



Datasheet for Engineering Leaders

Physics-Driven Computational PCB Design for Ultra-Rapid Iterations

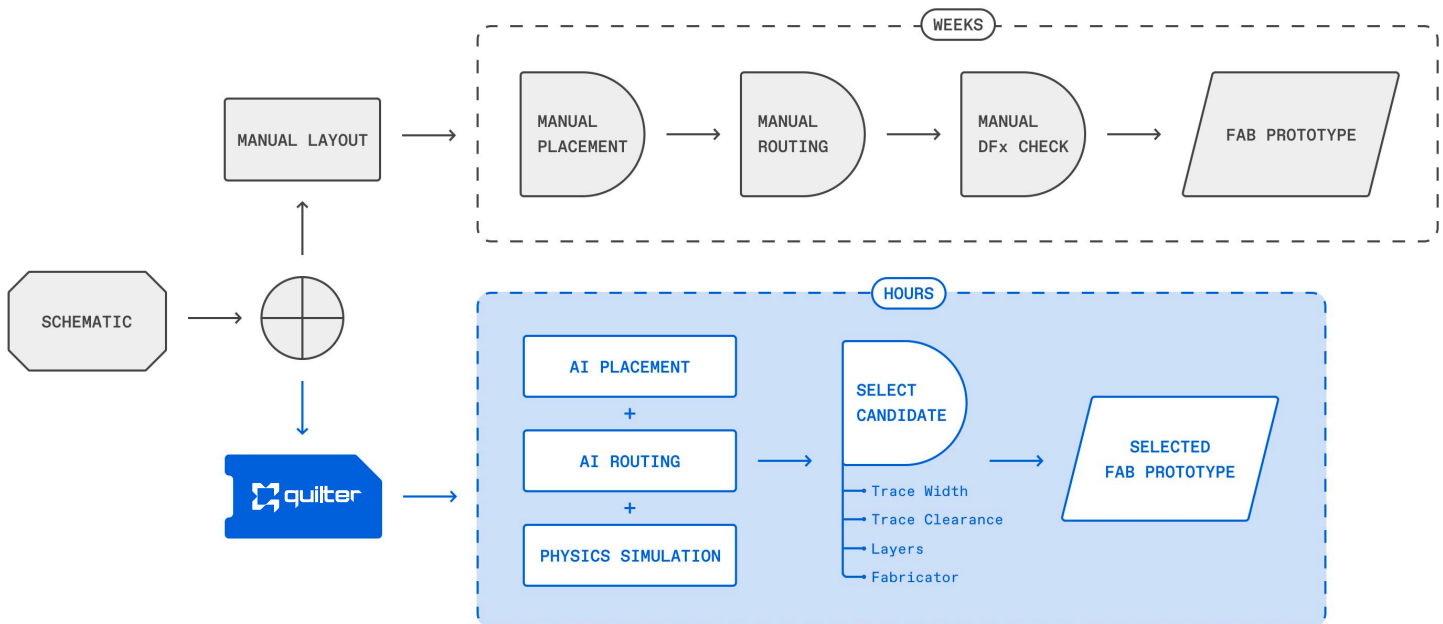
Eliminate the layout bottleneck. Generate an infinite number of candidates for entire layouts in hours. Reclaim engineering time for what really matters: maximizing your competitive edge.

In hardware, speed is leverage. Every week spent waiting on layout is a week your competitors are debugging silicon, flashing firmware, or shipping products, while your market competitiveness suffers.

The Bottleneck Blocking R&D Velocity

Traditional layout workflows were built for production boards, not early prototypes, evaluation platforms, or bring-up hardware. They're optimized for mass production. Quilter is optimized for speed.

- **PCB layout delays circuit validation**, pushing out bring-up, test, and integration by weeks across highly competitive industries.
- **Centralized PCB teams are at capacity**, leaving EEs to do layout work that pulls them from their core responsibilities.
- **Outsourcing creates handoff delays**, errors, and limited iteration windows.



Quilter Removes the Bottleneck

Engineers upload a design—even partial—and Quilter autonomously delivers multiple completed, fab-ready layouts in hours. So fast you can throw results away and run boards again and again. Quilter is the first layout engine built for Hardware-Rich Development™ where layout is just another compile loop.

Why Engineers & Teams Trust Quilter

More boards, earlier, with less waiting, blocking, or negotiating.

Quilter is built for fast-turn, constraint-driven designs where early exploration and meaningful innovation go hand-in-hand. Quilter enables engineers to treat real hardware as not just a delivery milestone, but a learning tool.

- **Unblock the critical path:** Fab-ready boards in hours so you catch issues earlier, fix them faster, and keep the entire program on schedule.
- **Infinite exploration without extra headcount:** Consider unlimited stackups, costs, and board sizes in parallel
- **Empower engineers:** EEs and everyone else can generate their own boards without new tools
- **Focus experts where they matter:** PCB designers stay focused on designing, debugging, and high-value programs
- **Not a co-pilot. Not an autorouter. Not a script.** Quilter is the first layout engine that compiles design, constraints, and physics into working boards.

What Makes Quilter Different?

A full-stack, deterministic layout engine that autonomously completes the entire PCB design, not just routing a few traces or assisting a human.

Quilter uses reinforcement learning and physics-based simulation to generate dozens of fully placed and fully routed design candidates in parallel. Built for agile, high-frequency prototyping.

Proven at the Frontier of R&D

Used by engineering teams in aerospace, semiconductors, medical, and defense, where iteration speed is a competitive edge.



I've been doing layout for over 20 years. Quilter passed checks, got built, and saved days.

— Ben Jordan, Staff Engineer

How It Works

Quilter seamlessly integrates into your workflow. It works alongside your existing tools, increases your speed, and gives engineers control without disrupting trusted processes or platforms.

Layout on Demand

Instead of emailing your layout person, just drag and drop the same schematic and constraints into Quilter and get completed boards back in mere hours.

Works With What You Use

Whether it's Altium, Cadence, or another leading PCB design tool, just drag and drop your design. Quilter takes care of the layout.

Accelerates Without Overreach

You stay in control. Quilter handles the layout while you focus on engineering, not repetitive tasks.

Accessible to Every Engineer

PCB expertise isn't required. You design a circuit, and Quilter designs the board.

Instant Value, Zero Overhead

No onboarding hurdles, no licenses to shuffle. Upload. Get results. Keep moving.

Secure & Private

- Secure access via Quilter cloud with all files encrypted at rest, and also available on private cloud or on-prem deployments for regulated and high-security environments
- SOC 2 Type II under observation
- IP-secure by design: Every job is isolated, and data is encrypted at rest

Learn about Hardware-Rich Development™ at quilter.ai/hardware-rich-development