



## Predictable Designs Case Study

### Breathing Life into Electronic Product Concepts

Where most people see a product idea, John Teel sees potential. After 15 years as a senior integrated circuit design engineer at Texas Instruments, Teel answered his entrepreneurial calling and founded [Predictable Designs](#). Channeling his lifelong passion for electronics, Teel helps small businesses, entrepreneurs, start-ups, and inventors develop and bring their electronic products to market.

“Uncertainty surrounding the cost of development is the biggest obstacle to an idea becoming a product,” said Teel. Most design firms work on an hourly basis, making it hard for startups and individuals to budget.

### Eliminating Barriers to Innovation

“Our clients rely on us for technological expertise, fast turnaround times, and error-free results. That’s why we partner with Sunstone Circuits.”

- John Teel,  
Founder and President at  
[Predictable Designs](#)

Teel is an experienced designer that has developed successful consumer products distributed worldwide. He understands firsthand the enormous risks associated with engineering new technology without the support of a large manufacturer.

“Non-fixed cost is a real risk for entrepreneurs, because projects often go over budget in the design phase,” said Teel. “There’s a reason behind our name. We make the whole development process as predictable as possible.”

Predictable Designs offers something unique: End-to-end design solutions at fixed price points. Guiding customers through the entire electronic product engineering process, Predictable Designs removes uncertainty beginning with the initial cost evaluation and schematic design and on through programming and testing.

“Our clients rely on us for technological expertise, fast turnaround times, and error-free results,” said Teel. “That’s why we partner with [Sunstone Circuits](#)®.”

## Fixing Mistakes Before They Happen

“Sunstone’s given me nothing but quality and consistency. I got lucky finding them and have never had a reason to change.”

- John Teel

On his very first project as an independent engineer, Teel ordered PCBs through Sunstone Circuits. He has remained loyal ever since.

After Teel completes the initial work for each job, he sends his design files to Sunstone for prototype assembly and manufacturing. Predictable Designs’ clients maintain contact with Sunstone throughout the prototyping process and appreciate the cohesiveness and dependability provided by each company.

“I don’t ever have to tell them what to do,” said Teel. “I send the design files, and they make it happen.”

To Predictable Designs, “making it happen” is more than just a matter of order fulfillment. Teel’s been building and taking apart circuit boards since he was a kid, and he knows how one seemingly minor miscalculation can significantly impact PCB functionality.

“I don’t have to worry about every design detail, because Sunstone ensures manufacturability as part of their process,” said Teel. “It gives me confidence. They’re not just going to make junk because a file tells them to.”

### Blind or Buried, but Not Unknown

A via is a tunnel that connects different layers of a PCB. Teel recently encountered a surprisingly complex challenge related to vias. He had designed a high-powered, pocket-sized personal device that used blind and buried vias: connections not visible through one or either of a circuit board’s outer layers—and which, when implemented, can double or triple the cost of a project.

“Sunstone helped me understand the complex limitations of blind and buried vias,” said Teel.

Teel leverages experiences like these to expand his scope of specialized knowledge and meet any client demand.

## Predictable Costs...

“My competitive advantage is making the entire development process as predictable as possible,” said Teel.

Sunstone offers Teel competitive prices, rapid-response, and online quotes. The 24/7 customer service and tech support don't hurt either.

“Sunstone's proactive design input prevents costly rework. Their rapid response time accelerates prototyping,” said Teel. “That makes it easier for me to provide my customers quality service and fixed pricing. Profitably.”

## Predictable Prototyping and Production



Teel relies on Sunstone to maintain his near-universal customer satisfaction—a partnership that includes critical small production runs courtesy of [Screaming Circuits](#).

## ...And Predictable Results

Predictable Designs brings its clients product ideas to life. From conception to production, Teel can provide input and guidance at every stage of the process.

That sweeping combination of service and expertise is rare—even for a former Texas Instruments engineer ranked among the top 10% of his field:

“Sunstone helps me help my customers realize their full potential,” said Teel.”