

## **SIGMADESIGN installs HP Jet Fusion 3D Printer**

**(February 21, 2017)** –**SIGMADESIGN** acquires a new HP Jet Fusion 4200 3D printer at their headquarters in Vancouver, WA on February 22, 2017. **SIGMADESIGN** is one of the first HP customers in North America to receive the HP Jet Fusion 4200 model and will play an important role in demonstrating the capabilities of the new printer. **SIGMADESIGN** is one of the leading product development firms in the Pacific Northwest, and the HP Jet Fusion printer will enhance the way the firm provides concept through production services for clients.

### Why this Technology?

The HP Jet Fusion 4200 will significantly evolve the design process at **SIGMADESIGN** with the cutting-edge HP Multi Jet Fusion 3D printing technology. This new technology provides design opportunities and improved processes that enable faster production times and more economical part production. By printing functional parts at the individual voxel level (a voxel is the 3D equivalent of a 2D pixel in traditional printing), HP offers customers an unprecedented ability to transform part properties and deliver mass customization.

**SIGMADESIGN**'s unique mix of product design and engineering services poises the company to use this printer more effectively than any other design firm.

First, the size and flexibility of the firm's design and engineering staff enables more expansive product iterations at each design and prototyping phase. The fast build time of HP's Multi Jet Fusion technology allows **SIGMADESIGN**'s design staff to create dozens of part iterations in a single build. Industrial Designers and Engineers can stack parts in any orientation to fill the build envelop which saves time and money.

Secondly, the printer will produce quality parts overnight, maximizing efficiency and reducing lead times. The HP Jet Fusion 4200 will replace the need for injection molded parts in many circumstances that typically take longer to design and require costly tooling to produce. **SIGMADESIGN**'s Engineers will be able to bypass traditional steps from design for manufacturing (DFM) to manufacturing by leveraging the strengths of HP's Multi Jet Fusion technology. **SIGMADESIGN** has an existing 20,000+ square foot manufacturing facility which will benefit from the increased efficiency of using parts printed using the HP Jet Fusion 4200.

### Design Advantages

The HP Jet Fusion 4200 produces parts with impressive structural integrity. VP of Engineering for **SIGMADESIGN**, Matt Cameron notes, "We're excited to be the first product development firm in North America to use the HP Jet Fusion 4200. The ability to produce parts similar to production-grade quality will allow us to streamline our design process."

Unlike other 3D printing technologies, the HP Jet Fusion 4200 enables reptation to happen between layers as they are applied during the build. Under a microscope, reptation looks similar to interlocking strands of spaghetti. This structure creates uniformity throughout the entire block of material. Part

density can vary from very thick to very thin while maintaining part integrity, which gives Designers and Engineers more freedom of design. Irrespective of build orientation, parts produced are near equivalence to production-grade parts.

Another benefit of HP's Multi Jet Fusion technology is the high percentage of print material that can be reused. Reusability of material means savings for clients, less environmental waste, and supports small prototype builds to high volume production builds. Additionally, material development is open source, meaning new materials are currently being developed by various producers, which will result in an ever-growing range of materials at competitive prices.

"This investment aligns with our mission to be the best Product Development Services Company in the world by offering solutions from Concept through Production for our clients. We see the addition of this HP 3D print technology as an avenue to design without compromise." – Bill Huseby, President and CEO of **SIGMADESIGN**.

#### **ABOUT SIGMADESIGN, INC.**

**SIGMADESIGN**, a product design and engineering firm headquartered in Vancouver, WA, offers professional services that support projects from concept through production. **SIGMADESIGN** provides turnkey solutions for projects through solid engineering, broad experience, and focused execution.

The firm was founded in 1994 to serve product design needs of the US Pacific Northwest. Now with multiple locations and an office in Singapore, the company serves a world-wide client base.

**SIGMADESIGN** offers a full range of services including Industrial Design, Mechanical Engineering, Electrical Engineering, Firmware and Software Engineering, Rapid Prototyping, Machine Shop/Part Fabrication, Product Testing, Manufacturing, Logistics and Shipping.

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