



Garrett Motion Launches Predictive Control Software with Hyundai Motor Company

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Leverages Automotive Engineering Expertise to Deliver Innovative Energy and Health Management Software Solutions

ROLLE, Switzerland, June 17, 2021 (GLOBE NEWSWIRE) -- **Garrett Motion Inc. (Nasdaq: GTX)**, a leading differentiated technology provider for the automotive industry, today announced it has launched a new software solution focused on Model-Based Predictive Control (MPC) technology with Hyundai Motor Company (HMC).

Garrett's advanced MPC technology is able to predict and preemptively optimize how a system operates in real-world conditions, enabling all types of light and commercial vehicles, whether ICE, hybrid, battery electric, or hydrogen fuel cell powered, to improve performance, efficiency and reliability. Despite its potential, MPC has been rarely used in the automotive industry primarily due to the complexity of its implementation and computational requirements. However, Garrett created a solution to overcome these challenges by providing a complete toolchain to make the implementation and deployment of the technology much faster and straightforward, allowing efficient implementation on current and future vehicle platforms. The rollout of Garrett's embedded MPC for use in HMC's passenger vehicles is another fundamental step in bringing this technology to the global automotive industry for all types of vehicles.

The launch by Garrett encompasses [Hyundai's all-new i20 N](#) and is expected to include other vehicle models equipped with HMC's new 1.6-liter turbocharged engine. Garrett's next-generation software enables OEMs to optimize vehicle performance and deliver superior fuel economy and emissions by predictively optimizing boost control and health management control. It has been integrated within the existing electronic control unit (ECU) and comes with a calibration tool that empowers OEMs to configure and calibrate Garrett's software to realize breakthrough results in performance as well as reduced development efforts and costs.

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/b363f4c6-9ffc-4791-9303-5f7f0cfe108d>

"The mass deployment of our predictive control technology in HMC's passenger vehicles further expands our longstanding partnership with the global automaker and demonstrates our ongoing success in leveraging Garrett's core competencies to deliver innovative software solutions," said Craig Balis, Garrett Senior Vice President and Chief Technology Officer. "The use of our MPC technology is key to maximizing the benefits in terms of vehicle performance and energy management while employing prognostic and smart diagnostic tools to monitor in real-time the vehicle's health status. At Garrett, we have built a rich technology portfolio based on our proven expertise in automotive engineering and unwavering commitment to continuous innovation. The success we have achieved in bringing cutting-edge technologies from the laboratory to the market underscores our strategic investments in developing our product pipeline and expanding our in-house capabilities. We continue to receive new business awards in the electrical and software domains as we maintain our focus on strengthening Garrett's technology leadership and addressing the needs of a rapidly evolving industry."

Yong Wha Kim, Senior Vice President and Head of Powertrain Performance Development Center at HMC, stated, "We are pleased to broaden our partnership with Garrett with the implementation of the company's proprietary advanced control software in our all-new i20 N. By applying physics-based model predictive controls, we streamlined the automotive design process, reducing our experimentation and calibration efforts. Additionally, Garrett's sophisticated software tools enable us to optimize powertrain performance under robust conditions and manage energy consumption. These unique additions help our new generation 1.6-litre turbo GDi flat power engine deliver greater fuel efficiency and cleaner emissions as well as an enhanced driver experience. HMC is proud to offer its customers dynamic technology innovations combining high performance with sustainability."

Full Suite of Advanced Controls & System Optimization Software

Garrett has a comprehensive library of modular model-predictive controls that can be used at the vehicle and powertrain supervisor level or at a sub-system level. With the use of its own optimization algorithms that allow this complex technology to be efficiently integrated into existing ECUs, Garrett provides MPC technologies for light and commercial vehicles across numerous applications, including:

- Boost and airpath control and health management for turbocharged ICE and hybrid vehicles
- Predictive energy and thermal management for hybrid, battery electric and fuel cell vehicles
- Custom controls and monitoring software for other complex automotive systems

Garrett's unparalleled expertise in handling multivariable controls in increasingly complex vehicle systems throughout all real-world conditions provides OEMs with a single turnkey solution for energy management and powertrain optimization as well as overall vehicle health management for all types of vehicles. Additional information on Garrett's advanced controls and system optimization software is available on the company's website and can be found [here](#).

About Garrett Motion Inc.

Garrett Motion is a differentiated technology leader, serving customers worldwide for more than 65 years with passenger vehicle, commercial vehicle, aftermarket replacement and performance enhancement solutions. Garrett's cutting-edge technology enables vehicles to become safer, more connected, efficient and environmentally friendly. Our portfolio of turbocharging, electric boosting and automotive software solutions empowers the transportation industry to redefine and further advance motion. For more information, please visit www.garrettmotion.com.

Forward-Looking Statements

This press release contains “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of fact, that address activities, events or developments that we or our management intend, expect, project, believe or anticipate will or may occur in the future are forward-looking statements including without limitation our statements regarding industry trends, Garrett’s strategy, and Garrett’s capital structure following emergence from the Chapter 11 process. Although we believe forward-looking statements are based upon reasonable assumptions, such statements involve known and unknown risks, uncertainties, and other factors, which may cause the actual results or performance of Garrett to be materially different from any future results or performance expressed or implied by such forward-looking statements. Such risks and uncertainties include but are not limited to those described in our annual report on Form 10-K for the year ended December 31, 2020, and our quarterly report on Form 10-Q for the three months ended March 31, 2021, as well as our other filings with the Securities and Exchange Commission, under the headings “Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements.” You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this document. Forward-looking statements are not guarantees of future performance, and actual results, developments and business decisions may differ from those envisaged by our forward-looking statements.

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Source: Garrett Motion Inc.

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