



IDT Press Contact:  
Dean Solov  
Public Relations Manager  
Phone: (408) 284-2608  
E-mail: dean.solov@idt.com

## IDT and 5G Lab Germany Collaborate on Technology to Enable Network-Connected Autonomous Vehicles

*Research To Focus on IDT RapidIO Interconnect, Timing and Synchronization in Application Areas Such as Assisting Vehicles Via 5G Network Edge Computing Servers*

SAN JOSE, Calif., Feb. 24, 2016— Integrated Device Technology, Inc.® ([IDT](#)®) (NASDAQ: IDTI) today announced the launch of what is planned to be a multi-year collaboration with 5G Lab Germany on research related to 5G tactile networks, including the application of IDT technology to enable network-connected autonomous vehicles. The project extends the Dresden-based lab’s focus on combining 5G technologies with system-transforming applications. The project’s core technology is IDT’s low-latency RapidIO interconnect, used today for nearly every 4G telephone call made globally, as well as for real-time sensor analysis in a variety of aerospace and defense systems, applicable to autonomous vehicles.

IDT’s [RapidIO technology](#) will be used to explore two key elements of the network. First, the 100ns latency RapidIO switching and interconnect technology will be used to realize 5G Lab Germany’s vision of transforming the vehicle into a connected appliance by networking it with a 5G base station’s “edge computing” server. Second, it is planned for RapidIO technology to be evaluated to connect multiple vehicle sensors in real time for the mission-critical sensor fusion network essential for the self-driving or computer-assisted driving experience. A RapidIO-connected heterogeneous computer network will run real-time analytics to assist various network devices, including vehicles.

“With Germany’s leadership in the global automotive industry, our lab’s focus on the tactile Internet of Things, and IDT’s low-latency interconnect and market-leading timing portfolio, the key elements are in place to tackle the real-time mission-critical challenges of

platforms for the tactile Internet, including autonomous vehicles,” said Gerhard Fettweis, 5G Lab chair and Vodafone chair professor for Mobile Communications Systems. “With the 1 millisecond round trip constraints in 5G deployments, we need low-latency computing platforms for vehicles, base station and edge computing servers. This project will explore connecting the requisite high-performance computing nodes through the deployment of IDT RapidIO technology and associated timing products.”

The collaboration will build on IDT’s [recently announced RXS family](#) of 50 Gbps RapidIO products, as well as computing appliances under development by IDT partners in the Open Compute Project’s (OCP) High-Performance Computing group. The OCP’s projects support heterogeneous computing between x86, ARM, Power Architecture, GPU and FPGAs.

“Computing is moving where it needs to be--close to the end user experience--and it has to happen in real time, which means it will require low-latency interconnect with superior systems synchronization,” said Sailesh Chittipeddi, IDT’s chief technology officer and vice president of global operations. “As the technical needs of connected autonomous vehicles and 5G edge computing servers become more clearly defined, it is becoming increasingly clear that RapidIO technology—with more than 110 million ports shipped to the wireless base station and aviation markets—will keep IDT in the center of development for distributed computing with multi-processor and sensor networks.”

Chittipeddi also noted that, with the recent acquisition of German company ZMDI, IDT enhanced its technology portfolio with automotive and sensor platforms, which can play a crucial role for autonomous vehicles and related 5G solutions.

Initial details of and advances from the joint collaboration are expected to be presented at the International Supercomputing Conference June 19-23 in Frankfurt, Germany, and the Mobile Edge Computing Congress, Sep 21-22 in Munich, Germany.

[About IDT](#)

Integrated Device Technology, Inc. develops system-level solutions that optimize its customers' applications. IDT's market-leading products in RF, timing, serial switching and interfaces are among the company's broad array of complete mixed-signal solutions for the communications, computing, consumer, automotive and industrial segments. Headquartered in San Jose, Calif., IDT has design, manufacturing, sales facilities and distribution partners throughout the world. IDT stock is traded on the NASDAQ Global Select Stock Market® under the symbol "IDTI." Additional information about IDT is accessible at [www.IDT.com](http://www.IDT.com). Follow IDT on [Facebook](#), [LinkedIn](#), [Twitter](#), [YouTube](#) and [Google+](#).

*IDT and the IDT logo are trademarks or registered trademarks of Integrated Device Technology, Inc. All other brands, product names and marks are or may be trademarks or registered trademarks used to identify products or services of their respective owners.*