



Solid Camera Case Study

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- Carlos Acosta

The Challenge

Carlos Acosta founded Solid Camera, Inc. in 2006 to meet the rapidly evolving needs of the film industry. Creators of everything from big budget movies to major sporting events are demanding more from their cameras with each new project. Solid Camera meets those needs with innovative camera accessories to help cinematographers get the shots they need.

“In this business, we’re called upon to deliver specialized, highly technical solutions almost overnight,” said Acosta. A pioneer in digital cinematography, Acosta was among the first to transition away from traditional film. He originally conceived Solid Camera as the industry destination for creative mounting systems and handle apparatuses for digital cameras.



Leading the Digital Revolution

Use of digital cameras was commonplace in high-end cinema by 2009, and [power management](#) became an increasingly critical issue for cinematographers.

This meant Solid Camera would have to expand its sphere of expertise to thrive in a new environment. “The [on-camera power management](#) presented

a challenge for us, because we had to do as much as possible without substantially changing the profile of the camera,” said Acosta.

That created the need for small-footprint, high-functioning printed circuit boards (PCBs). “I’ve always considered myself pretty good at learning new things and adapting to stay relevant in this industry,” said Acosta. “But designing printed circuit boards was going to be a stretch.”

PCB123 to the Rescue

Acosta is not a PCB designer, but he had to become one in hurry. When Solid Camera needed to quickly deliver a battery plate capable of powering and controlling a 3-D camera and withstanding 9 Gs, Acosta chose Sunstone's design tool, PCB123, to create his first PCB design.

"We only had a couple of weeks and were starting from scratch," said Acosta. "PCB123 helped me design a complex, six-layer board that was manufacturable and functioned the way we wanted it to. We assembled the rig and everything turned out great."

PCB123 provides even novice PCB designers like Acosta with the confidence that their boards can be built, and built right. [Explore PCB123 today.](#)

Customer-Driven Partnership

Acosta and his team at Solid Camera must constantly innovate to keep pace with their competitors. "Everyone uses digital now," said Acosta. "More people need what we offer, but they can't afford the one-off custom solutions the big boys use."

Rather than rely on receiving high-dollar, custom orders, Solid Camera would have to standardize and make its products accessible to a broader customer base. "Production volumes had to increase, so we started looking more closely at production efficiency," said Acosta.

"Sunstone helps us save time and money."

Acosta reached to Sunstone for help. Order volumes were increasing, but the deadlines remained as tight as ever. "We needed every possible time saver," said Acosta. "Sunstone helps us save time and money. For us, that means having someone on the phone to help us solve a design problem any hour of the day or logging in to a web order platform flexible enough to meet my needs."

Right-Sizing Production Runs

Acosta needed to produce more boards at once, but not too many more. Order fulfillment was critical, but continuous improvement was pretty important too. "We constantly find ways to improve our products, and that often requires little tweaks to our PCBs," said Acosta. "Sunstone accommodates our needs with fifty to a hundred unit productions runs, so I don't have to worry about getting stuck with a thousand boards I'll never be able to use."

Sunstone Is There for Us

“Our customers never seem to have emergencies during banking hours,” said Acosta.

Film productions don't recognize the standard work week. A lot of it happens at night, on the weekends, or in far-off time zones. “I often need to start production of a rig on the weekends or at odd hours, so web ordering has been huge,” said Acosta. “When I've needed help with something, even in the middle of the night, someone was there to do it. We always get our boards quickly, no mistakes.”

[Learn more](#) about Sunstone's rapid prototyping and production services.

Why We Keep Coming Back

Solid Camera has evolved its business model, increasing production volume while trimming its product line from over sixty items to fewer than a dozen. Quality and reliability are its top priorities. “Our customers have the same expectations of our products whether they are paying six hundred dollars or sixty thousand,” said Acosta.

Domestic Production Aligns With Solid's Values

For its largely domestic customer base, made in the USA is a big part of Solid Camera's reputation for quality. “We buy domestic aluminum, cutting tools, milling machines, even screws and fasteners,” said Acosta. “So, obviously, our PCBs are [made in the USA](#) too.”

Solid Camera relies on Sunstone for hassle-free ordering, expert customer support, and rapid prototyping. “To keep our customers coming back, we need to consistently provide them with a quality product,” said Acosta. “That's why we stick with Sunstone.”