

News Release

FOR IMMEDIATE RELEASE

Advanced driver assistance ECU and high-definition map position unit adopted in Nissan's new model "SKYLINE"

Tokyo, September 8, 2020 --- Hitachi Automotive Systems, Ltd. today announced that their advanced driver assistance ECU (Electronic Control Unit) and high-definition map position unit capable of automatic map updates via OTA (Over The Air)^{*1} has been adopted in Nissan Motor Corporation's (hereinafter "Nissan") new model "SKYLINE", which went on sale in September 2019, for the first time.

In recent years, competition has intensified as companies pursued the development of autonomous vehicles aiming to tackle societal issues, such as the elimination of traffic accidents and mobility support for the elderly. An advanced driver assistance ECU and a map position unit enables advanced driver assistance functions, such as overtaking assistance and navigated driving assistance on highways. The ECU provides integrated vehicle control based on expansive information on the surrounding environment acquired through camera sensors. The high-definition map position unit plays a crucial role in providing map data to the advanced driver assistance ECU. The map data includes the shape of roads from several hundred meters ahead to several kilometers ahead.

The advanced driver assistance ECU adopted in the Nissan new model "SKYLINE" is configured with two CPUs – one for recognition processing and one for vehicle control – enabling both safety and high-speed computing performance to contribute to even higher precision vehicle integrated control. The high-definition map position unit also adopted by "SKYLINE" stores high-definition digitalized 3D map data that covers features including Japan's nationwide highway network accurate to one centimeter-level. The unit provides vehicle surrounding map information based on a highly-accurately calculated vehicle position and recommended route information to the target destination on the vehicle lane level to the advanced driver assistance ECU, supporting integrated vehicle control. Through OTA, high-definition maps are always automatically updated, improving user convenience.

These technologies support world leading advanced driver assistance technologies developed by Nissan, "ProPILOT 2.0", which engages with the navigation system

enables hands-off^{*2} driving while cruising in a single lane on highways on a pre-defined route.

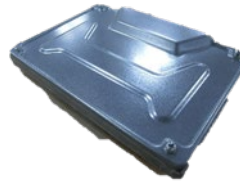
Hitachi Automotive Systems will continue to contribute to the development of autonomous vehicles towards improving society.

*1: Wireless data communication.

*2: Hands-off driving is possible when driving in a single lane on the condition that the driver remains attentive on the road ahead and is prepared to immediately take manual control of the steering wheel when the road, traffic and vehicle conditions require it on motorways for which high-definition 3D map data is available and where opposite lanes are separated.



Nissan new model "SKYLINE"
(Photo of new model "SKYLINE" GT Type SP(HYBRID/2WD))



Advanced drive assistance



High-definition map position
unit

About Hitachi Automotive Systems, Ltd.

Hitachi Automotive Systems, Ltd. is a wholly owned subsidiary of Hitachi, Ltd., headquartered in Tokyo, Japan. The company is engaged in the development, manufacture, sales and services of automotive components, transportation related components, industrial machines and systems, and offers a wide range of automotive systems including Powertrain Systems, Chassis Systems and Advanced Driver Assistance Systems. For more information, please visit the company's website at <http://www.hitachi-automotive.co.jp/en/>.

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Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.
