuned for vector output and accelerated on the Intel AI PC using the OpenVINO toolkit. The rendering engine generates scalable SVG outputs, with real-time previews and adjustments enabled by the processor's efficient use of CPU and GPU resources. At the output layer, the solution exports productionready SVG files suitable for use with tools such as Adobe Illustrator.



Vector FX increases productivity and efficiency across project areas. Efficient, high-quality production of vector graphics with Vector FX enables creators to simplify creation of content such as logos and illustrations, meeting tight deadlines for digital and print campaigns. The toolset is also valuable for manufacturing and product design tasks such as development of packaging and technical illustrations. More broadly, simplified graphics generation adds value across usages such as education, media and entertainment.



Source: Distinct Al

Al-driven vector design. Vector FX converts text-based descriptions or image inputs into detailed SVG files, making it versatile for various applications. From branding to technical illustrations, this tool supports a wide range of creative and professional needs, ensuring highquality vector graphics every time.



Dynamic customization in real time. The UI features advanced sliders for refining details, smoothing corners, and adjusting path coarseness. It also includes a high-detail toggle that allows users to switch between simple and complex designs, providing versatile customization options for a variety of creative needs.

Optimized for the Intel AI PC. Local processing is optimized with the OpenVINO toolkit, ensuring rapid and efficient performance. This combination accelerates processing tasks, delivering swift and effective results, making it ideal for demanding applications and enhancing overall system performance.



Ready for production. User-generated outputs are ready for professional use, helping foster high quality and efficiency in overall workflows. Highquality, scalable SVG files are fully compatible with leading design tools such as Adobe Illustrator, for seamless integration.



Stand-alone application. Vector FX functions independently, offering a comprehensive SVG design solution without needing to be integrated with other software. This end-to-end approach simplifies your workflow and enhances efficiency.

Vector FX takes in user ideas from prompts and transforms them into stunning vector graphics, using GenAI optimized to run locally on the Intel AI PC, without cloud connectivity. Ease of use lets users focus on their craft instead of the technology, to bring their boldest ideas to life.

Novel inference architecture: Intel AI PC

As AI workflows become more central to mainstream business computing, cloud-based pricing models are proving unsuited to the scalability requirements of everyday inference. Intel AI PCs democratize AI personal productivity by running inference directly on the client, driving the cost toward zero.

Powered by Intel[®] Core[™] Ultra processors, Intel AI PCs usher in a new paradigm that matches AI workloads to specific execution engines to tailor latency, throughput and power efficiency outcomes. CPU resources provide low-latency response with a combination of the latest Performance-core and Efficiency-core architectures. Vector FX increases throughput further with optimization for Intel[®] Deep Learning Boost (Intel[®] DL Boost). The Integrated Intel[®] Arc[™] GPU, based on new X^e2 architecture, drives high throughput for heavy workflows.

The OpenVINO fast track to AI performance

OpenVINO empowers AI developers with the foundations for high-performance inference with a reduced footprint, while retaining accuracy, without any proprietary licenses. It optimizes AI inference for Intel hardware, including utilization of its different processing engines for the ideal balance of latency, throughput and power efficiency. Using OpenVINO streamlines development and deployment to shrink timelines and maximize productivity, while protecting data and investments. OpenVINO is making it easier on developers to adapt AI solutions with existing hardware solutions while preparing for future requirements and use cases.

Vector FX makes use of the OpenVINO toolkit to optimize AI models for efficient local processing on Intel AI PCs to increase performance and improve the user experience. OpenVINO helps the solution enable real-time inference with low latency and reduced memory requirements, while keeping sensitive data local to the AI PC, for reduced cyber exposure.

More creative impact with less effort

Vector FX helps project teams quickly and cost-effectively generate high-quality vector graphics, offloading manual effort so creators can focus more on ideas and less on technical execution.



Easy and intuitive. Vector FX is crafted for ease of use, enabling both novices and seasoned designers to effortlessly create stunning vector graphics. Its intuitive interface and robust features streamline the design process, allowing you to bring your ideas to life smoothly and enjoyably.



The freedom to create. Vector FX helps liberate creativity, freeing users from unnecessary technical or licensing constraints. With its intuitive interface, the tool powers creation of a wide array of vector graphics, from stylized illustrations to intricate designs, effortlessly.



Outstanding vector image quality. Create exceptional images with Vector FX's Enhanced Vector Quality feature. Advanced sliders refine every aspect — from smooth curves to intricate lines. Outputted vector graphics are sharp and uphold the highest professional standards, making every creation truly remarkable.



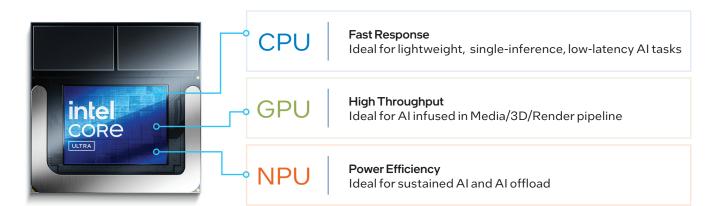
Ethical AI. Vector FX is crafted to provide creative freedom while ensuring vector designs adhere to ethical content generation standards. Users can create with confidence, knowing their work respects intellectual property and maintains integrity, offering peace of mind for both personal and commercial projects.



Local processing. Vector FX operates directly on the Intel AI PC, helping ensure that vector creations and sensitive data remain secure. With no need for cloud-based processing, users avoid ongoing costs and retain full control over their work, with privacy and security advantages.

Intel[®] Core[™] Ultra Processors: Three AI Engines for the AI PC

The right balance of platform power and performance for building and deploying AI models



Conclusion

Distinct AI Vector FX drives down the time and budget requirements to create professional-quality vector graphics. It enables creative teams to focus on ideas and execution rather than technical details, to improve outcomes for projects that range from digital and print marketing to packaging design and technical illustration. With outstanding performance from local GenAI inference on the Intel AI PC with OpenVINO toolkit, Vector FX makes vector design more future-ready and accessible to everyone who needs it.

Learn More

To learn more about Distinct AI and Vector FX visit:

- Distinct AI home page
- Vector FX product page
- Vector FX video on intel.com

To learn more about Intel® technologies visit:

- Intel AI PC
- Intel[®] Core[™] Ultra processors family
- Intel[®] Distribution of OpenVINO[™] toolkit

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