SUBARU Selects ON Semiconductor Image Sensing Technology

September 23, 2020

ON Semiconductor and SUBARU redefine leading-edge ADAS capability with new machine vision algorithms and sensing technology

PHOENIX, Ariz. – Sept. 23, 2020 – ON Semiconductor (Nasdaq: ON), driving energy efficient innovations, has announced that SUBARU CORPORATION has selected its image sensing technology to enable camera-based ADAS (Advanced Driver Assistance Systems) in the car manufacturer's new-generation EyeSight Driver Assist platform. The Levorg, a 2020 All-Wheel Drive Sports Tourer, is the first model to offer the new system.

Winner of numerous safety awards, SUBARU's EyeSight is one of the most well established and widely deployed vision-based ADAS solutions in the market. The new generation continues the stereo camera architecture, providing a range of ADAS features including adaptive cruise control, lane keep assist and pre-collision braking system. As with previous versions of EyeSight, ON Semiconductor's image sensing technology acts as the 'eyes' to enable this important safety functionality. The new-generation Eyesight, recently announced in the Japan market, provides additional features such as active lane change assist and an emergency driver stop system.

"We have teamed with ON Semiconductor for every generation of the EyeSight ADAS system and continue to adopt its image sensing technology optimized for image recognition performance in automotive applications with higher resolution," explained Eiji Shibata, general manager, EyeSight development project at SUBARU. "Our engineering partnership and technical collaboration on this system are vital to achieving our shared vision of improving safety and achieving ZERO traffic fatalities in the near future."

"Next-generation vehicles require several different kinds of sensors, including LiDAR, radar, and cameras, comprising the vehicle's ADAS. These sensors gather data and feed it into a much larger processor (or set of processors) capable of making real-time decisions about what's happening outside and inside the vehicle, and how the vehicle should respond," stated Patrick Moorhead, founder, president and principal analyst at Moor Insights & Strategy. "I believe ON Semiconductor's market leading position and proven track record of more than 50 years in the automotive market, coupled with a focus on safety and quality, a global support structure and roadmap featuring all sensor modalities makes them a compelling choice for any OEM or Tier 1 automotive manufacturer."

As the global market leader in automotive image sensing technology, ON Semiconductor has shipped over 120 million image sensors into ADAS applications, and the company continues to innovate to meet the demand for future ADAS and autonomous driving systems. The company's image sensing technology provides the resolution and frame rates that enable automotive camera systems to perform at optimal levels; the High Dynamic Range and flexible exposure ratio control required to ensure performance in all natural lighting conditions; and LED flicker mitigation to prevent interference from artificial light sources.

"SUBARU's high quality standards and commitment to road safety make their choice of our technologies a powerful endorsement," commented Ross Jatou, vice president and general manager of Automotive Solutions, Intelligent Sensing Group at ON Semiconductor. "We are thrilled to continue to collaborate with them and together save lives with safer roads from ADAS and autonomous vehicles."

Additional resources & documents:

- Subaru Eyesight
- Sensing for ADAS, Autonomous Vehicles
- AR0231AT CMOS Image Sensor
- LED Flicker Mitigation for Automotive (Video)

About ON Semiconductor

ON Semiconductor (Nasdaq: ON) is driving energy efficient innovations, empowering customers to reduce global energy use. The company is a leading supplier of semiconductor-based solutions, offering a comprehensive portfolio of energy efficient power management, analog, sensors, logic, timing, connectivity, discrete, SoC and custom devices. The company's products help engineers solve their unique design challenges in automotive, communications, computing, consumer, industrial, medical, aerospace and defense applications. ON Semiconductor operates a responsive, reliable, world-class supply chain and quality program, a robust compliance and ethics program, and a network of manufacturing facilities, sales offices and design centers in key markets throughout North America, Europe and the Asia Pacific regions. For more information, visit https://www.onsemi.com.

# # #