AUTODESK Fusion 360

The future of design and manufacturing



Functional design

Design and engineer products how you want to ensure aesthetics, form, fit, and function $% \label{eq:constraint}$

Make anything

Comprehensive tools for additive and subtractive manufacturing, electronics, and PCB design

Accelerate innovation

Bring innovative products to market faster

What is Fusion 360?

Fusion 360 is a cloud-based 3D modeling, CAD, CAM, CAE, and PCB software platform for professional product design and manufacturing. Bring products to market faster and impact your bottom line through a connected product development process.

Capabilities



With a 3D design and modeling platform, engineer products with a comprehensive set of modeling tools, including direct, surface, parametric, mesh, and freeform modeling. With easy-to-use cloud CAD software, you can quickly explore many iterations.



Unified PCB design

Leverage schematic design, PCB layout, and routing capabilities to bring your designs to life. Save valuable design time with a full-featured schematic capture, PCB manufacturing, and a component PCB library with ready-to-use parts.



Explorative generative design tools

Optimize your design with multiple manufacturing-ready outcomes that meet your specifications while reducing weight, improving performance, and consolidating parts. Review AI-generated design outcomes based on visual similarities, plots, and filters.

Integrated CAD/CAM

Design to manufacture capabilities makes it easy to program CNC machines to produce high-quality CNC machined parts, using simplified controls for high-efficiency roughing, adaptive clearing, and tool orientation.

Seamless 3D simulation

Test your designs to ensure they will survive real world conditions. Digital, cloud-based tools allow you to simulate your products, reducing the cost of prototyping. Set up multiple studies to gain insights on finite element analysis through exploration.

Instant-on data management

Centralized, real-time data management allows you to assign permissions inside and outside of your organization, reduce conflicts and errors with automated version control, and allows teams to work from anywhere with cloud storage and access from any device.



Fusion 360 - Capabilities that accelerate outcomes

Organizations that concurrently engineer and are more agile can benefit from improvements in design iterations. Leveraging an improved product development process can get products to market faster while better utilizing your companies' resources.

Learn more: autodesk.com/fusion-360



AUTODESK

What is a Fusion 360 extension?

Unlock advanced design and manufacturing technologies



Advanced strategies

Gain access to complex machining strategies, generative design, and additive manufacturing workflows

Customized subscriptions

Customize your experience to align with project timelines with several subscription options

Try Fusion 360 today: autodesk.com/products/fusion-360/trial-intake

What is a Fusion 360 extension?

Extensions allow you to unlock advanced design and manufacturing technologies in Fusion 360. Create better products with enhanced workflows tailored to your business on one platform.

Extensions



Machining Extension

Simulation Extension

Automate CAM programming to simplify and speed up the production of milling and drilling programs to process entire parts. Reduce errors, improve the surface finish. and increase cycle efficiency to produce higher-quality parts in less time.



Understand how 3D designs perform under real-life conditions before manufacturing. Access a wide range of advanced finite element analysis (FEA) simulation capabilities including injection molding structural, thermal, and event simulation.

Product Design Extension

Improve your product development process by leveraging multiple design options influenced by your available design constraints. Focus on function and aesthetics with automated design change capabilities that will better prepare your designs for the shop floor.

Manage Extension

Improve the management of your engineering process with collaborative workflow in the cloud. Capture, notify, and approve of all design changes. Release and track the latest approved data to stakeholders. Control how users interact with your project data.



Signal Integrity Extension

Improve high-speed PCB design compliance with EMI and EMC testing standards. Reduce costly physical PCB prototyping and testing time by virtualizing electromagnetic analysis and simulation early within PCB design workflow.







Nesting & Fabrication Extension

Optimize the design and manufacture of multi-sheet layouts for sheet metal and non-sheet metal parts with extended nesting and fabrication capabilities including multi-sheet nesting, setups/toolpaths and NC code creation, and customizable reports.

Generative Design Extension

Explore multiple outcomes with manufacturing process-aware artificial intelligence (AI) that meet your design specifications. Save time by simultaneously solving for various design outcomes that will reduce weight and improve performance.

Additive Build Extension

Select from the most popular metal additive 3D printers, and automatically orient parts to achieve a successful print. Additionally, additive process simulation predicts possible print failures and automatically compensates geometries to get the best result.



