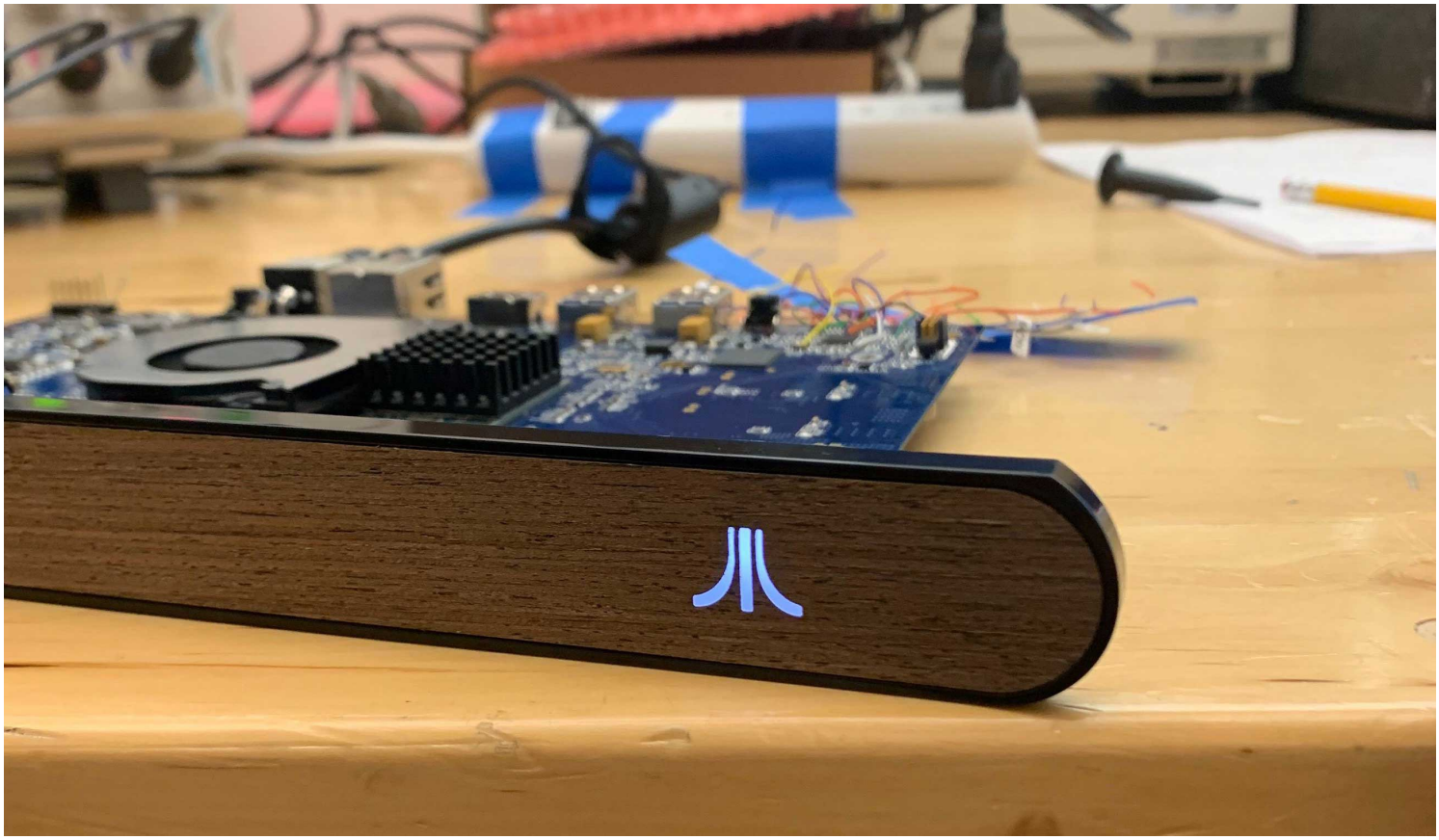
# Atari VCS Plastics, Thermals, and Internals

Atari VCS Follow
Oct 8 · 7 min read

*A peek inside the engineering lab, factory, and the Atari VCS itself — along with some hints of what's next.*

