

PROFILE

Corporate Executive Vice President
Samsung Electronics

CITATION

For visionary global executive leadership in wireless communications and transformative impact on AI-integrated next-generation connectivity innovation.

JUNGWON LEE

AAEOY Executive of the Year Award

Dr. Jungwon Lee serves as Corporate Executive Vice President at Samsung Electronics, where he leads global modem development and next-generation wireless research initiatives. He oversees approximately 400 engineers across South Korea, the United States, and India, while working in close coordination with Samsung's engineering and product teams in China to ensure global alignment of technology development and deployment. He directs an annual R&D budget of approximately $150 million.

This role represents enterprise-scale executive responsibility within one of the world's most strategically critical technology sectors. His organization spans modem architecture, advanced signal processing algorithms, AI-native communication systems, silicon implementation, system integration, validation, and long-term 6G research. Managing semiconductor innovation across four major technology regions requires disciplined governance, cross-cultural leadership, fiscal stewardship, and long-range strategic planning.

At Marvell Semiconductor located in Santa Clara, CA (2003–2010), he served as Principal Engineer leading wireless modem algorithm development and standardization activities. He contributed to LTE, WiMAX, Wi-Fi, Bluetooth, and HD Radio chipsets during the formative era of mobile broadband expansion. These contributions helped lay groundwork for the global smartphone revolution.

At Samsung USA located in San Diego, CA (2010–2020), Dr. Lee served as Vice President leading development of cellular modems, connectivity system-on-chips, Neural Processing Units (NPUs), and Image Signal Processors (ISPs). These technologies powered flagship mobile platforms deployed globally at the scale of more than 10 million units per year. His work integrated communication, computation, and intelligent processing—anticipating the convergence of connectivity and AI that defines modern devices, and impacts of his work and vision are well demonstrated in various highlights below on modem innovation.

Since 2021, as Corporate EVP at headquarters, Dr. Lee has led modem development, and Samsung's Exynos modem series have been used in various flagship smartphones. In October 2021, Samsung commercialized FR2 mmWave 5G modem enabling ultra-high speed 5G deployments in global markets. In August 2024, Samsung modem achieved world first commercialization of 5G-compatible satellite narrowband communications through Pixel 9 expanding cellular connectivity beyond terrestrial infrastructure and redefining emergency and remote-area communication capability. He now guides foundational research for 6G wireless systems and AI-integrated modem platforms that will define the next decade of global connectivity.

In addition to professional employment, Dr. Lee served as Associate Adjunct Professor at the University of California, San Diego from 2013 to 2019.

He received his BS degree from Seoul National University and MS and PhD degrees from Stanford University, all in Electrical Engineering. He is an IEEE Fellow.