

## ECD Case Study



### Sharing a Commitment to Quality

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- Mark Waterman,  
Manufacturing  
Manager at ECD

For over fifty years, the dedicated team at Electronic Controls Design, Inc. (ECD) has driven innovation in the design, development, and manufacture of thermal monitoring technology for the electronics, baking, and solar industries. Headquartered in Milwaukie, Oregon, ECD most recently expanded their product suite to include intelligent dry storage systems.

“Our systems need to perform for a long time and often in tough conditions. They literally get thrown into an oven,” said Mark Waterman, manufacturing manager at ECD. ECD temperature profiling systems are expected to function with minimal maintenance for many years in conveyORIZED ovens, electronics manufacturing plants, and solar energy facilities.

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The high-quality intelligent ECD SmartDRY™ dry cabinet provides market-leading recovery time, automated bake cycles, Industry 4.0 readiness, and immediate visual confirmation of cabinet status.

## Customization Creates Competitive Advantage

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“It’s not enough that we make premium products,” said Waterman. “We gain competitive advantage through our ability to customize those high-quality solutions for new and diverse applications.”

That’s where Sunstone Circuits fits in. Originally a division of ECD, Sunstone has dedicated forty years to the prototype and production of printed circuit boards (PCBs). “Clearly, our corporate values are aligned, and we share many of the same processes,” said Waterman. “Most importantly, Sunstone is capable of the quick-turn, custom prototyping we and our customers depend on.”

Rapid prototyping is just one part of the end-to-end support Sunstone provides ECD. “Sunstone treats us like we treat our customers,” said Waterman. “We ask them for something completely unreasonable, and they say, ‘Sure, no problem.’ That’s what we would do.”

## Just-in-Time Manufacturing Keeps Costs Down

ECD products are unique for another reason—how their systems fit into the client’s financial operation. “Depending on the level of customization, units can cost up to \$10,000,” said Waterman. “That can be too much to categorize as tools or supplies but not enough to qualify as a capital asset to be depreciated over time.”

ECD faces a similar challenge with their own inventory. “We can’t keep a year’s worth of inventory on the shelf and expect to be cost competitive,” said Waterman. As a result, ECD employs a lean, just-in-time manufacturing model.

“We need vendors just as agile and responsive as we are,” said Waterman.

## Never Too Late to Make More

“Our systems can be in the field for up to twenty years, and we strive to provide consistent, premium support throughout the product life cycle,” said Waterman.

Meticulous record keeping is a big part of Sunstone’s commitment to quality. “Component replacement is something that can recur only once or twice during the life of the system,” said Waterman.

Not a problem for Sunstone, a PCB reorder from a production several years ago is no different from a board manufactured last month. “We ordered a board that we hadn’t needed in over a decade, and Sunstone delivered it like clockwork,” said Waterman.

“Our sales people are always under pressure to strike while the iron is hot. Sunstone never keeps them waiting.”

- Mark Waterman

## No Waiting for Quotes

“Our customers ask for some new system functionality all the time, and that usually means we’ll need a customized PCB,” said Waterman. “So we can’t quote the customer before Sunstone provides costs for the modified board.”

ECD manufactures field applications that support revenue-driving productions, meaning time is always of the essence. A delayed response to a quote request translates into a lost deal, so urgency is the order of every day for the sales team. Sunstone’s online platform transforms a quote request into a number in near real time.

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ECD’s advanced thermal profiling technology powers its SuperM.O.L.E.® Gold 2—The smartest profiler on the planet.

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### **Rapid Prototyping Puts ECD Ahead of Competition**

Sunstone's quick-turn prototyping maintains the expedited pace set by instant online quotes. PCBExpress® offers lead times as short as twenty-four hours, helping ECD sustain expedited, just-in-time production of their systems. “Unlike some vendors, Sunstone never asks us to wait in line,” said Waterman.

### **No Do Overs, No Delays**

Consistent manufacture of quality PCBs helps eliminate production delays and ensure satisfied customers. “I can't remember the last time Sunstone delivered a PCB with a defect,” said Waterman. “We haven't had to return a product in the ten years I've been here.”

## Together, All the Way

ECD has realized sustained growth for years by constantly diversifying their product line and expanding the verticals they serve. “We always seek to innovate on behalf of our customers and find new applications for existing systems,” said Waterman.

Sunstone has enhanced ECD's competitive advantage through the years. Shared focus on quality and commitment to premier customer support position both companies to meet each new challenge and opportunity.

“Excellent customer service, on-time delivery, top-quality products,” said Waterman. “Sunstone has been a real partner and made my job easier.”