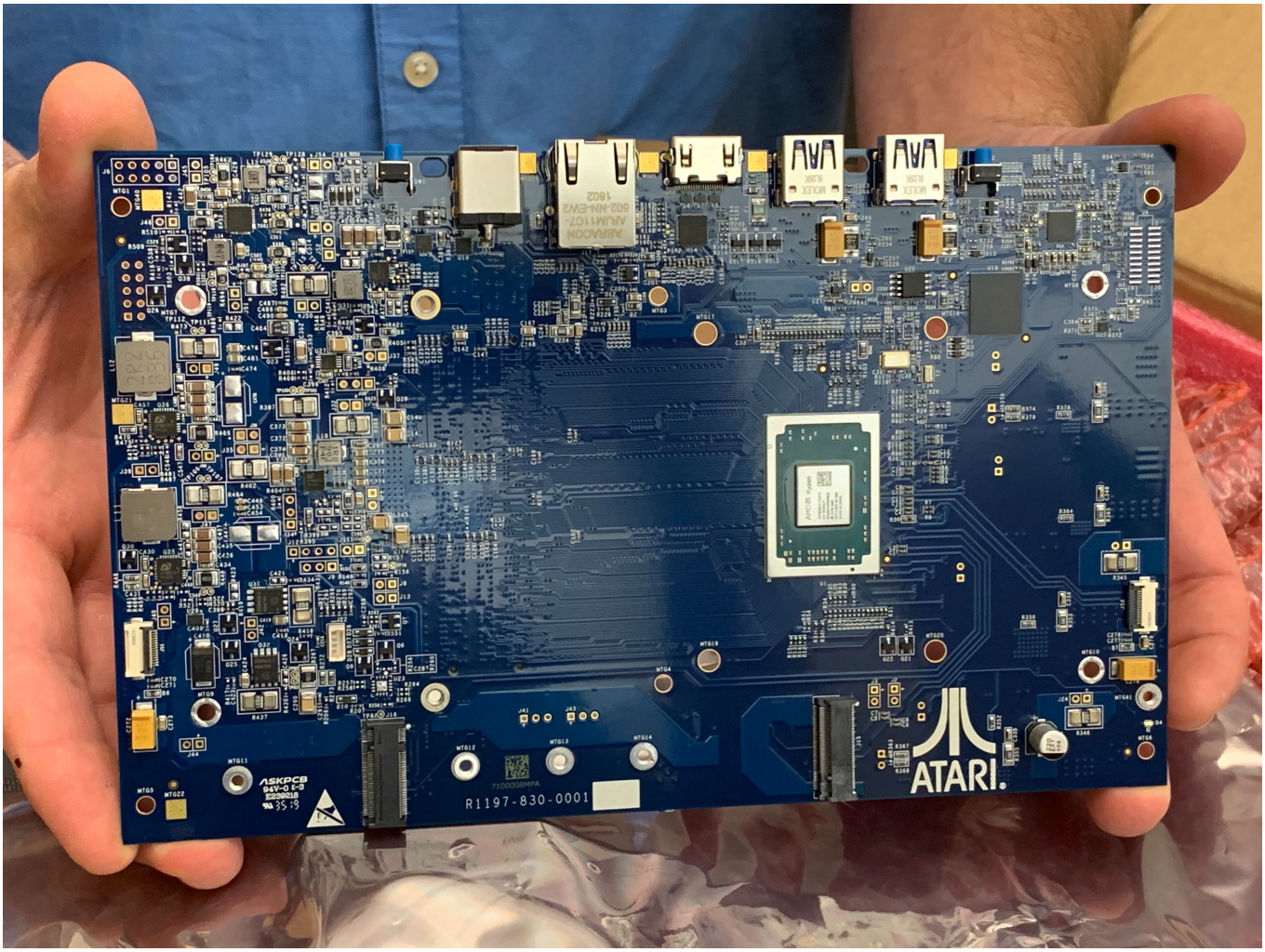


Atari VCS Lab Testing, September 2019

The ongoing journey of the Atari VCS from mysterious teased concept, to Indiegogo sensation, to fully-realized product nearing mass production has been a long one, filled with plenty of twists and turns.

There's still much to do before the team feels it can change the Indiegogo status from "Prototype" to "Production," but we get closer each day.

