

Trimble and SiriusXM Establish Alliance to Deliver Trimble RTX GNSS Corrections via Satellite Radio for Autonomous Vehicles

Together Industry Leaders Expect to Advance Autonomy Adoption by Offering Cost-Effective Precise Positioning Solution for a Majority of New Cars Sold in the U.S. and Canada

SUNNYVALE, Calif., Dec. 3, 2020 /PRNewswire/ -- Trimble (NASDAQ: TRMB) and Sirius XM Connected Vehicles Services Inc., a subsidiary of Sirius XM Holdings Inc. (NASDAQ: SIRI), announced today that Trimble RTX® GNSS corrections are being transmitted through the SiriusXM® satellite radio network. As a result, new cars sold in the contiguous U.S. and Canada equipped with SiriusXM's Gen8 satellite chipset will be able to receive RTX GNSS corrections enabling high-accuracy positioning—a key component of autonomous on-road applications.

With the simple addition of the Trimble RTX Auto™ software library, any new vehicle that receives SiriusXM broadcasts with a Gen8 satellite chipset can leverage a positioning solution ideal for Advanced Driving Assistance Systems (ADAS), Autonomous Driving (AD) and Vehicle-to-Everything (V2X) applications.

Since the SiriusXM hardware is already installed in most new vehicles, automotive OEMs can avoid the cost of additional hardware to receive GNSS positioning corrections.

"We are excited to add Trimble RTX Corrections to our suite of Connected Vehicle services," said John Jasper, senior vice president for SiriusXM Connected Vehicle Services. "By delivering this service over our satellite broadcast network, automakers can access relevant location correction data throughout the contiguous U.S. and portions of Canada to facilitate ADAS, AD and V2X applications without the need to access a cellular network."

Trimble RTX is a trusted precise-positioning technology of choice for car manufacturers and their suppliers, and was the first solution adopted for production use in passenger vehicles. RTX technology is a critical component of General Motors' Super Cruise™ system—the first hands-free driving assistance system for the highway. To date, Super Cruise and Trimble RTX have enabled over 5 million miles of hands-free driving on America's roadways.

Ideal for automotive applications, the RTX Auto software library is Automotive Safety Integrity Level B (ASIL-B) certified and developed using the Automotive SPICE process maturity framework (Software Process Improvement and Capability Determination - ISO 15504). The RTX network operation is certified according to ISO 20000 standards, providing further peace of mind for any industry deploying safety-critical applications. No other precise positioning solution offers the same level of performance, reliability, versatility and coverage worldwide.

Trimble RTX technology provides real-time, multi-constellation correction of GNSS observations to provide significantly more precise position estimates. Standard GPS signals can drift up to 25 feet, which could cause incorrect lane identification. When used in conjunction with high-definition maps, cameras, radar and inertial sensors, Trimble RTX provides lane-level positioning performance for semi-autonomous and autonomous vehicles.

"The alliance with SiriusXM provides an expansive distribution pipeline for Trimble RTX into new passenger vehicles," said Patricia Boothe, senior vice president of Trimble's Autonomy Sector. "OEMs now have an easy, cost-efficient alternative to bring high-precision GNSS into their vehicles. Together, Trimble and SiriusXM are helping to accelerate the adoption of real-time positioning in connected vehicles, ultimately supporting safety-critical V2X applications."

About SiriusXM

SiriusXM Connected Vehicles Services Inc., a subsidiary of Sirius XM Holdings Inc. (NASDAQ: SIRI), delivers a broadly adopted connected vehicle platform in North America. SiriusXM Connected Vehicle Services can be found in many makes and models from various manufacturers, and give customers access to a suite of safety, security, and convenience services including automatic crash notification, enhanced roadside assistance, remote door unlock, remote start, stolen vehicle recovery assistance, turn-by-turn navigation, integration with smart home devices and more. For more, visit:

www.siriusxmcs.com.

About Trimble Autonomy

Trimble Autonomy is developing solutions and services that enable the next generation of autonomous functionality to improve productivity and safety. Trimble has been at the forefront of positioning innovation for over 35 years, providing autonomous solutions for off-road machines such as tractors and haulers. Positioning is the foundation for helping transform how the world leverages autonomy through a robust suite of solutions, which include GPS/GNSS, truthing, inertial, dead-reckoning, machine control, sensor fusion and more. For more, visit: <https://positioningservices.trimble.com/industries/automotive>.

About Trimble

Trimble is transforming the way the world works by delivering products and services that connect the physical and digital

worlds. Core technologies in positioning, modeling, connectivity and data analytics enable customers to improve productivity, quality, safety and sustainability. From purpose-built products to enterprise lifecycle solutions, Trimble software, hardware and services are transforming industries such as agriculture, automotive, construction, geospatial and transportation. For more information about Trimble (NASDAQ: TRMB), visit: www.trimble.com.

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