



November 12, 2018

## Micron and Achronix Deliver Next-Generation FPGAs Powered by High-Performance GDDR6 Memory for Machine Learning Applications

- | *Micron GDDR6 Memory Devices Enable Achronix FPGAs at Less Than Half the Cost of Alternative High-Bandwidth Memory Solutions*
- | *Achronix First to Offer High-Performance FPGAs with GDDR6 Support*

BOISE, Idaho, Nov. 12, 2018 (GLOBE NEWSWIRE) -- Micron Technology, Inc., (Nasdaq: MU) today announced that its GDDR6 memory, Micron's fastest and most powerful graphics memory, will be the high-performance memory of choice supporting Achronix's next-generation stand-alone FPGA products built on TSMC 7nm process technology. GDDR6 is optimized for a variety of demanding applications, including machine learning, that require multi-terabit memory bandwidth and will enable Achronix to offer FPGAs at less than half the cost of FPGAs with comparable memory solutions.

Achronix's high-performance FPGAs, combined with GDDR6 memory, are the industry's highest-bandwidth memory solution for accelerating machine learning workloads in data center and automotive applications.

This new joint solution addresses many of the inherent challenges in deep neural networks, including storing large data sets, weight parameters and activations in memory. The underlying hardware needs to store, process and rapidly move data between the processor and memory. In addition, it needs to be programmable to allow more efficient implementations for constantly changing machine learning algorithms. Achronix's next-generation FPGAs have been optimized to process machine learning workloads and currently are the only FPGAs that offer support for GDDR6 memory.

"From GPUs and beyond, Micron delivers high-performance memory solutions that meet the needs of today's most demanding applications, including artificial intelligence (AI) and machine learning — most recently demonstrated by achieving throughput of up to 16 Gb/s on our GDDR6 solutions," said Andreas Schlapka, director of Micron's networking segment. "In addition to offering increased performance, Micron has developed an ecosystem to support companies like Achronix whose FPGAs with GDDR6 will enable rapid creation of designs. This, in effect, translates into faster time to market for customers using this powerful new memory technology."

Achronix's next-generation FPGAs include up to eight hardened GDDR6 memory interfaces that provide customers the flexibility to choose from multiple memory configurations for their end application. Customers can use from one to eight GDDR6 memory devices, which can offer over 4 Tb/s memory bandwidth and from 8Gb to 128Gb density. This type of flexibility allows customers to optimize cost and power for their application, which is not currently possible with alternate high-bandwidth memory solutions like HBM2.

"With more than 14 years' experience in developing high-performance FPGAs, Achronix is the first FPGA company to support GDDR6 memory and deliver multi-terabit memory bandwidth at the lowest cost for data center, blockchain, networking and automotive applications that require the highest-performance programmable platform," said Manoj Roge, vice president of strategic planning and business development at Achronix Semiconductor Corporation. "Achronix is excited to work closely with Micron and other ecosystem partners to accelerate time to market for GDDR6-based solutions for our customers' most demanding workloads and applications."

Micron works closely with partners like Achronix to accelerate engineering efforts to build robust models and toolsets and deliver board layout validation. Through this ecosystem approach, Micron delivers high-bandwidth memory technology that provides a path for engineers to incorporate GDDR6 in designs and bring bandwidth-intensive applications to market.

### Follow Micron:

- | Blog: [www.micron.com/about/blogs](http://www.micron.com/about/blogs)
- | Twitter: [www.twitter.com/MicronStorage](https://www.twitter.com/MicronStorage)
- | LinkedIn: [www.linkedin.com/company/micron-storage](https://www.linkedin.com/company/micron-storage)
- | YouTube: <http://www.youtube.com/user/MicronTechnology>

### Follow Achronix:

- | Website: [www.achronix.com](http://www.achronix.com)
- | The Achronix Blog: <https://www.achronix.com/blogs/>
- | Twitter: @AchronixInc
- | LinkedIn: <https://www.linkedin.com/company/57668/>
- | Facebook: <https://www.facebook.com/achronix/>

### **About Micron Technology, Inc.**

We are an industry leader in innovative memory and storage solutions. Through our global brands — Micron®, Crucial® and Ballistix® — our broad portfolio of high-performance memory and storage technologies, including DRAM, NAND, NOR Flash and 3D XPoint™ memory, is transforming how the world uses information to enrich life. Backed by 40 years of technology leadership, our memory and storage solutions enable disruptive trends, including artificial intelligence, machine learning, and autonomous vehicles, in key market segments like cloud, data center, networking, mobile and automotive. Our common stock is traded on the NASDAQ under the MU symbol. To learn more about Micron Technology, Inc., visit [www.micron.com](http://www.micron.com).

### **About Achronix Semiconductor Corporation**

[Achronix](http://www.achronix.com) is a privately held, fabless semiconductor corporation based in Santa Clara, California. The company developed its FPGA technology which is the basis of the Speedster22i FPGAs and Speedcore eFPGA technology. All Achronix FPGA products are supported by its ACE design tools that include integrated support for Synopsys Synplify Pro.

The company has sales offices and representatives in the United States, Europe, and China, and has a research and design office in Bangalore, India.

*©2018 Micron Technology, Inc. All rights reserved. Information, products, and/or specifications are subject to change without notice. All information is provided on an "AS IS" basis without warranties of any kind. Drawings may not be to scale. Any dates are estimates only. Micron and the Micron orbit logo are trademarks of Micron Technology, Inc. All other trademarks are the property of their respective owners.*

#### Media Relations Contact:

Vishal Bali  
Micron Technology, Inc.  
+1 (408) 822-0291  
[vbali@micron.com](mailto:vbali@micron.com)

#### Achronix Contact:

Manoj Roge  
Achronix  
+1 (408) 889-4145  
[manoj@achronix.com](mailto:manoj@achronix.com)