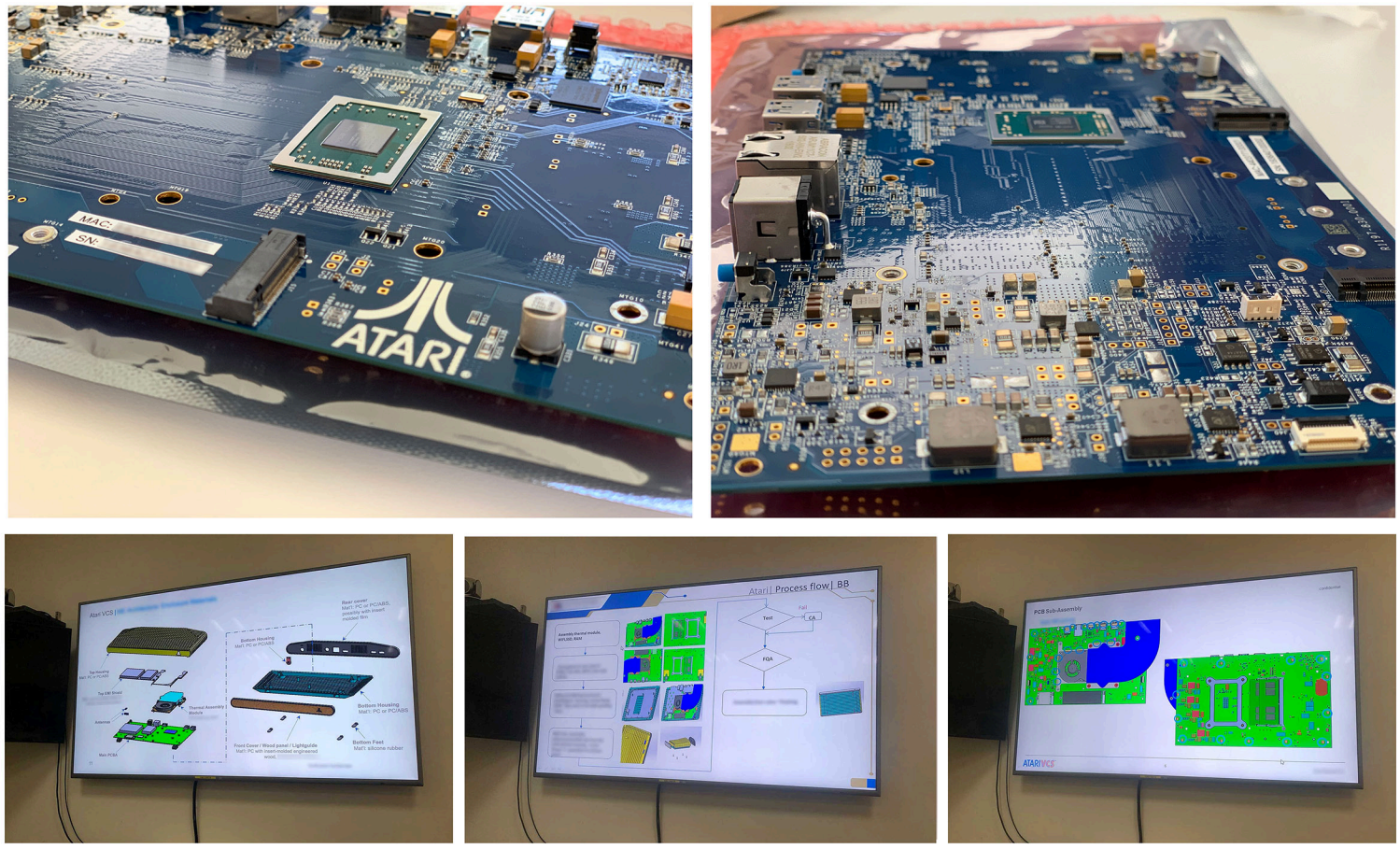
As we've always said, the Atari VCS is not like other game systems. It's meant to be **your** machine, with numerous capabilities that allow for customization and personalization of both the hardware and software. Today's update blog re-focuses on the hardware side and brings lots of photos and detailed descriptions covering the past several months of development that we are excited to share!




Atari VCS pre-production board, September 2019

The first thing we will talk about is the photo of the PCB board we shared last time and have included again here. That view is of the top of the Atari VCS circuit board; you should be able to quickly and easily spot the AMD Ryzen APU, along with the two USB 3.0 ports, one HDMI port and one power connector that will be accessible from the back of the machine. The large, relatively open space in the center of the board is where the

cooling solution, comprised of a blower fan and venting system, will sit. Toward the front of the board is an open area with receptacles that will accept an M.2 SATA solid state hard drive so users can upgrade the internal storage. Not visible here are the twin SODIMM DDR4 4GB RAM sticks (8GB total) on the board's belly, which can be upgraded. There are also two additional USB ports that will be accessed on the front riser of the VCS, right under the front fascia.

