Tula Benefits from GM Investment in Its Revolutionary Fuel-Saving Technology

SAN JOSE, Calif. – Jan. 5, 2014 – Silicon Valley-based Tula Technology, Inc. has benefitted greatly from a 2012 investment by General Motors Ventures LLC, and is buoyed by GM’s optimism that its revolutionary fuel-saving powertrain technology, Dynamic Skip Fire (DSF), could be deployed in future General Motors gasoline-powered engines.

“This is an incredibly exciting time for Tula. For more than two years we have worked closely with GM during a critical stage of development, and they have provided strong financial support to help us deliver a system that significantly improves fuel efficiency and reduces emissions,” said R. Scott Bailey, president and CEO of Tula Technology. “Our innovative team is committed to helping GM further its mission to create unique solutions that enhance the sustainability of future vehicles without compromising performance.”

Tula’s DSF technology is the industry’s first individual cylinder deactivation system that successfully manages engine noise, vibration and harshness (NVH). Testing shows that DSF can improve fuel efficiency by as much as 15 percent when compared to a vehicle equipped with a V8 engine that does not have cylinder deactivation.

“This technology holds the potential to improve fuel economy on select GM vehicles without degrading power capability when it’s required,” said Jon Lauckner, GM chief technology officer, vice president of Global R&D and president of GM Ventures. “This joint effort combines software expertise from Silicon Valley with unmatched powertrain expertise from General Motors.”

Tula’s revolutionary control approach integrates advanced digital signal processing, culled from consumer electronics technology, with sophisticated powertrain controls to create the ultimate variable displacement engine, delivering optimal fuel efficiency under a wide range of driving conditions.
Tula’s DSF technology does not rely on fixed cylinder deactivation or switching between fixed patterns. Rather, it continuously makes dynamic firing decisions on an individual cylinder basis to deliver the required engine torque for all vehicle speeds and loads while avoiding unwanted vibration. Operating an engine in a dynamic skip fire manner alters the torque excitations on the powertrain, which could lead to unacceptable NVH characteristics. However, Tula’s novel firing decision and control algorithms manage noise and vibration to maintain a high-quality driving experience.

Additionally, DSF is a very high-value, fuel-efficiency solution, providing large absolute gains in fuel efficiency at a cost that is roughly one third of competing options. Also, DSF can be integrated into current engine programs with nominal capital investment and limited hardware changes.

About Tula Technology, Inc.

Tula Technology Inc. is a Silicon Valley based supplier of Dynamic Skip Fire (DSF), a powertrain technology that integrates advanced digital signal processing with sophisticated powertrain controls to create the ultimate variable displacement engines for a wide range of applications. Tula’s technology delivers optimal fuel efficiency at the lowest cost to the world’s automotive manufacturers, helping them meet fuel efficiency and CO₂ mandates. With headquarters in San Jose, CA, and an engineering center in Plymouth, MI, Tula brings together the best of Silicon Valley and automotive expertise resulting in 22 patents issued and over 50 U.S. and international patents pending. Tula Technology is a privately held company that is strongly supported by successful investors including Sequoia Capital, Sigma Partners, Khosla Ventures and GM Ventures. More information is available at www.tulatech.com.

General Motors Co. (NYSE:GM, TSX: GMM) and its partners produce vehicles in 30 countries, and the company has leadership positions in the world’s largest and fastest-growing automotive markets. GM, its subsidiaries and joint venture entities sell vehicles under the Chevrolet, Cadillac, Baojun, Buick, GMC, Holden, Jiefang, Opel, Vauxhall and Wuling brands. More information on the company and its subsidiaries, including OnStar, a global leader in vehicle safety, security and information services, can be found at http://www.gm.com

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