

FOR IMMEDIATE RELEASE

LG TO ACCELERATE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE WITH OWN AI CHIP

New AI Processor with LG Neural Engine Designed for Use in Various Products Including Robot Vacuum Cleaners, Washing Machines and Refrigerators

SEOUL, May 17, 2019 — As part of its strategy to accelerate the development of AI devices for the home, LG has developed its own artificial intelligence chip (AI Chip) with proprietary LG Neural Engine to better mimic the neural network of the human brain to greatly improve the processing of deep learning algorithms.

The AI Chip incorporates visual intelligence to better recognize and distinguish space, location, objects and users while voice intelligence accurately recognizes voice and noise characteristics while product intelligence enhances the capabilities of the device by detecting physical and chemical changes in the environment. The chip also makes it possible to implement customized AI services by processing and learning from video and audio data in order to enhance recognition of the user's emotions and behaviors and the situational context.

Products utilizing the LG AI Chip take advantage of the On-Device AI to operate even without a network connection. What's more, LG's AI Chip employs a powerful security engine to better protect personal data from external hacking. Processing that does not require high security is designed to run in a general zone and jobs that require higher security run in a separate hardware-implemented security zone.

LG's AI Chip is designed to enhance the recognition performance in the products it powers such as an advanced image recognition engine for simultaneous localization and mapping (SLAM). For example, its powerful image processing function corrects for distortion caused by wide angle lenses and generates brighter and clearer images in dark environments. LG Electronics plans to include the new AI Chip in future robot vacuum cleaners, washing machines, refrigerator and even air conditioners. In addition, LG will



expand the reach of its artificial intelligence solutions through collaborations with outside companies, universities and research laboratories.

"Our AI Chip is designed to provide optimized artificial intelligence solutions for future LG products," said I.P. Park, president and CTO of LG Electronics. "This will further enhance the three key pillars of our artificial intelligence strategy – evolve, connect and open – and provide customers with an improved experience for a better life."

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About LG Electronics, Inc.

LG Electronics Inc. is a global innovator in technology and manufacturing with operations in 140 locations and a workforce of over 70,000 around the world. With 2018 global sales of USD 54.4 billion, LG is composed of five companies – Home Appliance & Air Solution, Home Entertainment, Mobile Communications, Vehicle Component Solutions and Business Solutions. LG is a world-leading producer of TVs, refrigerators, air conditioners, washing machines and mobile devices, including premium LG SIGNATURE and LG ThinQ products featuring artificial intelligence. For the latest LG news, go to www.LGnewsroom.com.

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