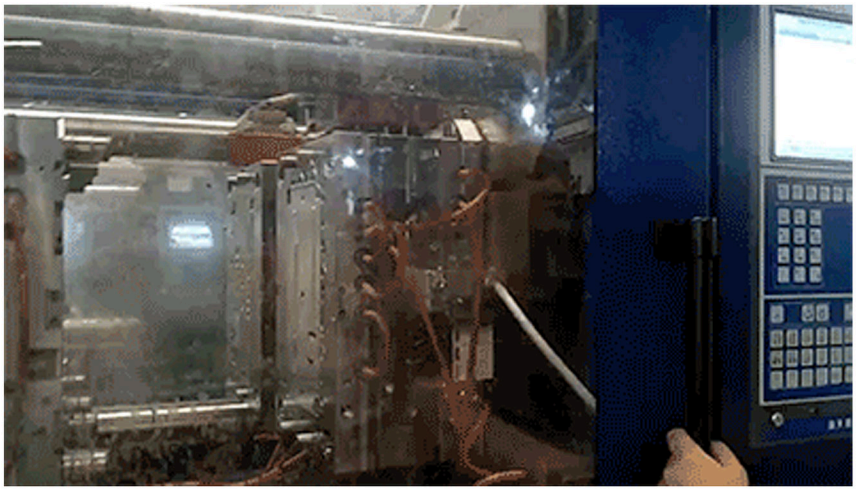



Behind the scenes: Atari VCS hardware development, pre-production planning, 2019

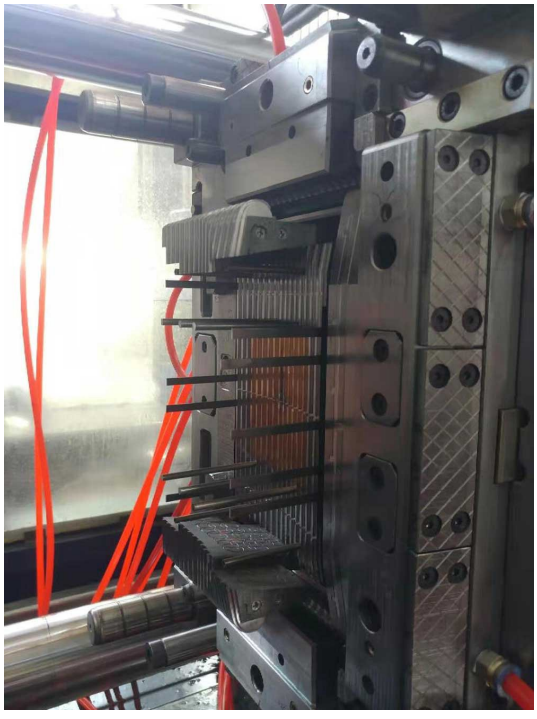
The thermal solution mentioned above is a custom unit designed specifically for the Atari VCS. The AMD APU has thermal sensors and a fan controller system that monitors the APU temperature and adjusts the fan speed according to the unit's needs at a given moment. It is supported in its efforts by the two large vent ports on the the back fascia of the unit. Looking at the back straight-on view, the slotted vents on the right rear will allow outside air to be sucked into the unit to cool the processor and other parts, while hot air is simultaneously forced out and away from the unit through the vents on the left. You can't really see it in the photos, but the vent slots are all angled to drive air away

from the unit. There's also die-cut metal mesh screens to prevent small objects from getting inside the VCS through the open vents.

Behind the scenes: Atari VCS hardware development, enclosures and fascias, 2019

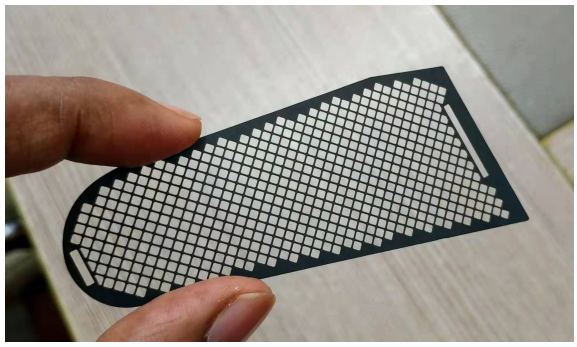


The tooling (molds) for the Atari VCS plastic parts are largely complete, and being put through the normal tuning process of final fit and finish. This is an ongoing process, so most of the photos we are showing here do not represent final textures and do look far more “plasticy” than they will in the finished products. The engineers’ first priority is always fit over finish. They work closely with the factory and suppliers to ensure that all the parts fit together smoothly and as intended. The parts go back and forth countless times for evaluation, with the teams making precise adjustments every step of the way. These adjustments all end up contributing to a flawless and trouble-free manufacturing process that starts with easy and fast release from the tools, with minimal waste (many plastic parts can be recycled).



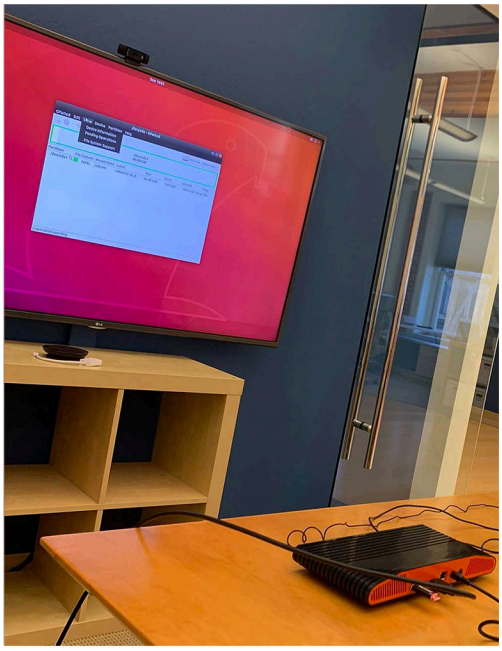
Behind the scenes: Atari VCS hardware development, factory tools, 2019

That precision also contributes to smooth and easy assembly processes on the factory floor, where line workers will bring together the different parts, including the circuit board, thermal unit, plastic housings, numerous screws and connectors, plus final finish parts like rubber feet and the decorative front fascias in wood, plastic or carbon fiber finishes that make up a completed Atari VCS system. Meanwhile, all of the same things have also been going on at the PowerA factory where the awesome new Atari Classic Joysticks and Atari Modern Controllers are just about ready for mass production, too. Once the teams shift into actual mass production, the factories have the ability to build thousands of units quickly and efficiently.


Behind the scenes: Atari VCS hardware development, part fit and finish studies, 2019

You're probably wondering what happens when you turn on one of our pre-production Atari VCS units. To be honest, while these machines boot up using our Atari BIOS, they operate more like a computer than a fully-functional game system at the moment. In other words, Atari Sandbox Mode is fully functional and the machines will play games beautifully through a standard Linux or Windows installation. The custom Atari operating system is functional, but various consumer-facing software elements like the front-end graphics interface we teased at E3, along with with our Atari VCS store framework and apps, including Antstream Arcade and other native entertainment and game applications, are still in varying stages of development and not yet ready to be shared or installed into these particular units. We have all of this working in other environments and it will be working in concert on the Atari VCS soon. We can't wait to show it to the world because it all looks incredible. In fact, we are very much looking forward to hosting a series of hands-on preview events later in the fall for a select group of press and partners as soon as we are ready.



Behind the scenes: Atari VCS hardware development, boot tests, 2019

This is probably a good time to remind our Indiegogo backers of the participatory nature of their support. As we have stated before, the Atari VCS hardware that early backers receive will be 100% finished, but the software on these first units will be early access, exclusively available to our community. Atari will be counting on our many thousands of backers to help improve and enhance the VCS experience with all the great feedback and

ideas we know they will provide, in advance of our retail launch in spring 2020. Our goal, as always, has been to make sure that we ship our official products with the help of our biggest fans. Of course we will provide many more details about the Atari VCS software directly to backers as we get closer to shipping. In the meantime, we hope you have enjoyed this latest “behind the scenes tour.”

We have more partnerships in the works and more new updates and announcements planned and very much look forward to sharing more with you soon!

— The Atari VCS Team

Note: Please visit AtariVCS.com to learn more about the Atari VCS system and peripherals, or to participate in the Official Atari VCS Presale happening now at AtariVCS.com, GameStop.com and Walmart.com.

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